



- Section 1: Overview and Installation
- Section 2: UNIX Settings
- Section 3: SQL Server Database Setup

Part A: MS SQL Server 2000
Part B: MS SQL Sever 2005
Part C: MS SQL Express 2005

Section 4: Oracle Database Setup

Part A: Oracle File Edits
Part B: Data Transfer

Part C: Oracle 9i/10g,OVO Database
Part D: Oracle 9i (Solaris or HP-UX)
Part E: Oracle 10g (Solaris or HP-UX)

- Section 5: Unified Reports Setup
- Section 6: Running Reporter and OVOW 7.5 on separate systems
- Section 7: Installation in Microsoft Cluster
 Server
- Section 8: Configure multiple OVO UNIX
 Management Servers to Reporter
- Index

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Overview and Installation

HP OpenView Reporter creates Web-based reports from data of targeted systems it discovers, because of OpenView agent software running on the systems. Agent software includes:

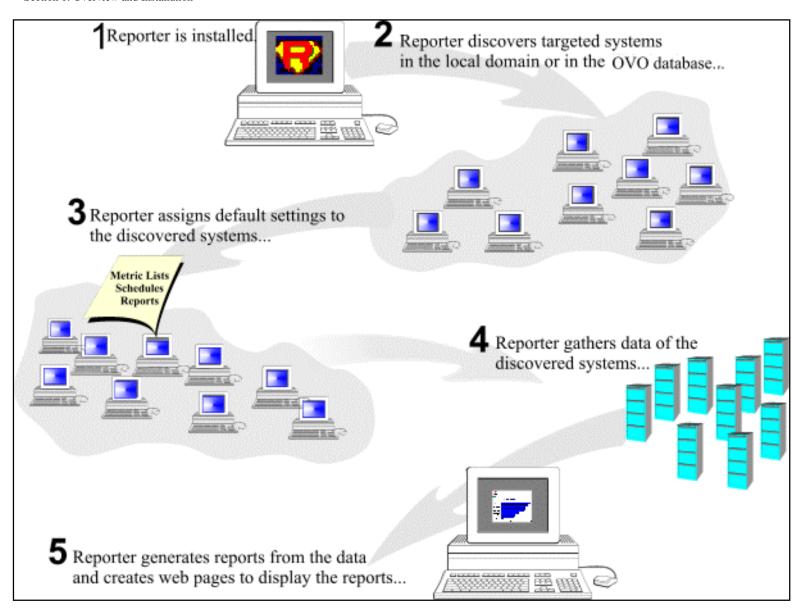
- HP OpenView Performance Agent on UNIX or Windows (also known as MeasureWare Agent).
- HP OpenView Operations subagent (version 7 and later).

NOTE: HP-UX and Solaris are the only platforms where Oracle is supported. Microsoft Access is not supported for upgrading customers only (from OVR 3.0). Clean install do not support Microsoft Access. Some features such as "Long host name" and "composite indexes" will not be supported in Microsoft Access.

When Reporter is first installed, it begins operation automatically, using pre-configured settings which come with the product. These initial settings are sufficient for Reporter to discover systems in the local domain, running OpenView agent software. Reporter can also discover systems in a configured OpenView Operations database. After installation, Reporter completes a number of steps as illustrated below. After Reporter has run through its discovery, it gathers data based on pre-defined and user-specified lists of metrics. It then uses this data to generate reports.

NOTE: In order to generate additional reports for other OpenView products, you must add the Reporter package for the OpenView product you are using. Please refer to the online Help "Working with Reports" topics for instructions.

What happens after <u>installation?</u>



As shown in the preceding illustration, following installation, Reporter begins a cycle of its actions immediately. This immediate start, which is different from the schedule that Reporter follows by default, occurs so that you can see reports right away without having to wait until the next day. After the above actions are completed, Reporter follows the default schedule, which begins at 12:30 AM every night unless you change those default settings. Reporter's default schedule is described in "*How Reporter Works*," *Chapter 3* of the Reporter Concepts Guide.

⚠IMPORTANT: Do not run multiple copies of Reporter with the same Reporter database as unexpected results occur when more than one copy of Reporter attempts to write data to the Reporter database.

The OpenView Performance Agent and OpenView Operations (OVO) are sold separately from Reporter. No changes are required to the OpenView Performance Agent in order to support Reporter. However, for OpenView Operations on HP-UX or SUN, see the appropriate sections in this document to configure a connection to the OVO database.*

In addition, to generate reports from other OpenView Reporter-enabled products, you must select the report package from Reporter's File>Configure Report Packages menu.

NOTE: Reporter stores data in a default database (MSDE SP3a with Reporter A.03.70). If you want to use a different database, please see the configuration instructions pertaining to your database software.*

(Installation and Special Configurations Guide).

*Due to Oracle requirements, Reporter does not support connections to more than one version of Oracle Server at a time. Please see the Oracle9i/10g Online Generic Documentation or contact Oracle support for further details.

Reporter's Daily Routine

After you install Reporter and it goes through the discovery process, it starts collecting data based on the metric lists. Metric lists for OpenView Performance Agent and OpenView Operations Agent can be modified. Metric lists for service and event data gathered from OpenView Operations management server cannot be modified. The default metric lists provided for the respective agents are grouped as follows:

For OpenView Performance Agent systems:

- Global
- Application
- Transaction
- Uptime
- Sysdowntime

For OpenView Operations systems:

- ITO Messages
- ITO Operator

The data collected by Reporter is stored in a database from which reports can be generated. Reporter also performs routine database maintenance and builds a web page that can display all reports generated by Reporter. This web page is viewable from your browser.

Reporter performs the following actions to discover new systems and to continue to track systems already in the database.

- Searches systems selected for inclusion in the Discovery Area (or initially, by default, systems in the local domain) and adds entries into the schedule to gather data when it finds new sources of data added.
- Gathers a default set of metric data based on the metrics available through OpenView Performance Agents and stores this data in the Reporter database.
- Updates the database with any new information.
- Creates a series of pre-defined reports based on the data available in the Reporter database.
- Creates a web page that links into all the HTML reports created by Reporter.

From the data it collects, Reporter automatically generates a number of different reports, providing you with critical information about the systems in your computing environment.

After you have begun using Reporter, you will likely want to customize Reporter by organizing your systems into different system groups (see the Concepts Guide, Chapter 5). With these changes you can assign reports to these new system groups and generate sets of reports that are immediately organized in a way that is relevant to the way your organization functions. Lastly, you might also decide to create custom reports (see the Concepts Guide, Chapter 4), for which you can purchase Crystal Reports and define new reports with data that you select (by creating metric lists).

To install Reporter - New Installation:

- 1. At the Windows system, insert the CD in the CD-ROM drive.
- 2. In the window that appears, please select, print, and review the two documents:
 - -read before installing
 - -release notes
- 3. Select install reporter.
- 4. Follow the instructions as they appear on screen.

NOTE: More detailed instructions [covering upgrades and other situations] are available in the Release Notes.

To Upgrade Reporter

If you are upgrading Reporter, see the **Reporter Release Notes** if you want to change your database type to the current default, which is MSDE SP3a.

NOTE: If you want to continue to use Access as your database, do not uninstall the previous version of Reporter. This guide contains instructions for migrating from Microsoft Access to SQL Server 2000, Microsoft Access to MSDE, Microsoft Access to Microsoft SQL Server 2005, Microsoft Access to Microsoft SQL Express 2005. If you decide in the future to use MSDE, Microsoft provides tools (Access 2000, Upsizing Wizard in; SQL Client Tools, Import and Export Data Wizard) for migrating Microsoft Access to MSDE.

- 1. Create a backup copy of your Reporter database if you are updating over a previous version, in case you decide to roll back to a prior version.
- 2. To save configuration data (this does NOT save the gathered data) from the database in a file, enter the following from a Command Prompt window: repload -save <filename>
- 3. Complete the steps above for a new installation. Your existing database configuration is detected during installation and is left intact.
- 4. Make a note of your License key. From the **Reporter** window, select **File** > **Configure** > **License**, The **Configure License** window opens. This window displays the License key information.

NOTE: To restore configuration data (if you removed the old database) in a new database, after you complete the installation, open a Command Prompt window and enter: repload -load <filename>

What happens during the upgrade:

• The Reporter binaries are overwritten.

- New versions of the default report templates are added or updated over existing versions in <installation_directory>\data\reports. Your custom templates are not disturbed, providing you gave them different file names from the Reporter default templates.
- Customizations that you made to report templates through the Reporter GUI will be preserved. Customizations made through Crystal Reports Professional will not.
- Reporter Web pages are not disturbed (<installation_directory>\data\Webpages).
- The Reporter database is updated by adding new columns or tables to the Reporter database; this change does not disturb your data.

To Uninstall Reporter:

- 1. From the Start menu select **Settings>Control Panel**.
- 2. In the Control Panel Window double-click Add/Remove Programs.
- 3. In The Add/Remove Programs window select **HP OpenView Reporter** and click the Remove button.
 - Two options Remove Standard and Remove Clean are available. Use the Remove Clean option to remove the data files and HTML reports that are created by the product. Remove Standard will not remove the data files and HTML reports that are created by the product.

NOTE: Select the Remove Clean option only if no other OV products are installed on your system.

What happens during the uninstallation:

- Reporter binaries and product files are removed.
- The following Reporter directories remain intact:
 - <installation_directory> \data\datafiles\ (the Reporter database is not removed).
 - <installation_directory> \data\Webpages\ (Webpages are not removed).

NOTE: For Reporter A.03 or later, the database connection is not removed during an uninstallation and no re-configuration is necessary when re-installing.

• An uninstallation has no effect on the virtual directory settings in IIS. These settings remain available to other OpenView products, such as OV Internet Services. If you no longer have any OV products using IIS, you can manually remove any remaining "HPOV_" entries from the Web server.

2UNIX Settings

This document shows settings (Part I) for the default installation, where you use the Reporter database, and settings for a custom database configuration (Part 2). The topics are as follows:

- Part 1: Setting Kernel Parameter Minimum Values
- Part 2: For Oracle Database Setup on UNIX / Setting UNIX Environment Variables

Part 1: Setting Kernel Parameter Minimum Values

Kernel parameters setting for HP-UX and Solaris systems are outlined below.

HP-UX Systems

For your system to run more efficiently, modify (as necessary) the HP-UX kernel parameters to meet or exceed the minimum values listed below. To modify kernel values, run SAM and use the Kernel Parameters area to change the specific parameters within the Action menu.

maxdsiz	32 MB
maxfiles	120
maxssiz	2 MB
maxuprc	100
nfile	3000
nproc	700
semmni	20
semmns	128
shmmax	64 MB
shmmni	100
shmseg	12



IMPORTANT: To activate changes to settings, you must reboot your system.

Solaris Systems

For your system to run more efficiently, modify (as necessary) the Solaris shared memory parameters to meet or exceed the minimum values listed below. To modify shared memory values, edit the /etc/system file and change the specific parameters as listed below:

set shmsys:shminfo_shmmax	67108864
set shmsys:shminfo_shmmin	1
set shmsys:shminfo_shmmni	100
set shmsys:shminfo_shmseg	40
set semsys:seminfo_semmns	200
set semsys:seminfo_semmni	100
set semsys:seminfo_semmsl	30

IMPORTANT: To activate changes to settings, you must reboot your system.

Part 2: For Oracle Database Setup on UNIX / Setting UNIX **Environment Variables**

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

Set Up Microsoft SQL Server as the Reporter Database

HP OpenView Reporter (Reporter) now uses the MSDE SP3a (Microsoft Database Engine) as its database. The MSDE SP3a version that Reporter currently uses is a subset of SQL Server 2000, which means that 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 migrate your data to SQL Server 2000 database.

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

<u>Configure Microsoft SQL Server 2000 as the Reporter database</u> provides instructions to set up SQL Server 2000 as the database for Reporter.

<u>Configure Microsoft SQL Server 2005 as the Reporter database</u> provides instructions to set up SQL Server 2005 as the database for Reporter.

<u>Configure Microsoft SQL Express 2005 as the Reporter database</u> provides instructions to set up SQL Express 2005 as the database for Reporter.

Set Up Microsoft SQL Server as the Reporter Database Part A: Configure SQL Server 2000

Set Up SQL Server 2000 as the Reporter Database

To use Microsoft SQL Server as the Reporter database requires both server and client software. The first section of this procedure covers the SQL Server installation and configuration. The second section covers the SQL Server client installation as well as Reporter configuration as a SQL Server account.

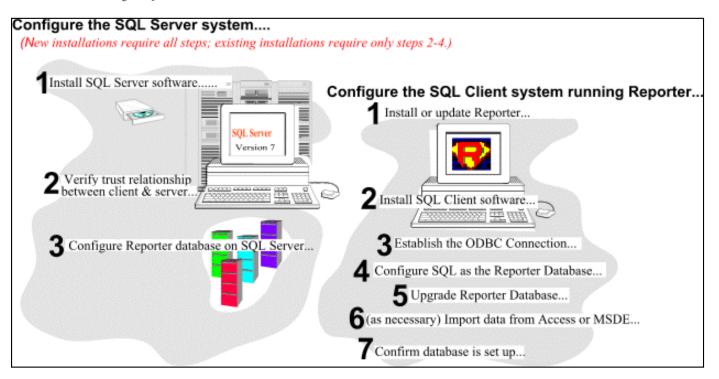
Reporter 3.70 uses the MSDE SP3a (Microsoft Database Engine) as its database. The MSDE SP3a version that Reporter currently uses is a subset of MS SQL Server 2000, which means that that much of the MS SQL 2000 functionality is present in the MSDE database, even though no dialogs are available to assist in the configuration. MSDE has a 2GB size limit per database instance. Knowing this, you may at some point choose to migrate your data to an MS SQL Server 2000 database. When upgrading from MSDE to SQL Server 2000, follow the instructions provided by Microsoft and choose OVOPS instance to upgrade.

⚠IMPORTANT: To upgrade from a previous version of OVIS or Reporter, the minimum requirement for SQL Server 2000/MSDE is currently Service Pack 3a. This Service Pack is essential to guard against the vulnerability in SQL Server 2000 towards destructive computer viruses (such as the SLAMMER worm virus). Refer to the OVIS release notes for detailed instructions to upgrade to this Service Pack.

⚠IMPORTANT: If HP OpenView Internet Services 4.0 and Reporter are installed on the same system, migration of your OVIS/ Reporter data from your existing database to SQL Server 2000 is not supported.

Because Reporter uses an MSDE SP3a instance, you see the instance name when using MS SQL Server 2000 Enterprise Manager to look at the MSDE Reporter database. The corresponding MS SQL Server 2000 examples do not use the instance name. You are not required to use an instance name when using MS SQL Server 2000.

NOTE: To migrate data from Access or MSDE database to MS SQL Server, skip Task 5 and go directly to Task 6 or 6a. Task 6 covers migration from Access (Reporter 2.0 default database) to MS SQL Server (allow approximately 1.5 times the space used in Access). Task 6a migration from MSDE (Reporter 3.5 default database) to SQL Server 2000. (no change in space requirements).



Install and Configure MS SQL Server Software

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

Prerequisites include: (1)Windows 2000 Server and (2) Internet Explorer 5.01, Service Pack 2 or higher.

▲ IMPORTANT: Service Pack 3a is mandatory for SQL Server 2000.

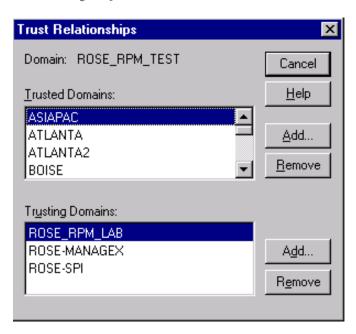
Task 1 Install MS SQL 2000 Server Software

- 1. Insert the MS SQL Server 2000 CD into the CD-ROM drive.
- 2. Select Install MS SQL 2000 Components.
- 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. Upgrade to SQL Server 2000 Service Pack 3.
- 8. Restart the system.

Task 2 P Verify Trust Relationship Between Client and Server

NOTE: A trust relationship should be set up if the Reporter client and SQL Server are in separate domains in NT4 or if the client and server run on mixed systems (Windows NT4 or Windows NT4 and Windows 2000). If the Reporter client and SQL Server are running on Windows 2000, skip this task.

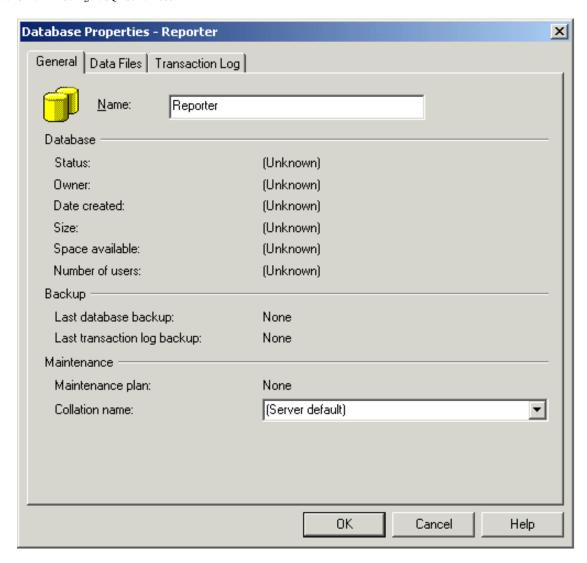
- 1. Log on to the MS SQL Server-installed system with Administrator privileges.
- 2. From the Start menu select **Programs > Administrative Tools > User Manager for Domains**.
- 3. From the Policies menu select **Trust Relationships**.



4. In the Trusting Domains dialog box, look for the Domain where Reporter 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 Reporter and SQL Server systems are in separate domains, you must configure a trust relationship between the systems).

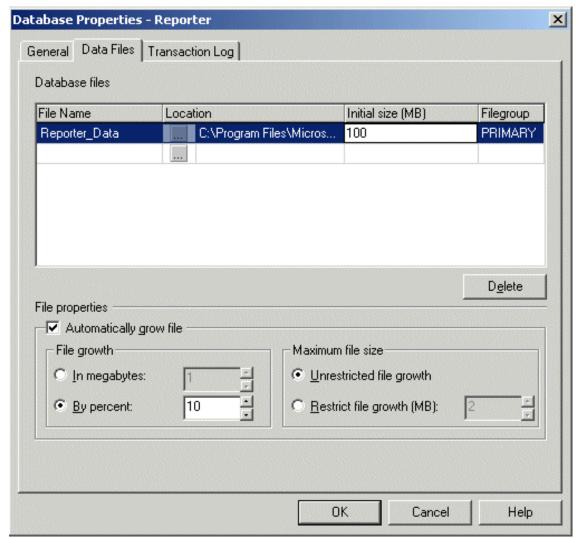
Task 3 → Configure the Reporter Database on SQL Server 2000

- 1. From the Start menu select **Programs > Microsoft SQL 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).

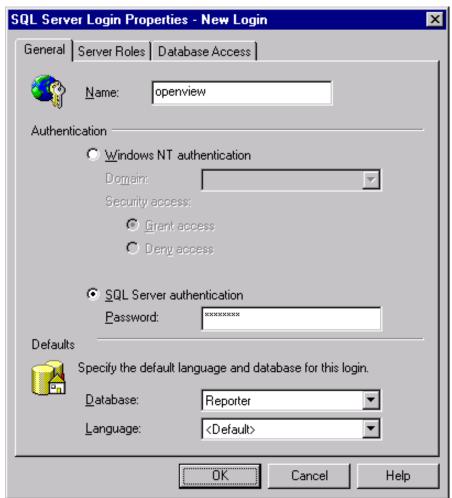


NOTE: The SQL Server database no longer needs to be named Reporter.

- 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.



- 8. After the database is created, expand Security.
- 9. Right-click **Logins new login**.
- 10. Click the **General** tab and in the **Name** box, enter the user name as **openview**.



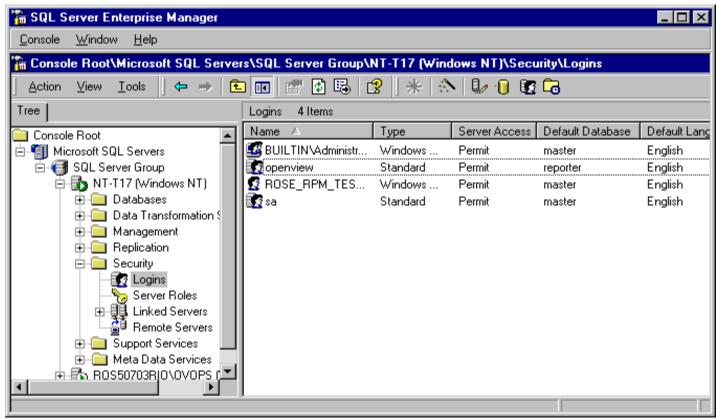
- 11. Under Authentication select the SQL Server authentication radio button and enter your password.
- 12. Under the Defaults, select **Reporter** from the Database list box.
- 13. Select the Database Access tab and under Database access check the Permit box that corresponds to Reporter.
- 14. Under Database roles for Reporter, check **public** and **db_owner** and select **OK** to exit.



15. Confirm the new password from Step 11.



16. 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 Reporter is installed).

Install and Configure SQL Client Software

Installing SQL 2000 Client includes three general areas:

- Install SQL 2000 software
- Configure Reporter ODBC connection
- <u>Upgrade newer versions of Reporter or the SQL database, or install Reporter</u>

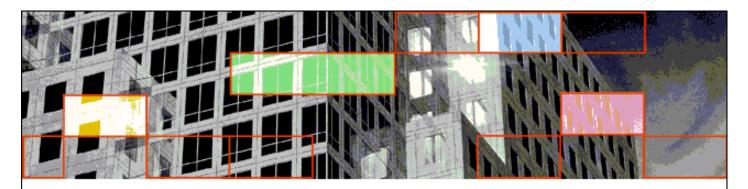
SQL 2000 Client Installation Prerequisites

- Internet Explorer 5.01 SP 2
- 500 MB Free Disk Space
- SQL Server 2000 CD
- Product License 10 digit code

Task 1 PInstall SQL Client Software

△IMPORTANT: This task is unnecessary if Reporter and SQL Server are installed on the same system.

- 1. Insert the SQL Server 2000 CD to install the SQL Client 2000 software.
- 2. Click autorun.exe.
- 3. Click SQL Server 2000 Components.



Microsoft SQL Server 2000 Standard Edition



SQL Server 2000 Components



SQL Server 2000 Prerequisites



Browse Setup/Upgrade Help



Read the Release Notes



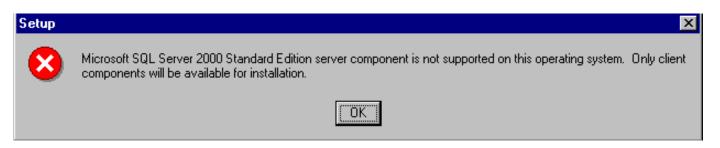
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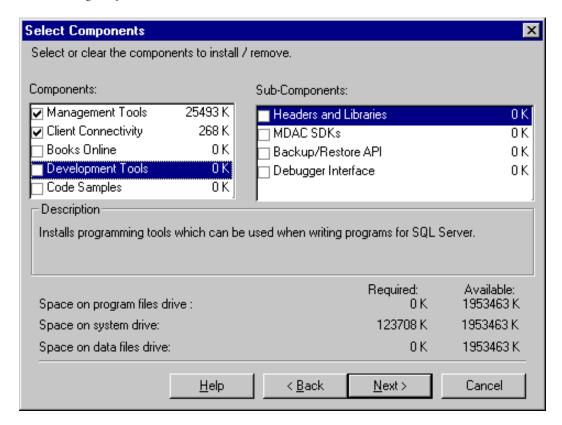
4. Select Install Database Server



5. Choose **Next** for Select Install Method screen and click **OK** in response to the following message.



- 6. Follow the instructions as they appear.
- 7. Select Management Tools and Client Connectivity as the components to install; you can choose whether or not to install documentation.



8. Reboot the system after installation is complete

Task 2 PEstablish the ODBC Connection

IMPORTANT: Before continuing, if you are migrating data from the default database to SQL Server, stop the Reporter Service using the Reporter toolbar button; then close the Reporter main window.



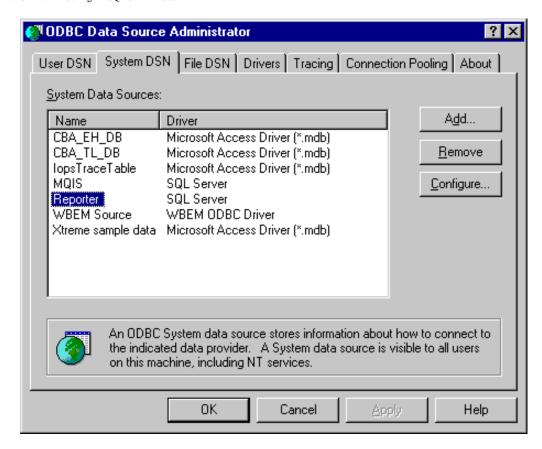
Task 3 P Upgrade or Install Reporter

(If migrating current data from the default database to SQL Server, skip this task.)

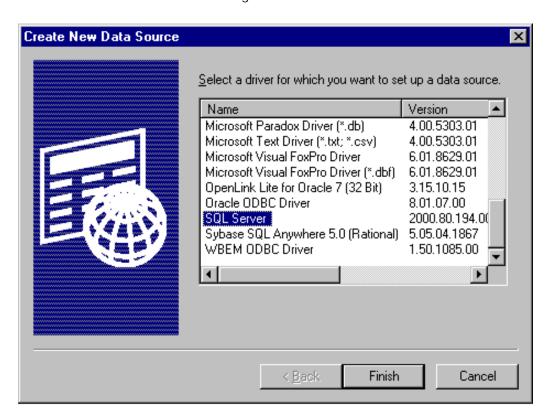
- 1. Install Reporter.
- 2. During the installation, select **No** in response to choosing Automatic Service startup.

Windows 2003 Enterprise / Windows 2000 / Server / Professional / Windows XP

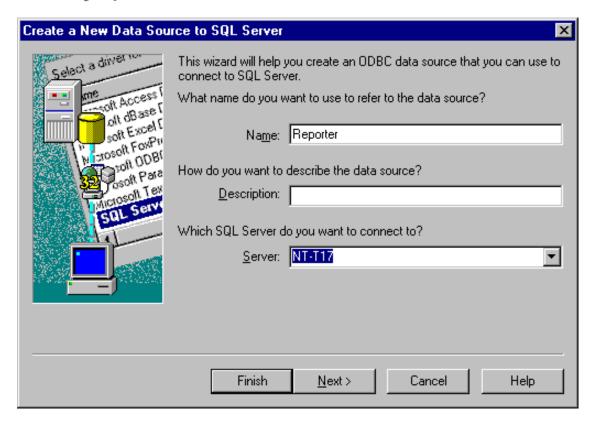
- 1. From the Start menu, select Settings>Control Panel.
- 2. Double-click Administrative Tools.
- 3. Double-click Data Sources (ODBC).
- 4. Highlight Reporter and select the **Remove** button.



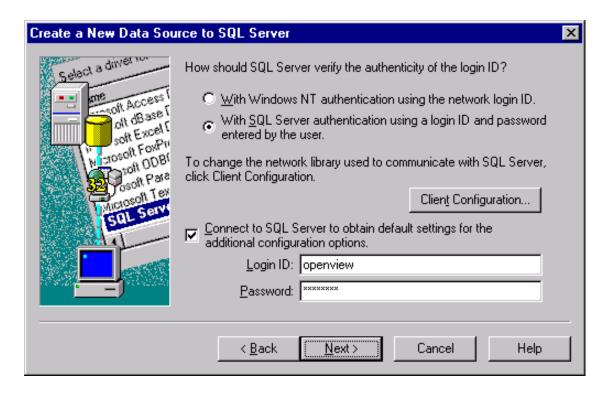
- 5. Select the **Add...** button to create a new Reporter data source.
- 6. In the Create New Data Source dialog box select the **SQL Server** driver and the **Finish** button.



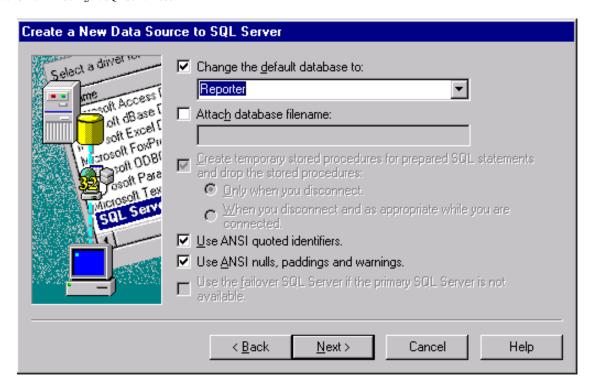
6. In the Create a New Data Source to SQL Server dialog, make sure that the server name appears in the Server: text box. Then select **Next**.



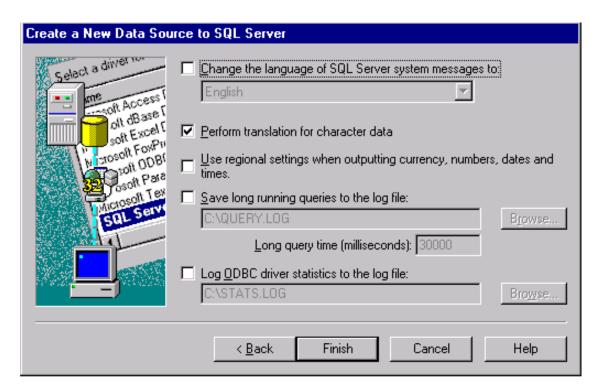
7. Select - With SQL Server authentication using a login ID and password entered by user. Also check the box for Connect to SQL Server to obtain default settings. Enter the login ID and password that you used in the first section Install and Configure SQL Server 2000: Task 3 - Configure the Database on SQL Server 2000. Then select Next.



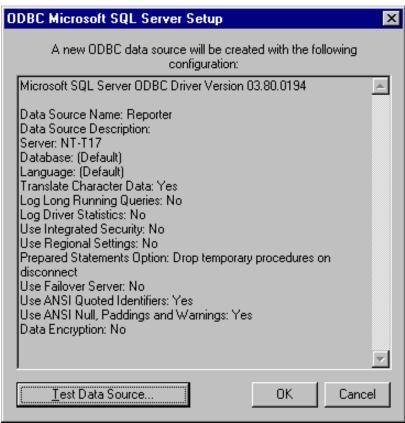
8. Check Change the default database to, select Reporter, and click Next.



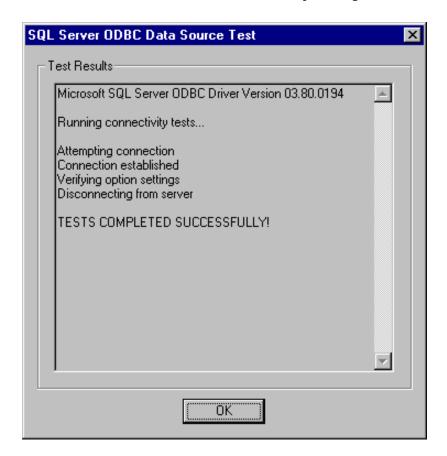
9. Check Perform translation for character data and select Finish.



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



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



Task 4 Configure SQL as the Reporter Database

1. From the Start menu select **Programs > HP OpenView > Reporter>Reporter**.

- 2. An error message is expected; click Yes to proceed.
- 3. In the Reporter main window select **File** > **Configure** > **Databases**. (Another error message is expected; click **Yes** to proceed.)
- 4. In the Configure Databases in the uppermost section (Reporter Database), 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, and click **OK**.
 - (No entries required for remaining text boxes.)
- 5. Verify that Reporter Service and Reporter UI are stopped

Task 5 Upgrade Reporter SQL Sever Database Tables

To migrate data from an Access database to SQL Server, skip this section and see Task 6.

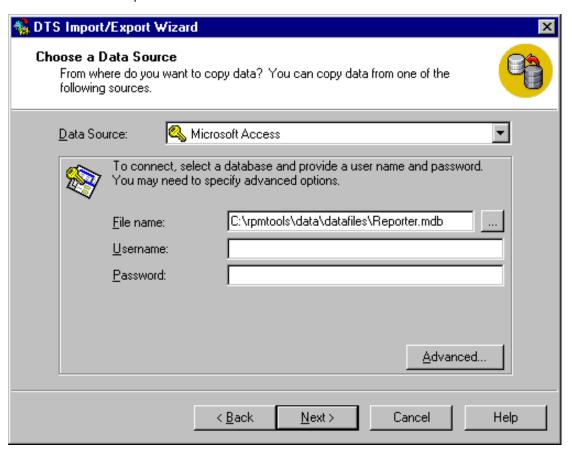
- 1. Run <install_directory>\bin\NewDB.exe
- 2. Start Reporter by double-clicking <install_directory>\bin\Reporter.exe, and in the Status Pane, look for the message: Completed creation/modification of required Reporter database tables.

Task 6 PMigrate Data from an Access database to SQL Server (optional, use as appropriate)

- 1. Run < installation_directory>\bin\NewDB.exe -empty
- 2. Open the Reporter main window and stop all services (accessing the source database) by clicking the **Stop/Start Reporter Service** toolbar button (or by selection Action>Stop Reporter Service).

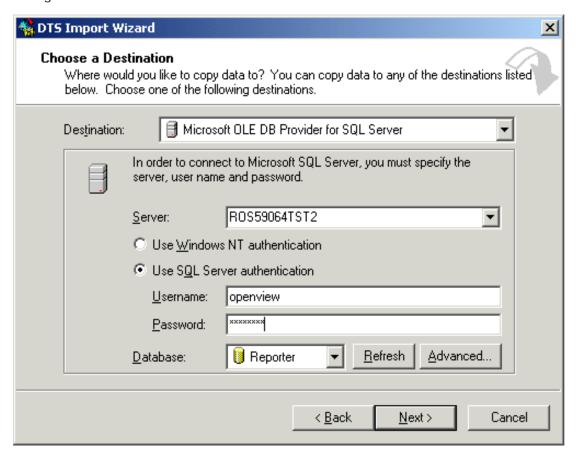


- 3. In the SQL Server Enterprise Manager console start the DTS Import Wizard by right-clicking the newly created Reporter database.
- 4. Select All Task -> Import Data..., and click Next.
- 5. From the Source drop down list choose Microsoft Access .

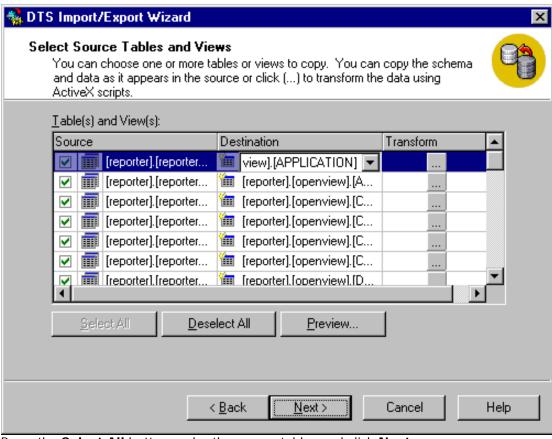


- 6. Enter the location to the Reporter mdb file in the Filename text box, click **Next** (An Access login and password is not required)
- 7. In the Server: box click the down-arrow and select the SQL Server system that has the newly created Reporter database.
- 8. Select the Use SQL Server authentication radio button.

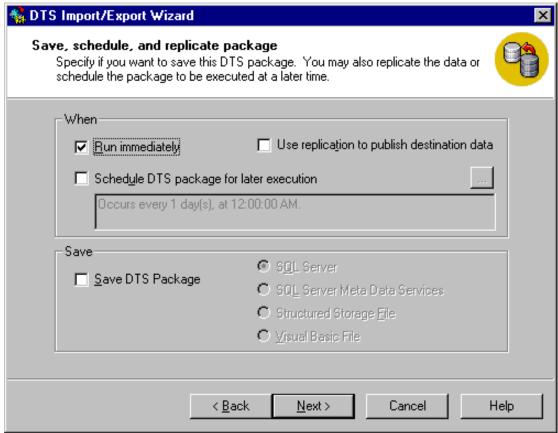
9. Enter the login ID and password that you used in the first section Install and Configure SQL Server 2000: Task 3 - Configure the Database on SQL Server 2000.



- 10. Select reporter from the Database Name drop-down list and click Next.
- Select the radio button next to Copy table(s) from the source database and click Next.



12. Press the Select All button under the source tables and click Next.



- 13. Select the **Run immediately** check box and click **Next**.
- 14. View the Summary information box to ensure the source and destination information is correct, and select **Finish**. (The status pane should appear with the progress of the import, finally a message should appear with the number of successful tables imported from the default database to Microsoft SQL Server. All tables should have transferred without errors.)
- 15. Open the Reporter main window and select the Start/Stop Reporter Service toolbar button to restart the Reporter service.

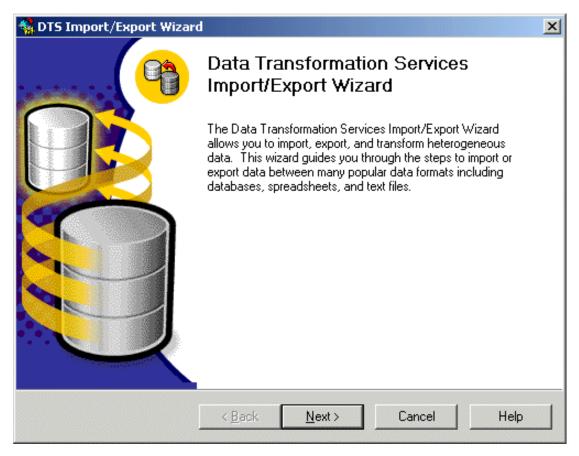


Task 6A ➡ Migrate Data from a default MSDE database to SQL Server (optional, use as appropriate)

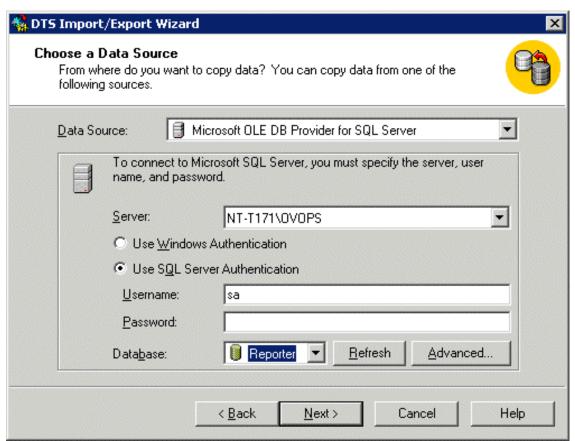
1. Open the Reporter main window and stop all services (accessing the source database) by clicking the **Stop/Start Reporter Service** toolbar button (or by selection Action>Stop Reporter Service).



- 2. In the SQL Server Enterprise Manager console start the DTS Import Wizard by right-clicking the newly created Reporter database
- 3. Select All Tasks>Import Data..., and click Next.

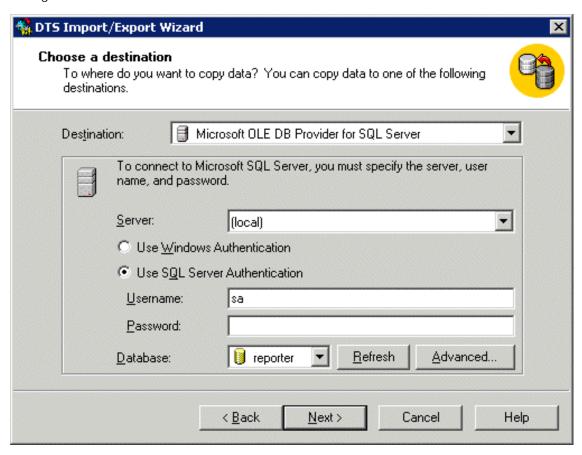


4. From the Data Source drop down list choose **SQL Server**.

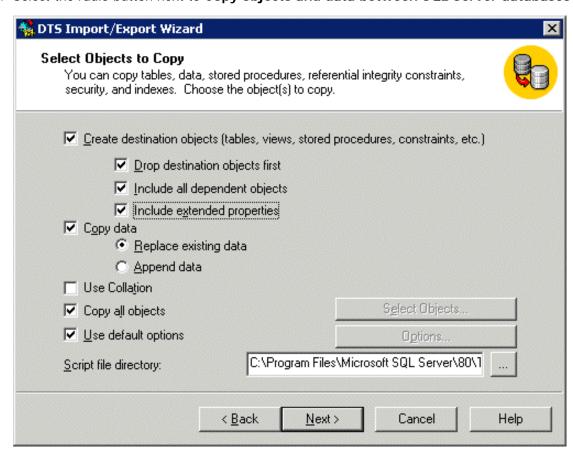


- 5. In the Server: box click the down-arrow and select the SQL Server system that has the newly created Reporter database.
- 6. Select the Use SQL Server Authentication radio button.
- 7. Enter the login ID (username) and password that you used in the first section Install and Configure SQL Server 2000: Task 3 Configure the Database on SQL Server 2000.
- 8. Enter the login ID and password that you used in the first section Install and Configure SQL Server 2000: Task 3 -

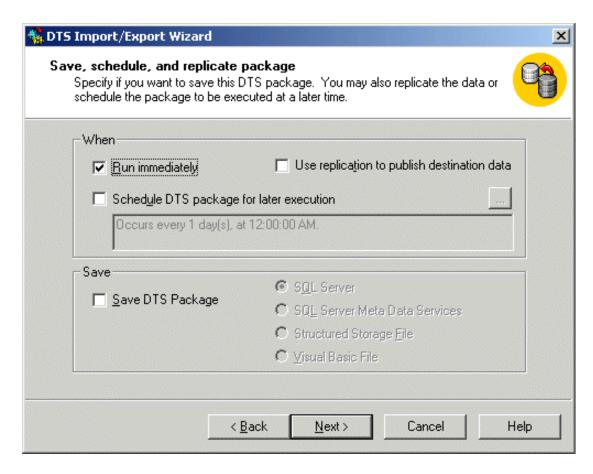
Configure the Database on SQL Server 2000.



- 9. Select reporter from the Database Name drop-down list and click Next.
- 10. Select the radio button next to Copy objects and data between SQL Server databases and click Next.



11. Select Include extended properties and click Next.



12. Select the Run immediately check box and click Next.



- 13. View the Summary information box to ensure the source and destination information is correct, and select **Finish**. (The status pane updates you on the progress of the import, finally stating the number of successfully imported tables now in Microsoft SQL Server. All tables should have transferred without error.)
- 14. Open the Reporter main window and select the Start/Stop Reporter Service toolbar button to restart the Reporter service.



Task 7 → Confirm that the Database is Set Up

- 1. From the Start menu, select **Programs > Microsoft SQL 2000 > Query Analyzer**.
- 2. Connect to your SQL Server using SQL Server authentication using the user name and password you created.
- 3. In the SQL Server Query Analyzer dialog, select DB: reporter.
- 4. Enter a query to verify the database connection.

Part B: Set Up Microsoft SQL Server 2005 as the Database for Reporter

Overview

This chapter contains instructions to use Microsoft SQL Server 2005 as the database for HP OpenView Reporter (Reporter), you should install both Microsoft SQL server and client software. This section provides instructions to do the following:

- Install Microsoft SQL 2005 Server Software
- Configure Microsoft SQL Server 2005 as the Database for Reporter
- Install Microsoft SQL Client Software
- Upgrade the Database Tables for Microsoft SQL Server
- Establish and Test the ODBC Connection
- Migrate Data from other databases to Microsoft SQL Server

NOTE:

- If you have not installed Reporter 3.70, install the Microsoft SQL Server and client software and then install Reporter. For instruction to install Reporter, refer to, <u>Section 1: Overview and Installation</u>.
- Before installing Microsoft SQL Sever, consult with a Database Administrator (DBA). A database administrator can help you design and set up the database, including the creation of the tablespaces, for optimal use by OV Reporter.
- Before installing Microsoft SQL Server, refer to Microsoft documentation for recommended settings.

Installation Requirements

Before installing Microsoft SQL Server Software, for system requirements and other information, refer to the product documentation available online at: http://www.microsoft.com/sql/default.mspx

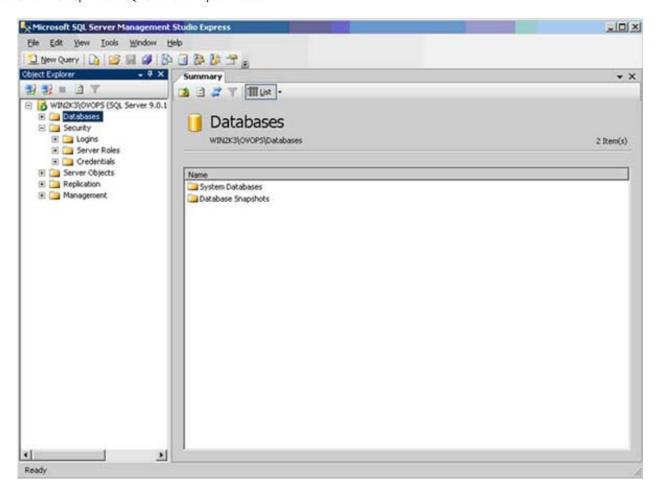
Install Microsoft SQL 2005 Server Software

- 1. Insert the Microsoft SQL Server 2005 CD into your CD-ROM drive.
- 2. Select Install MS SQL 2005 Services. The installation wizard appears.
- 3. Select Local Computer as the built-in system account and all the default options as they appear.
- 4. Select Mixed Mode for authentication.
- 5. In the Instance Name dialog box, select Named Instance and enter OVOPS.
- 6. Restart your system after the installation is complete.

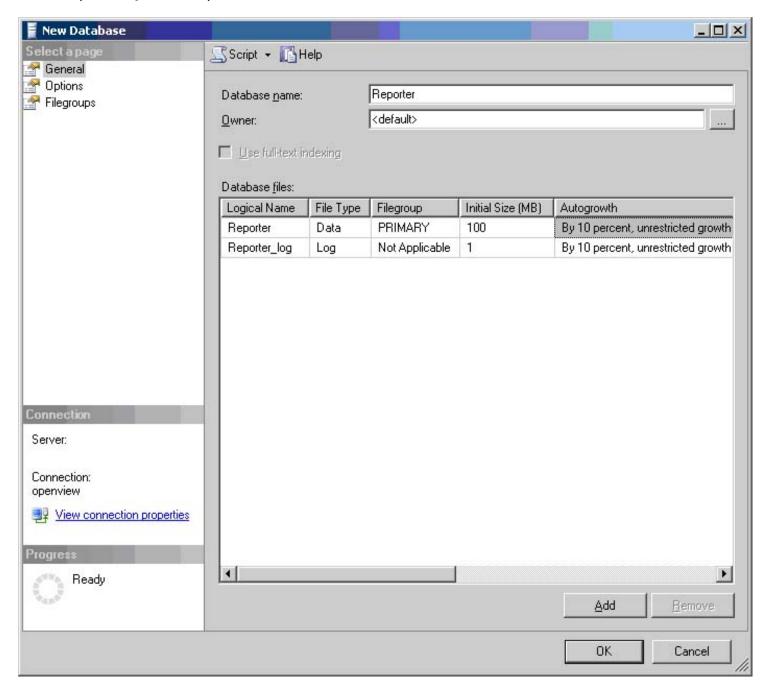
Configure Microsoft SQL Server 2005 as the Database for Reporter

To configure Microsoft SQL Server 2005 as the database for Reporter, do the following:

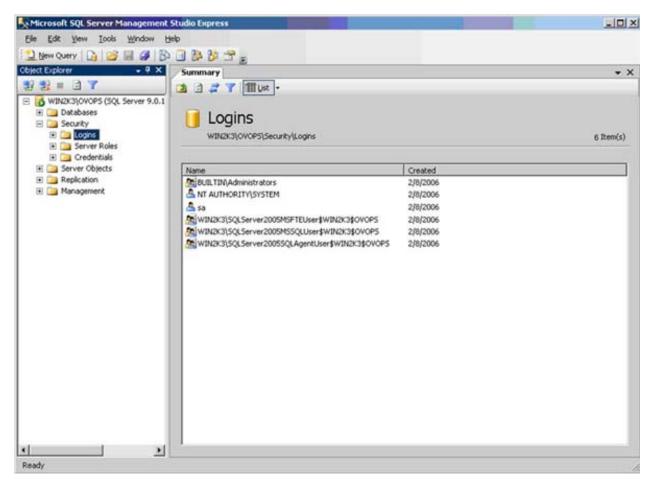
- 1. From the Start menu select Start -> Programs -> Microsoft SQL Server 2005 -> SQL Server Management Studio.
- 2. Enter your Login name and Password and click Connect, the Microsoft SQL Server Management Studio window appears.



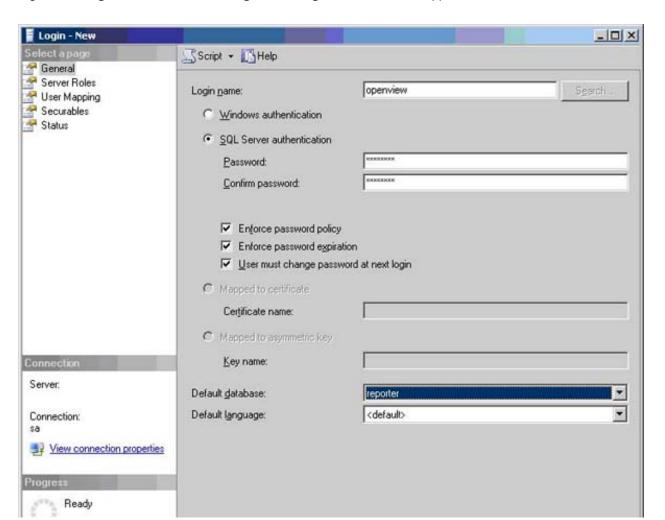
3. From the left pane of **Microsoft SQL Server Management Studio** window, right-click **Databases**, and select **New Database**. The **New Database window** appears.



- 4. If your SQL Server system is not listed under the SQL Server Group, right-click **SQL Server Group**, select **Register** from the drop-down menu. A registration wizard appears. Select the default options provided by the registration wizard to register your SQL Server.
- 5. Enter a name for the database in the **Database name** text box (Example: Reporter as shown in the screen shot). When you create a new database, the following files will be automatically created:
 - o a data file with the logical name same as the database name you specified (Example: Reporter as shown in the screen shot).
 - a log file with the logical name same as the database name followed by _log (Example: Reporter_log as shown in the screen shot).
- 6. The database files are displayed in the **Database files** section, specify the value of the **Initial Size (MB)** of database file as 100 MB and log file as the default value which appears. Click **Ok**, to close the **New Database** window.
- 7. From the left pane, click Security.



8. Right-click Logins, and select New Login. The Login - New window appears.



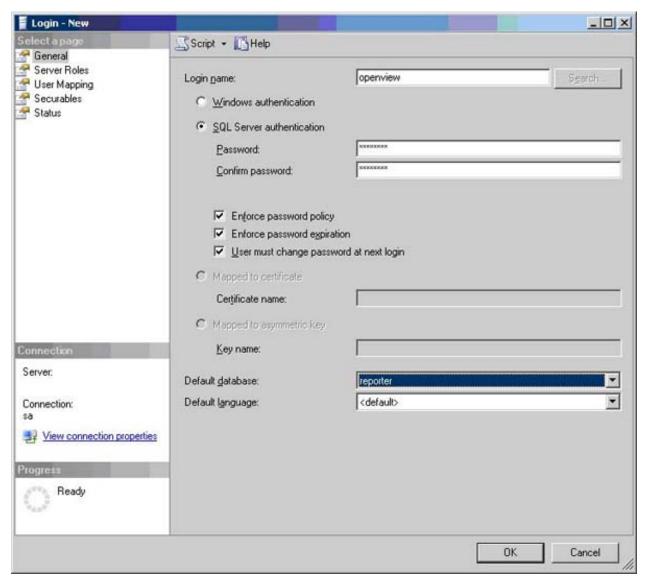
Section 3: Part B: Set Up Microsoft SQL Server as the Reporter Database



9. From the Select a Page options, Click General. Enter the Login name as openview.

NOTE: The login name has to be **openview**.

- 1. Select **SQL Server authentication** and enter the password.
- 2. From the **Default database** drop-down list, select **Reporter**. Retain all the default values as they appear, for all the remaining fields.
- 3. From the Select a Page options, Click User Mapping.



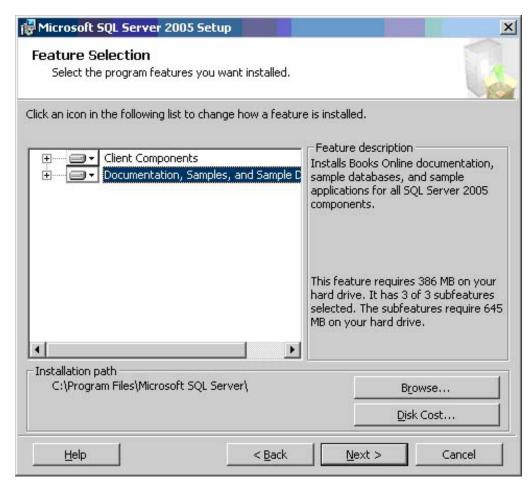
- 4. From the Users mapped to this login section, select the Map corresponding to your database Reporter
- 5. Under Database roles membership for: Reporter, select db_owner and public. Click OK.

The Microsoft SQL server 2005 database is now configured as the database for Reporter.

Install Microsoft SQL Client Software

IMPORTANT: If Reporter and Microsoft SQL Server are installed on the same system, you need not install SQL client software.

- 1. Insert the Microsoft SQL Server 2005 CD into your CD-ROM drive.
- 2. Double click the file SQL Server 2005 setup.exe and select Client Component, a windows-based installation wizard appears.



3. This wizard takes you through the installation, select all the default options to complete the installation.

Upgrade the Database Tables for Microsoft SQL Server

To upgrade the Microsoft SQL server database tables, do the following:

- 2. Double-click <install_directory>\bin\Reporter.exe to start Reporter
 The following message appears in the Status Pane:
 Completed creation/modification of required Reporter database tables.

Next Steps after Setting up Microsoft SQL Server as the database for Reporter

After installation, you must do the following:

- Establish and Test the ODBC Connection
- Verify Database Connection
- Verify Trust Relationship between Client and Server

Establish and Test the ODBC Connection

IMPORTANT: If you are migrating data from the default database to Microsoft SQL Server, stop the Reporter Service using the Reporter toolbar button and close the Reporter main window.

You must establish and test the ODBC connection. For steps to establish and test ODBC connection refer to the section, 'Establish the ODBC connection' under Section 4: Part C: Set Up Microsoft SQL Express 2005 as the Reporter Database.

Verify Database Connection

To verify the database connection, do the following:

- 1. From the Start menu select Start -> Programs -> Microsoft SQL Server 2005 -> SQL Server Management Studio.
- 2. Enter User name and Password you created.
- 3. In the SQL Server Management Studio window, right click DB: reporter and select New Query.
- 4. Enter a guery to verify the database connection.

Verify Trust Relationship between Client and Server

NOTE: A trust relationship should be set up if the Reporter client and Microsoft SQL Server are in separate domains in network or if the client and server run on different systems with Windows NT4 or Windows NT4 and Windows 2000.

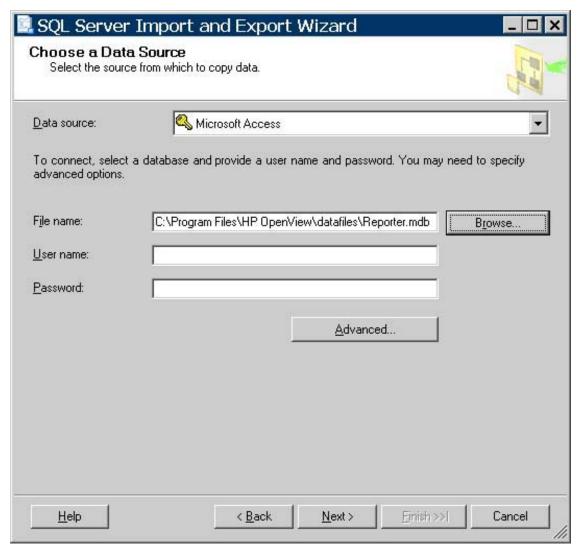
- 1. Log on to the Microsoft SQL Server-installed system with Administrator privileges.
- Click Start -> Settings -> Control Panel. In Control Panel, double-click Administrative Tools, and then double-click Active Directory Domains and Trusts. Select Trusts. The Trusting Domains dialog box opens
- 3. Look for the Domain where Reporter 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 Reporter and Microsoft SQL Server systems are in separate domains, you must configure a trust relationship between the systems).

Migrate Data from other databases to Microsoft SQL Server

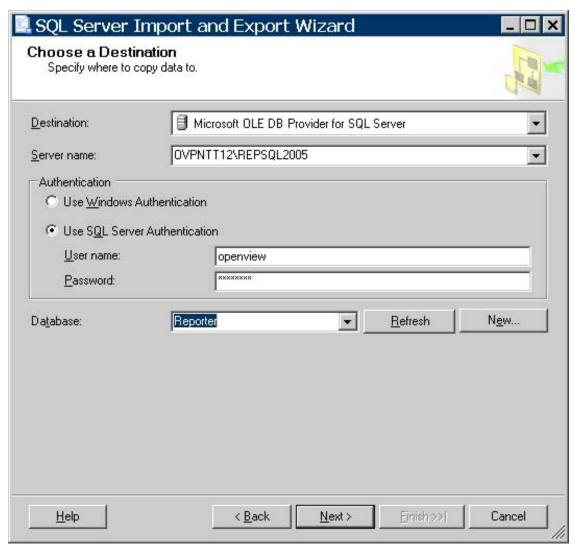
The following section provides instruction to migrate data from default MSDE database or Microsoft Access database to Microsoft SQL Server database.

Migrate Data from an Access database to Microsoft SQL Server

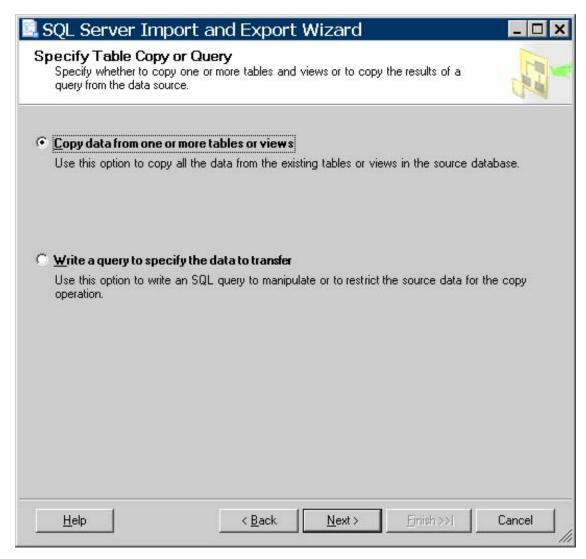
- 1. Run < installation_directory > \bin \NewDB.exe -empty
- 2. Open the main window of Reporter and stop all services which access the source database by clicking the **Stop/Start Reporter Service** on the toolbar (or Click **Action** -> **Stop Reporter Service**).
- 3. In the SQL Server Business Intelligence Development Studio console, select the newly created Reporter database.
- 4. Click Task -> Import Data. Click Next.



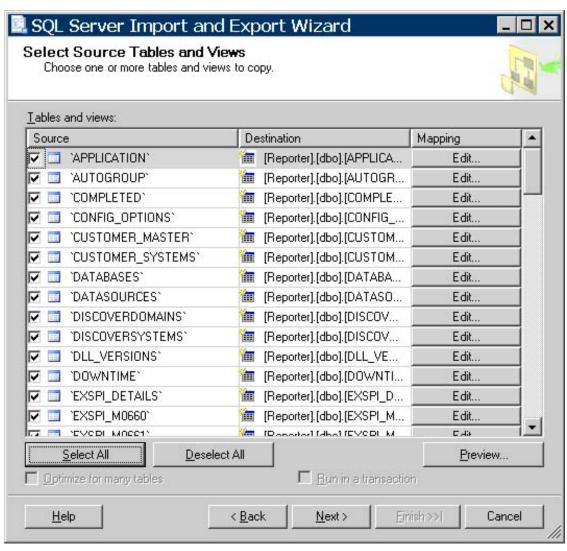
- 5. From the **Data Source** drop down list, select **Microsoft Access** .
- 6. Enter the path for the file Reporter.mdb file in the **File name** text box, click **Next**, the **choose a Destination** window is displayed.



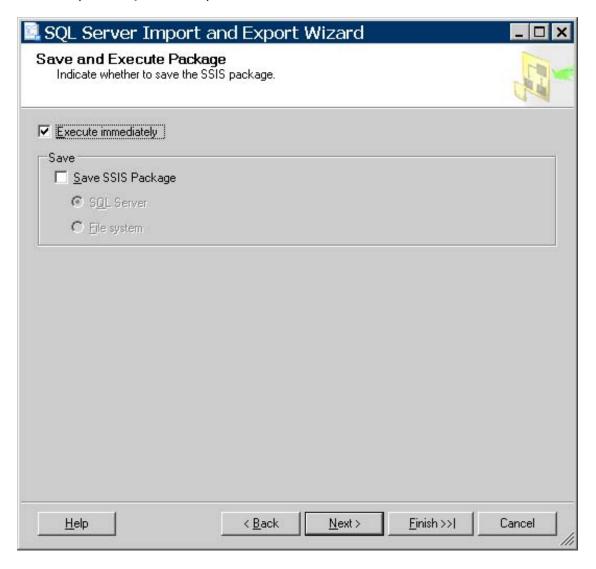
- 7. From the Server name drop-down list, select the Microsoft SQL Server system that has the newly created Reporter database.
- 8. Select the **Use SQL Server Authentication** radio button.
- 9. Enter the user name and password which you used for installing and configuring the Microsoft SQL Server 2005 software.
- 10. Select reporter from the ${f Database}$ drop-down list and click ${f Next}$.



11. Select Copy data from the one or more tables or views and click Next.



12. Click **Select All** and click **Next**.

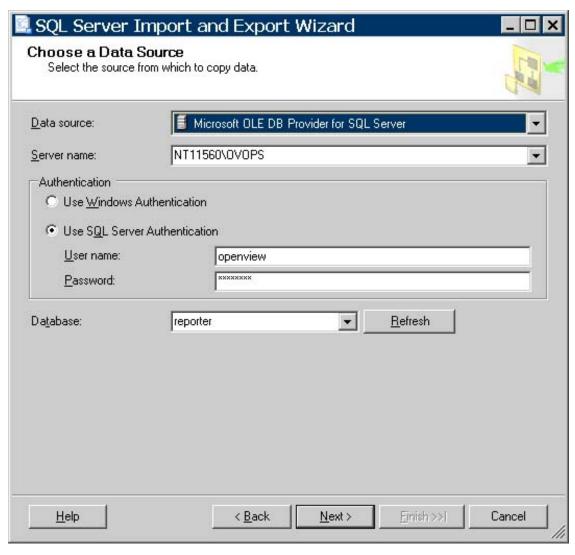


- 13. Select Execute immediately and click Next.
- 14. Verify the Summary information displayed, make sure that the source and destination information is correct, and select **Finish**. The status pane indicates the progress of the import. After the import, a message which indicates the number of successful tables imported from the default database to Microsoft SQL Server will be displayed. All tables should have the status transferred without errors.

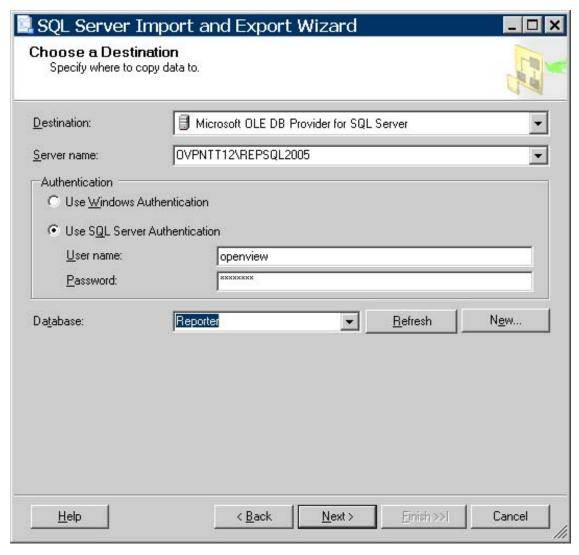
After the data migration from Access to Microsoft SQL Server is complete, you can restart Reporter.

Migrate Data from the default MSDE database to Microsoft SQL Server (optional)

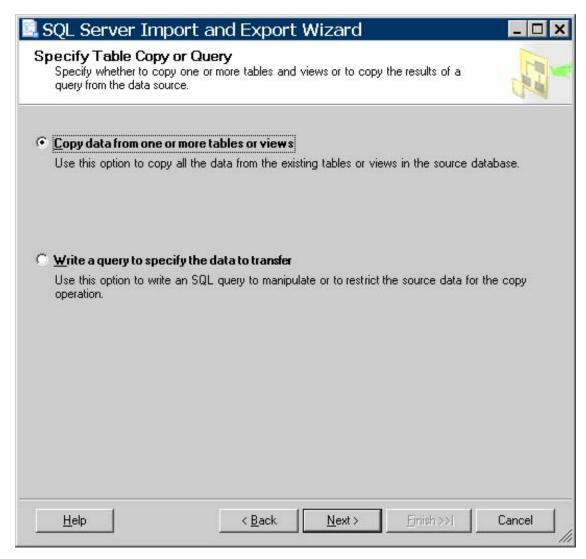
- 1. Run < installation_directory > \bin \NewDB.exe -empty
- 2. Open the main window of Reporter and stop all services which access the source database by clicking the **Stop/Start Reporter Service** on the toolbar (or Click **Action** -> **Stop Reporter Service**).
- 3. In the SQL Server Business Intelligence Development Studio console, select the newly created Reporter database.
- 4. Click Task -> Import Data. Click Next.



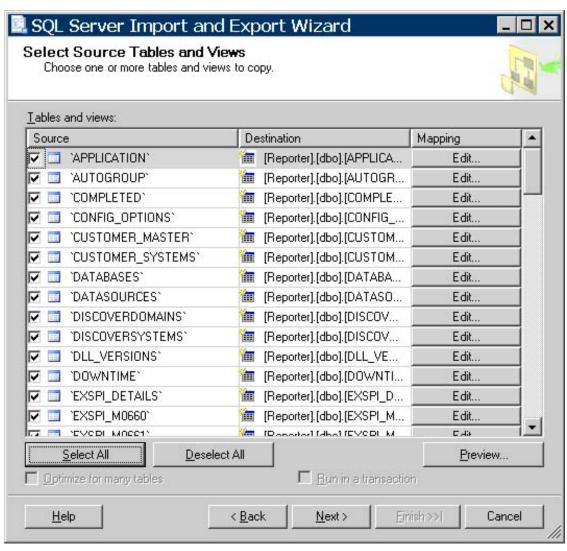
- 5. From the **Data Source** drop down list, select **SQL Server**.
- 6. Enter the path for the file Reporter.mdb file in the **File name** text box, click **Next**, the **choose a Destination** window is displayed.



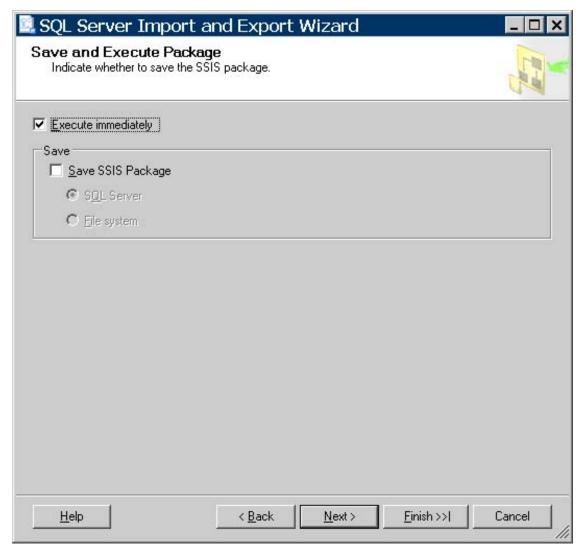
- 7. From the Server name drop-down list, select the Microsoft SQL Server system that has the newly created Reporter database.
- 8. Select the **Use SQL Server Authentication** radio button.
- 9. Enter the user name and password which you used for Installing and Configuring the Microsoft SQL Server 2005 software.
- 10. Select reporter from the ${f Database}$ drop-down list and click ${f Next}$.



11. Select Copy data from the one or more tables or views and click Next.



12. Click **Select All** and click **Next**.



- 13. Select Execute immediately and click Next.
- 14. Verify the Summary information displayed to ensure the source and destination information is correct, and select **Finish**. The status pane indicates the progress of the import. After the import, a message which indicates the number of successful tables imported from the default database to Microsoft SQL Server will be displayed. All tables should have the status transferred without errors.

After the data migration from the default MSDE database to Microsoft SQL Server, you can restart Reporter.

Part C: Set Up Microsoft SQL Express 2005 as the Database for Reporter

Overview

This chapter provides information about setting up Microsoft SQL Express 2005 as the database for HP OpenView Reporter (Reporter). You must perform the following tasks (in the order in which they are listed) to set up Microsoft SQL Express 2005 as the database:

- 1. Install Microsoft SQL Express 2005 and Microsoft SQL Server Management Studio Express
- 2. Configure SQL Express 2005 as the Reporter Database
- 3. Establish ODBC connection
- 4. Upgrading from MSDE 2000 to SQL Express 2005

NOTE:

- Before installing Microsoft SQL Express 2005, you can consult a Database Administrator (DBA) to optimize the database usage by OV Reporter. Optimization of the database usage can include tasks such as designing and setting up the database and creation of tablespaces.
- Before installing Microsoft SQL Express 2005, refer to Microsoft SQL Express 2005 documentation for current recommended settings.

Install Microsoft SQL Express 2005 and SQL Server Management Studio Express

To set up Microsoft SQL Express 2005 as the database for Reporter, you must download the files listed in the following table. You can download the files from the Microsoft Download Center. The Microsoft Download Center also provides information about the hardware and software requirements and instructions to set up MS SQL Express 2005.

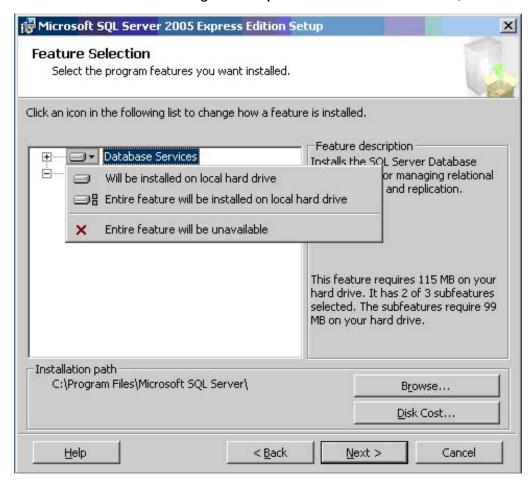
Application	File Name	URL
SQL Express Manager Microsoft SQL Server 2005	SQLEXPR.EXE	http://www.microsoft.com/downloads/details.aspx?FamilyID=220549b5- 0b07-4448-8848-dcc397514b41&DisplayLang=en
Microsoft SQL Server Management Studio Express - Community Technology Preview (CTP)	SQLServer2005_SSMSEE. msi	http://www.microsoft.com/downloads/details.aspx?familyid=82AFBD59-57A4-455E-A2D6-1D4C98D40F6E&displaylang=en

Install Microsoft SQL Express 2005

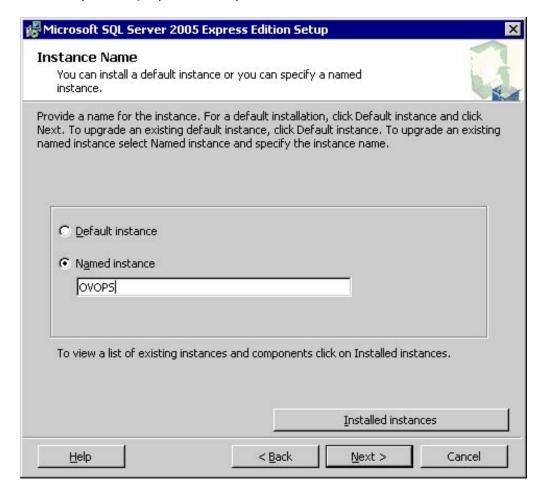
To install MS SQL Express 2005, perform the following steps:

- 1. Double click the file SQLEXP2005.exe, the installation wizard appears:
- 2. Select the I accept the licensing terms and conditions check box and click Next, the Registration Information screen appears
- 3. Enter your Name and Company name in the corresponding text boxes.

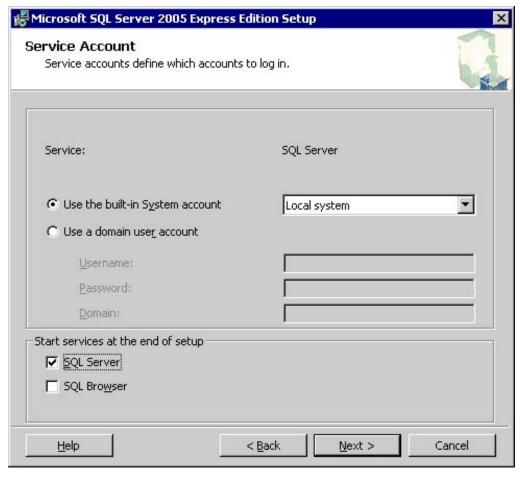
4. Clear the Hide advanced configuration options check box and click Next, the Feature Selection screen appears.



- 5. Click **Database Services**, a drop-down menu appears.
- 6. From the drop-down menu select, Entire feature will be installed on local Hard drive.
- 7. Click **Next**, the **Instance Name** window appears.



- 8. Select Names Instance and type OVOPS.
- 9. Click **Next**, the **Service Account** window appears.



- 10. Select Use the build-in system account and from the drop-down list select Local system.
- 11. Click **Next** to continue, the **Authentication Mode** window appears.
- 12. Select **Mixed Mode** and specify the **sa** (default) logon password in the **Enter Password** text box. Re-enter the password in the **Confirm Password** text box.
- 13. Click **Next**, select all the default options in the subsequent screens to complete your installation.

Install Microsoft SQL Server Management Studio Express

To install Microsoft SQL Server Management Studio Express, perform the following steps:

- Double click the file SQLServer2005_SSMSEE.msi, the installation wizard appears.
- 2. Select the default options provided by the installation wizard to complete the installation of MS SQL Server Management Studio Express.

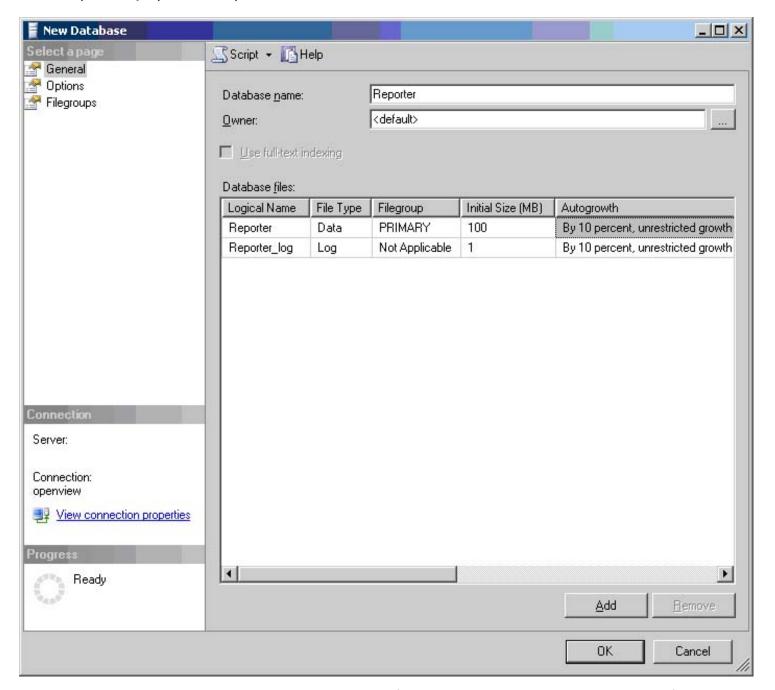
Configure the SQL Express 2005 as the Database for Reporter

To configure SQL Express 2005 as the Database for Reporter, perform the following tasks:

- Click Start -> Programs -> Microsoft SQL Server 2005 -> SQL Server Management Studio. The Connect to Server window appears.
- 2. Enter Login name and Password and press Connect. The Microsoft SQL Server Management Studio Express window appears.
- 3. Create a new database and login name. For instructions refer to the sections, Create a new database and Create a New Login.

Create a new database

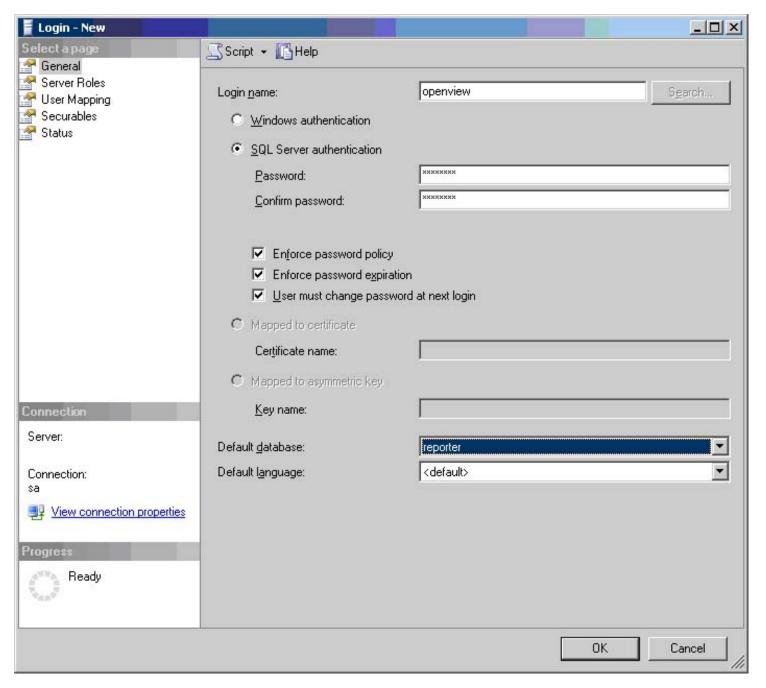
- 1. From the left pane of **Microsoft SQL Server Management Studio Express** window, right-click **Databases**. A pop-up menu appears.
- 2. Select New Database, the New Database window appears.



- 3. Enter a name for the database in the **Database Name** text box (Example: Reporter as shown in the screen shot).
- 4. In the Database files section, specify the value of the Initial Size (MB) of Reporter file as 100. Click Ok.
- 5. After the database is created, you need to create a new login.

Create a New Login

1. From the left pane of **Microsoft SQL Server Management Studio Express** window, right-click **Security** and select **New login**, the **Login - New** window appears.



- 2. From the menu options on the left pane, Click General. Enter the Login name as openview.
- 3. Select **SQL Server authentication** radio button and enter your password.
- 4. From the **Default database** list box, select Reporter.
- 5. From the menu options on the left pane, Click User Mapping tab and select Map Users mapped to this login to Reporter.
- 6. Under Database roles membership for: Reporter, select db_owner and public. Click OK.

You can exit the Microsoft SQL Server Management Studio Express window.

Establish the ODBC connection

To establish ODBC connection, perform the following tasks:

- 1. Click Start -> Settings -> Control Panel.
- 2. Double-click Administrative Tools.
- 3. Double-click Data Sources (ODBC).
- Select Reporter and click Remove.
- 5. Click Add, the Create New Data Source window appears.
- 6. Select **SQL Native Client** and Click **Finish**.
- 7. In the Create a New Data Source to SQL Server window, make sure that the server name appears in the Server text box.

Click Next.

- 8. Select With SQL Server authentication using a login ID and password entered by user and Connect to SQL Server to obtain default settings.
- 9. Enter the **Login ID** as openview and password (as specified in the section, <u>Configure the Reporter Database on SQL Express</u> 2005. Click **Next**.
- 10. Select Change the default database to, select Reporter from the drop-down list, and click Next.
- 11. Select **Perform translation for character data** and Click **Finish**. The **ODBC Microsoft SQL Server Setup** dialog box will be displayed.

Next Steps: Test the ODBC connection:

To test the ODBC connection, perform the following tasks:

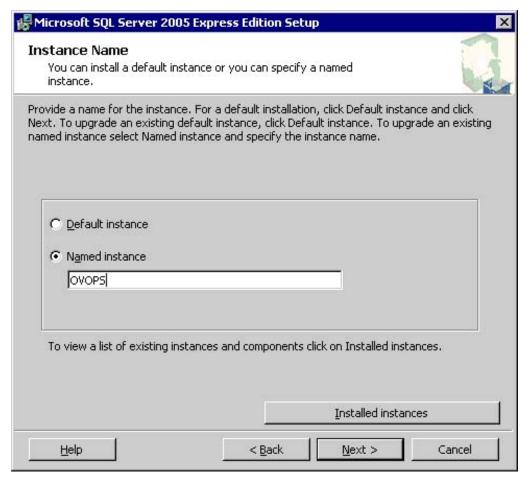
- 1. In the ODBC Microsoft SQL Server Setup dialog, Click Test Data Source....
- 2. Click Ok to exit the SQL Server ODBC Data Source Test.

Upgrading from MSDE 2000 to Microsoft SQL Express 2005

To upgrade from the default database MSDE 2000 to Microsoft SQL Express 2005, perform the following tasks:

MPORTANT: If you are migrating data from the default database to SQL Express 2005, stop the Reporter Service using the Reporter toolbar button and close the Reporter main window.

1. Follow steps from one through three in the section <u>Install Microsoft SQL Express 2005</u>. The **Instance Name** window appears.



- 2. Click Installed Instances, the Installed Instances window appears
- 3. Select **SQL Server OVOPS** and click **Ok**, the reporter database will now be upgraded from MSDE 2000 to SQL Express 2005.

Oracle Setup/Connections

(Covers connecting to the OpenView Operations Oracle database)

Reporter can be configured to work with Oracle as its database. The topics below cover many versions of Oracle and also offer information on configuring the connection to the Oracle listener.

A 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: Before installing Oracle, you can consult an Oracle Database Administrator (DBA) to optimize the database usage by OV Reporter. Optimization of the database usage can include tasks such as setting up the database and creation of tablespaces for configuration issues like database sizing and AUTOEXTEND of data files.

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

- Part A: Configure/edit the Oracle listener and tsnnames files
- Part B: Transfer data to Oracle
- Part C: Connect the Oracle 9i/10g OpenView Operations database to Reporter (to generate reports on OVO-managed systems)
- Part D: Oracle 9i (Solaris or HP-UX)
- Part E: Configure Oracle 10g (Solaris or HP-UX) as the Reporter database

4 Oracle Setup/Connections

Part A: Edit templates to configure Oracle listener.ora and tnsnames files

<u>Template 1</u> (listener.001) is for situations where no listener has been configured for Oracle. This template allows you to insert text pertaining to the host system and directory where Oracle resides and use the file to replace the existing listener file.

<u>Template 1/A</u> (tnsnames.001) is for configuring one Oracle database instance (for Reporter data). You can use this template to insert text pertaining to the database instance you will use for the Reporter database.

<u>Template 2</u> (listener.002) is for situations where a listener is already configured. This template allows you to copy and paste settings relating to Reporter into your existing template.

<u>Template 2/A</u> (tnsnames.002) is for adding the configuration of an Oracle database instance for Reporter data to the existing tnsnames.ora file that already is configured to recognize other Oracle database instances.

Template 1: Configuring the listener.ora file

The sample file below helps you edit the template included with Reporter (listener.001) for setting up a listener for the Oracle database instance connection to Reporter. Before using the template:

- 1. Replace the host name in two places
- 2. If necessary, change the ORACLE_HOME path (where Oracle resides).
- 3. Rename the template to listener.ora. and copy it to the **/etc** directory for HP-UX or the **\$ORACLE_HOME/network/admin** directory for Solaris.

```
LISTENER =
   (ADDRESS_LIST =
      (ADDRESS=
      (PROTOCOL=IPC)
      (KEY= REPORTER)
      (ADDRESS =
        (PROTOCOL = TCP)
        (HOST = host_name) #### Insert your host name for <host_name>
        (PORT = 1521)
        (QUEUESIZE = 50) ##### Increased queue size for REPORTER
      )
      (ADDRESS =
         (PROTOCOL = TCP)
         (HOST = host_name) #### Insert your host name for <host_name>
         (PORT = 1526)
         (QUEUESIZE = 50) ##### Increased queue size for REPORTER
      )
   )
SID LIST LISTENER =
  (SID_LIST =
     (SID_DESC =
        (SID NAME = REPORTER)
        (ORACLE_HOME= /opt/oracle/product/9.2.0)
        (ENVS='EPC DISABLED=TRUE')
     )
  )
STARTUP_WAIT_TIME_LISTENER = 0
CONNECT TIMEOUT LISTENER = 30 ##### Increased timeout for REPORTER
LOG_DIRECTORY_LISTENER = /opt/oracle/product/9.2.0/network/log
LOG FILE LISTENER = listener
TRACE LEVEL LISTENER = OFF
```

Template 1A: Configuring the tnsnames.ora file, using the template

The sample file below helps you edit the template included as tnsnames.001 for configuring one Oracle database instance connection to Reporter. Before you can use the file:

- 1. Replace the host name.
- 2. Rename the file to the the solution and copy into the **/etc** directory for HP-UX or the **\$ORACLE_HOME/network/admin** directory for Solaris.

```
# DATE...: Nov 16 2005
# NETWORK.: openview
# NODE...: Server
# SERVICE.: LISTENER
# COMMENT.: For use with HP OpenView Reporter.
##################

RPT.world =
    (DESCRIPTION =
        (ADDRESS = (PROTOCOL= TCP)(Host= <host_name>)(Port= 1521))
        (CONNECT_DATA = (SID = REPORTER))
    )
```

Template 2: Editing the Existing listener.ora file, copying from the template

The sample file below helps you edit the template included with Reporter (listener.002) to set up a listener for the database instance connection to Reporter. Before using the template:

- 1. Replace the host name in two places.
- 2. If necessary, modify the path where Oracle is located in two places.
- 3. Paste the REPORTER blocks and the "Increased queue size" line into the appropriate places in your existing listener.ora file.
- 4. Paste in or change the CONNECT_TIMEOUT_LISTENER line so that the timeout value is at least 30.

```
##############################
# FILENAME: listener.ora
# DATE....: Nov 16 2005
# NETWORK.: openview
# NODE....: Server
# SERVICE.: LISTENER
# COMMMENT: For use with HP OpenView Reporter
############################
LISTENER =
  (ADDRESS_LIST =
    (ADDRESS=
           (PROTOCOL=IPC)
           (KEY= openview)
    )
##### Begin REPORTER block number 1 ######
    (ADDRESS=
           (PROTOCOL=IPC)
                                            #
           (KEY= REPORTER)
                                            #
```

```
Section 4: Part A: Edit templates to configure Oracle listener.ora & tnsnames files
    )
##### End REPORTER block number 1 ########
    (ADDRESS =
             (PROTOCOL = TCP)
             (HOST = <host_name>)
             (PORT = 1521)
             (QUEUESIZE = 50) #### Increased queue size for REPORTER
    )
##### Begin REPORTER block number 2 #######
    (ADDRESS =
             (PROTOCOL = TCP)
             (HOST = <host_name>)
             (PORT = 1526)
             (QUEUESIZE = 50)
##### End REPORTER block number 2 ########
  )
SID_LIST_LISTENER =
  (SID LIST =
      (SID_DESC =
         (SID NAME = openview)
         (ORACLE HOME= /opt/oracle/product/9.2.0)
      )
  )
##### Begin REPORTER block number 3 #################
      (SID DESC =
         (SID_NAME = REPORTER)
         (ORACLE_HOME= /opt/oracle/product/9.2.0)
         (ENVS='EPC DISABLED=TRUE')
       )
##### End REPORTER block number 3 ####################
```

STARTUP_WAIT_TIME_LISTENER = 0

LOG_FILE_LISTENER = listener
TRACE LEVEL LISTENER = OFF

Template 2A: Editing the existing thsnames.ora file, copying from the template

CONNECT_TIMEOUT_LISTENER = 30 #### Increased timout for REPORTER LOG_DIRECTORY_LISTENER = /opt/oracle/product/9.2.0.1/network/log

The sample file below helps you edit the template included as tnsnames.002 for use in changing your existing tnsnames.ora file to recognize an Oracle database instance connection to Reporter. To use the

template:

- 1. Replace the host name in two places.
- 2. Paste the REPORTER blocks into the appropriate places in your existing tnsnames.ora file.

```
############################
# FILENAME: tnsnames.ora
# DATE....: Nov 16 2005
# NETWORK.: openview
# NODE....: Server
# SERVICE.: LISTENER
# COMMENT .: For use with HP OpenView Reporter.
############################
ov_net =
(DESCRIPTION =
(ADDRESS = (PROTOCOL= TCP)(Host= <host_name>)(Port= 1521))
(CONNECT_DATA = (SID = openview))
)
RPT.world =
(DESCRIPTION =
(ADDRESS = (PROTOCOL= TCP)(Host= <host_name>)(Port= 1521))
(CONNECT_DATA = (SID = REPORTER))
)
```

4 Oracle Setup/Connections

Part B: Transfer Data from Access to Oracle

Transferring data from a Reporter Access database to Oracle can be done using an Oracle utility. Even though the Oracle utility should maintain the data in its original form, you should still back up your Reporter database before you start.

Prerequisites: To migrate data from the Reporter database, you must have installed Reporter 2.0 or higher. Reporter 3.7 initially supports Oracle9i and Oracle 10g. Follow the instructions in the Installation and Special Configurations Guide for installing an Oracle database for Reporter, including database objects, tablespaces, data files, users and privileges. Also perform all needed installations and configurations for the Oracle client on Windows except do not run the "hpopenviewbinheddexe" executable against the database.

NOTE: The current Oracle Migration Workbench (version 2.0.2.0.0) is an Oracle 9i product. This product must be installed in an Oracle Home (directory structure) different from the Oracle 8i client. Use of the Oracle "Home Selector" utility is required to switch between the OMWB home (Oracle 9i) and the client home (Oracle 8i). The migration workbench may install a new Oracle Universal Installer version and new ODBC drivers. The OMWB requires an ODBC connection (using the new 9.x driver) to the target Reporter database.

The OMWB product is an evolving product and is updated frequently by Oracle Corporation. The intent of these instructions is to provide general guidelines for using the OMWB. Please refer to Oracle documentation for specific information about installation and use of the OMWB.

Task 1 → Download the Oracle Migration Workbench

At the Oracle Technology Network web site (http://otn.oracle.com) select software downloads (http://otn.oracle.com/software/content.html) and select the Oracle Migration Workbench (http://otn.oracle.com/software/tech/migration/workbench/content.html)

Download the Oracle Migration Workbench (current version 2.0.2.0.0) for Windows. A core component should be downloaded first, followed by a plug-in for the specific database from which data is migrated (i.e. MS Access, or SQL server).

Migration Workbench documentation is available at http://otn.oracle.com/docs/tech/migration/workbench/content.html

Task 2 - Stop Reporter services

- 1. Stop all Reporter services that are using the Access database.
- 2. Stop the services of any other OpenView products that use the Reporter database, such as OpenView Internet Services or Web Transaction Observer.

Task 3 Install the Oracle Migration Workbench Core Component

- 1. Begin installation by executing the **OMWB** program (omwb 20200.exe)
- 2. Unzip to the default location and when the Oracle Universal Installer appears, click **Next**.
- 3. Change the following:
 - Destination Name: OraHome9
 - Destination Path: \oracle\ora9 (or your preferred location).
 - (Installation requires that the OMWB must be installed in a directory different from the existing client software.)
- 4. Click **Next** to continue.
- 5. Select **Typical installation type**, and click **Next**.
- 6. Review the Summary, and click Install (Requires approx.174 MB)
- 7. When the Net8 Configuration Assistant dialog appears, to the prompt to use a directory service, select **No**.
- 8. Click Next.
- 9. Select the Oracle database version that you are using and click **Next**.
- 10. Type in the Service Name: **REPORTER**; then click **Next**.
- 11. Select the **TCP protocol** and click **Next**.
- 12. Type in the Host Name where the Oracle database will reside and click **Next**.
- 13. Select **Yes** to perform a connection test. (You may have to change the default login username and password.)
- 14. Click Next.
- 15. Enter a Net Service Name: **rpt_migrate**, (this is an arbitrary name for destination database which uses the 9.x ODBC driver, different than the 8i client driver) click **Next**.
- 16. When prompted to configure another service, select **No** and click **Next**.
- 17. Click **Next** to the completion message that appears and exit.

Task 4 Pinstall the OMWB Database-specific Plug-in

- 1. Begin installation by executing the OMWB plug-in program (msaccess_20200.exe)
- 2. Unzip to the default location and when the Oracle Universal Installer appears, click Next.
- 3. Install into the destination as specified in Task 3, click Next.
- 4. Review the Summary, click Install (Requires approx.3 MB)
- 5. Exit the Universal Installer at the End of Installation.

Task 5 Start the OMWB and create data repository

- 1. Upon starting the OMWB, select the **Default Repository** (this creates a local storage structure for holding models of the Access and Oracle databases).
- 2. Select the appropriate Migration Source (Microsoft Access).
- 3. The source database "Capture Wizard" starts; click **Next**.
- 4. Follow the instructions for creating a Microsoft Access XML data file. Select the XML file, click **Next**.
- 5. Review the data type mappings. No changes are recommended. Click **Next**.

- 6. Select Yes for creation of the Oracle Model. Click Next.
- 7. Review the Capture Details. Click Finish.
- 8. A log is displayed during creation of the Oracle Model. A dialog should indicate any errors or warnings. Correct any condition that causes errors. Click **OK**.
- 9. Select **No** if prompted to run the Migration Wizard to create schemas in the Oracle database. (The oracle model needs to be adjusted prior to migration).

Task 6 Make adjustments to the Oracle Model

- 1. Select the **Oracle Model** tab in the OMWB dialog.
- 2. Use the Tablespace Discoverer tool to fully populate the tablespaces element of the Oracle Model. You need to access the Oracle database with DBA privileges to obtain the tablespace names. Select **Reporter** as the default tablespace.
 - After using the tool, several tablespaces should be present including REPORTER and RPT_INDEXES.
- 3. Change the name and password of the "REPORTER" user to match the name and password of the user created when the Oracle Reporter database was created.
- 4. For each index under the user you modified in step 3, select the **Override Default Storage Options** tab and as the Tablespace select RPT_INDEXES.
- 5. Click **Apply** each time to set the change for each index.

Task 7 ➡ Migrate to Oracle

- 1. After the Migration Wizard begins, select the Migrate to Oracle Action in the OMWB dialog.
- 2. Supply a username and password with DBA privileges for the Destination Service: RPT_MIGRATE, click **Next**.
- 3. To migrating table data to Oracle prompt, select Yes and click Next.
- 4. Select all schema objects for migration, click Next.
- 5. Review the summary, click **Next**.
- 6. A logging dialog appears for the migration process.
- 7. Because the REPORTER tablespace already exists in the destination database, select **Ignore Error** if this error is reported.
- 8. Since the OPENVIEW (or the username established with the initial creation of the REPORTER Oracle Database) user already exists in the destination database, select **Ignore Error** if this error is reported.
- 9. If prompted to modify the MS Access database, select **Cancel**.
- 10. Attempt to resolve any error conditions.
- 11. Ignore warnings about milliseconds not being migrated in date columns.
- 12. Exit the migration workbench.

The data should be successfully migrated.

Task 8 P Set Oracle Home, Start Reporter

- 1. Use the Oracle Home Selector utility to change back to the Oracle client home (Oracle 8i).
- 2. In the Control Panel>Administrative Tools>Data Sources>System DSN tab, ensure that the the REPORTER ODBC points to the new Oracle database.
- 3. Run \Program Files>HP OpenView\bin\Newdb.exe against the Oracle database which will perform any needed schema updates for Reporter 3.7.

4. Start the Reporter main window, where you can start the Reporter service (from the toolbar).

Now Reporter is ready for operation with the migrated data.

Oracle Setup/Connections

Part C: Connect the OpenView Operations 7 or 8 (Oracle 9i / 10g), Database to Reporter

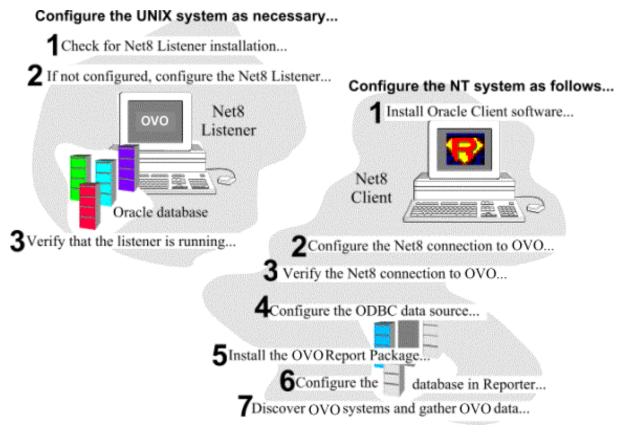
Set Up Oracle 9i/10g on HP-UX System and on the Windows System

Prerequisites: Check your settings as compared with those in HP-UX system kernel parameters. If you need to modify them, you must reboot your system. In addition, please do not attempt to run multiple copies of Reporter as unexpected results occur.

For other system, memory and disk requirements, pleas check the "System Requirements" section of the *Oracle9i Installation Guide Release 2 (9.2.0.1.0) for HP 9000 Server and Workstations* that is published by Oracle and 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.

Before Reporter can create reports containing OpenView Operations (OVO), formerly known as ITO, data, you must configure the connection between the OVO database (Oracle on the UNIX system) and Reporter (on the Windows system). The following illustration gives you an overview of the steps you complete on the two systems.



Prerequisites and Preparations

- Software on the OVO management server: OVO 7 or 8 using Oracle 9i/10g must be installed and running.
- Software on the Reporter system: Oracle Client Software, version 9i/10g a software package from Oracle.
- Information: Know the fully qualified OVO Oracle database server name, the ORACLE_HOME directory, and the user name and
 password for logging into the OVO database.
- Case Sensitivity: Some required entries in Windows are case-sensitive; so we recommend you match instruction text exactly.
- UNIX Shells: Since HP-UX users typically use the Korn shell and Solaris users typically use the Bourne shell, the syntax for

exporting variables differs.

For the Korn shell, the format is:
 export VARIABLE_NAME=<value>
For the Bourne shell, the format is:
 VARIABLE_NAME=<value>
 export VARIABLE_NAME

In the discussion below the Korn shell format is used; if you are running a Bourne shell, substitute the correct format.

Configure the UNIX Server System

This section covers checking for installation of the Net listener on the UNIX system which is the Oracle database server for OVO, and if necessary, installing it.

Task 1 Check for Net listener installation

On the Oracle database server for systems running OVO 7, or 8, the Net listener should already be installed and running. Check to see if the Net listener is already installed and running as follows. It is assumed you are logged on to the Oracle database server system for OVO as root.

- To see if the listener is configured, enter the command: grep listener /etc/services
- If the output includes a line beginning with "listener," such as listener
 1521/tcp #Oracle listener
 the listener is already configured and you can proceed to Task 3.

If the port number in the output is different from **1521/tcp**, consult with your Oracle database or OVO administrator to see if the port number can be changed to 1521 and the listener restarted. If not, you can change the port number on the client side in two ways (whichever you prefer) as follows:

- Select a different port in the Windows configuration in Task 2, step #7 to match the port specified on the UNIX Oracle server.
 OR
- Modify the \Oracle\Ora92\network\admin\tnsnames.ora file to enter the port number you specified in Task 2, step #7 (below) on system.

If no output appears, the listener is not configured, and you must proceed to the next task.

Task 2 → If necessary, configure the Net listener

To configure the Net listener on the HP-UX Oracle database server system, run the **opcsqlnetconf** script. For OVO 7 installations, this script is located on the OVO server system in directory /opt/OV/bin/OpC.

NOTE: If you run the the script and receive the WARNING: "Above Net files already exist. Do you want to replace them?," respond "No" to end the script execution. Call your OVO or database administrator for assistance.

The script assumes the OVO Oracle database instance "openview" is on the same system where OVO is installed, and prompts you with the system name where the script is running as the default "listener" system. The script must be run on the system where the OVO Oracle database instance "openview" resides.

To configure the OVO 7 UNIX server, follow these steps:

- 1. At the UNIX server on which OVO is installed, log on as root
- 2. Run the /opt/OV/bin/OpC/opcsqlnetconf script.

(Most responses require only that you press Enter.)

The script prompts and output are as follows:

OVO Net configuration script opcsqlnetconf.

```
Verify/Set Variables:
Please enter ORACLE SID [openview]: [Enter]
Please enter ORACLE HOME [/opt/oracle/product/9.2.0.1.0]: [Enter]
Please enter the name of the database server node
(normally management server) [voyager]: [Enter]
Do you want to enable automatic startup of the Net listener at system boot (y/n) [y] ? [Enter]
Do you want to start the Net listener now (y/n) [y] ? [Enter]
LSNRCTL for HPUX: Version 2.3.4.0.0 - Production on 18-NOV-05 14:39:39
Copyright (c) Oracle Corporation 2002. All rights reserved.
Starting /opt/oracle/product/9.2x/bin/tnslsnr: please wait...
TNSLSNR for HPUX: Version 2.3.4.0.0 - Production
System parameter file is /etc/listener.ora
Log messages written to /opt/oracle/product/9.2.0.1.0/network/log/listener.log
Listening on: (ADDRESS=(PROTOCOL=ipc)(DEV=10)(KEY=openview))
Listening on: (ADDRESS=(PROTOCOL=tcp)(DEV=14)(HOST=15.8.153.173)(PORT=1521))
Connecting to (ADDRESS=(PROTOCOL=IPC)(KEY=openview))
STATUS of the LISTENER
______
Alias LISTENER
Version TNSLSNR for HPUX: Version 2.3.4.0.0 - Production
Start Date 18-NOV-05 14:39:46
Uptime 0 days 0 hr. 0 min. 1 sec
Trace Level off
Security OFF
SNMP OFF
Listener Parameter File /etc/listener.ora
Listener Log File /opt/oracle/product/9.2.0.1.0/network/log/listener.log
Services Summary...
openview has 1 service handler(s)
The command completed successfully
OVO Net configuration script opcsqlnetconf finished.
```

Task 3 Verify that the Listener is Running

Enter the commands:

Look in the resulting status summary for a **Services Summary** indicating that **openview** has **<number> service handler(s)** (showing one or more for the number). If an error message appears, indicating "no listener," ask your Oracle database or OVO administrator to start the listener.

Configure the Windows Client System

(Running Reporter)

This section covers the Windows client configuration. This configuration allows Reporter to connect to the UNIX system, from which the OVO database is accessed.

Task 1 Install Oracle 9.2.0.1.0 Client software

To begin, you need the following Oracle product: Oracle 9i/10g Client, Release 2 (9.2.0.1.0). You also need administrator privileges on the Windows client where Reporter is installed.

NOTE: If you have the Reporter main window open, you must close it before you begin the installation of Oracle 9.2.0.1.0 Client software.

- If you have Oracle installed on your system, at your Windows system insert the Oracle9i/10g Client CD and in the dialog box that appears select Install/Deinstall Products.
 If you have no Oracle Products on your system skip this step.
- 2. In the Oracle Universal Installer Welcome dialog click Next.
- 3. In File Locations enter the Source and Destination file locations for this product; click Next.
- 4. In the Installation Types select **Administrator** as the installation type and click **Next**.
- 5. Verify information in the **Summary** dialog that appears. Click **Install**.

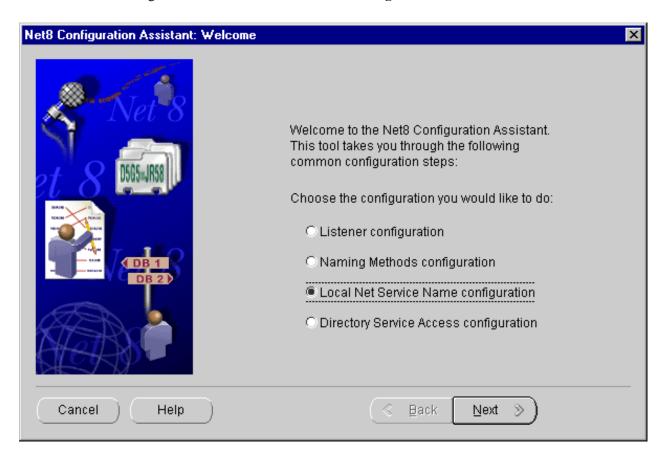
The install process automatically starts the **Configuration Tools** dialog where you can choose to run the **Net Configuration Assistant**.

Task 2 Configure the Net connection to the OVO database

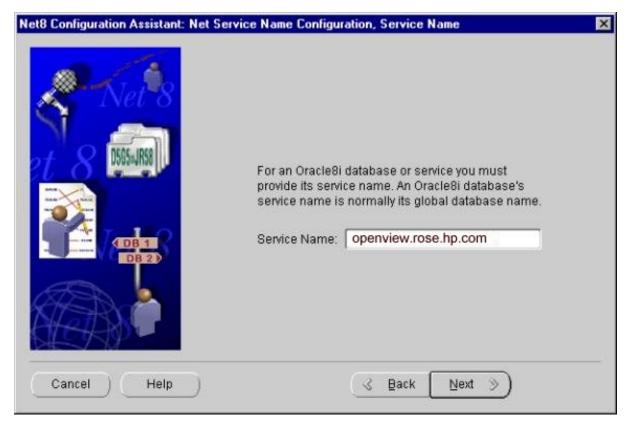
After you complete the installation of the Oracle client software (the Net Configuration is optionally part of the client install and dialog steps may differ slightly) on the Windows system running Reporter, on that same system complete the following steps:

1. From the Start>Programs menu, select **Oracle** - <**Oracle Home>**, and **Network Administration**, and **Net Configuration Assistant**.

At the Welcome dialog select Local Net Service Name Configuration, click Next.



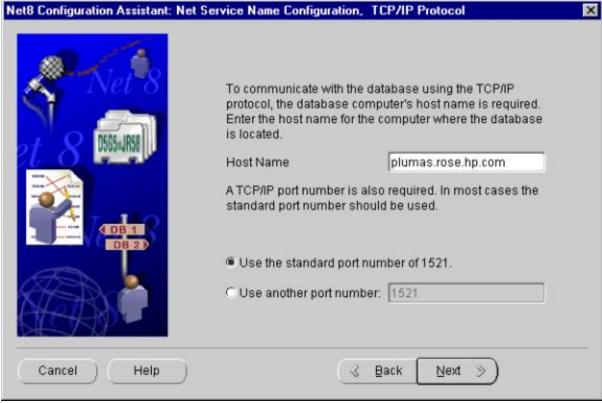
- 2. In the Net Service Name Configuration dialog select **Add** and click **Next**.
- 3. In the Database Version dialog, select **Oracle9i/10g database or service** (select the other option if connecting to a previous Oracle version), click **Next**.
- 4. At the Service Name dialog supply the global database name specified during database creation. Click **Next**.



Rerun the Net assistant and select test to verify the actual, full Net Service Name.

NOTE: The Net Service Name (i.e., **openview**) may have the network domain appended to its name. (For example, **openview.rose.hp.com**, where "rose.hp.com" is the domain name. Domain name may or may not be necessary, depending on how your system is set up.)

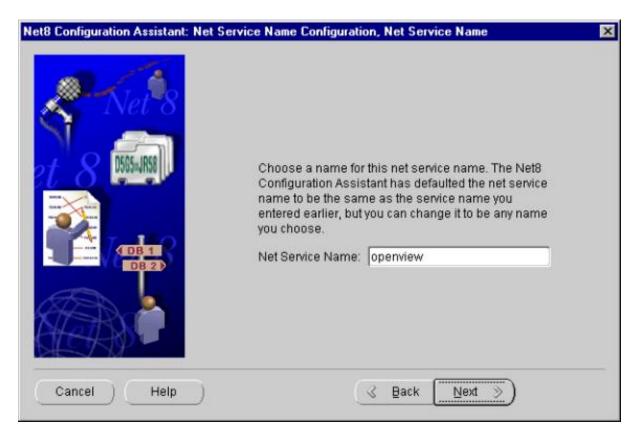
- 1. At the Select Protocols dialog, select TCP, click Next.
- 2. At the TCP/IP Protocol dialog, supply the Host Name and port number (typically 1521), click Next.



- 3. At the Test dialog, select **Yes, perform a test**, and click **Next**.
- 4. At the Connecting dialog, verify that the connection was successful (you may have to change the login credentials for the test to

succeed; the login/password should match those set up for OVO connecting to the database). Click Next.

5. At the Net Service Name dialog, supply a Net Service Name, (suggested: openview) click Next.



- 11. At the Another Net Service Name? Dialog, select No, click Next.
- 12. At the **Done** dialog, click **Next**, then click **Finish**.

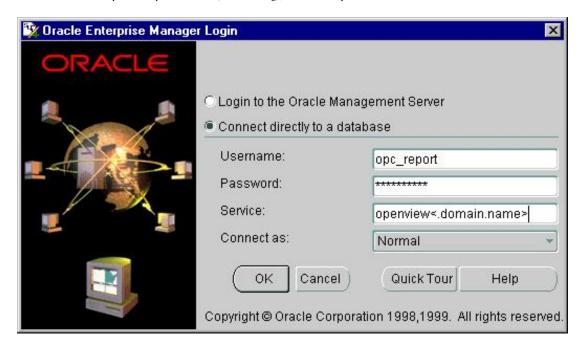
NOTE: The Net Service Name (i.e., **openview**) may have the network domain appended to its name. (For example, **openview.rose.hp.com**, where "rose.hp.com" is the domain name. Domain name may or may not be necessary, depending on how your system is set up.)

Rerun the Net assistant and select test to verify the actual, full Net Service Name.

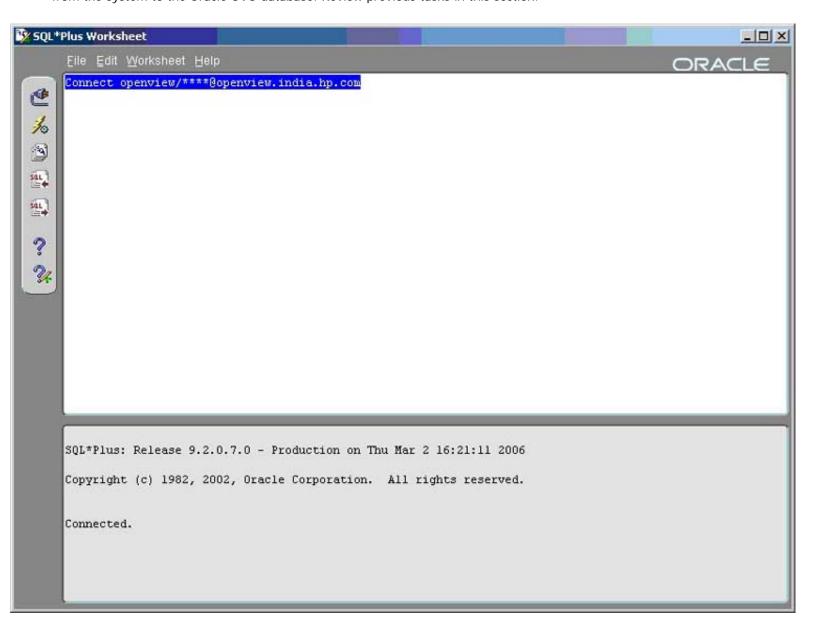
Task 3 Verify the Net connection to the OVO database

After you complete the Net configuration, verify that you can contact the OVO database from your system as follows:

- 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 **User Name** (the recommend user name is opc_report) and **Password**. Enter the **Service** name (**openview<.DOMAIN.NAME>**).



3. Click the **OK** button. The SQL*PLUS Worksheet should appear. If error messages appear, you have an error in the connection from the system to the Oracle OVO database. Review previous tasks in this section.



4. In the SQL*Plus Worksheet, enter the command to retrieve data from one of the Oracle database tables:

select node_group_name from opc_node_groups;

A response like the following indicates successful access to the OVO database. If you receive errors, you need to correct them before proceeding. Contact your Oracle database administrator for assistance.

NODE_GROUP_NAME
-----hp_ux
net_devices
NT40

5. From the File menu select Exit.

Task 4 Configure the ODBC data source in the Control Panel

After you have configured Net on the Windows system running Reporter, you must configure the ODBC data source.

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

- 1. Select Control Panel from the Windows Start>Settings menu.
- 2. Double-click ODBC in the Control Panel window.
- 3. Select the **System DSN** tabbed page.
- 4. Choose the Add... button and highlight Oracle ODBC driver and select Finish.
- 5. In the dialog box that appears, enter the following:

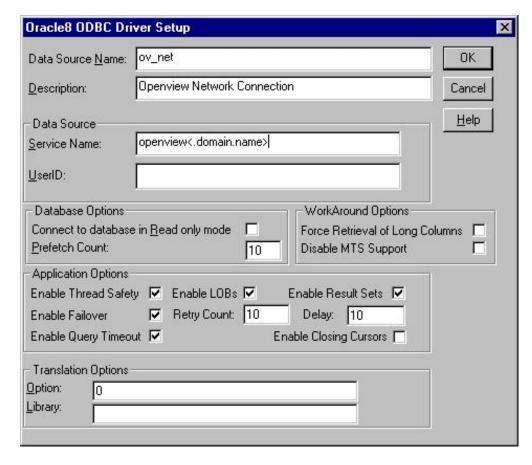
Data Source Name: **ov_net**

Description: < your_description>

Service Name: openview<.domain.name>

User ID: (no entry necessary)

NOTE: You must provide the Data Source Name as ov_net8 in case of ovo 8 database to configure OV Operations for Unix



- 6. Click OK.
- Close the ODBC Data Source Administrator window.
- 8. Close the Control Panel window.

Task 5 ₱Install the OVO Report Package

To add report definitions and configuration information, you need to add the OV Operations for Unix 7, and 8 package.

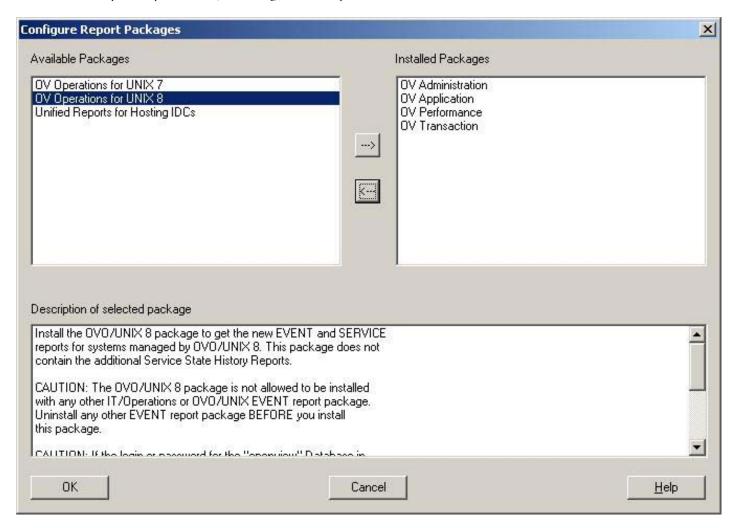
MPORTANT: If you have installed an earlier version of OVO (OpenView Operations for UNIX [ITO]) reports, you must remove that package from the Installed Packages area of the Configure Report Packages dialog (as shown below)

- 1. Select the package in the Installed Packages area and click the left-arrow. (The report package then no longer appears in the Installed Packages area.)
- 2. Click **OK** to close the dialog; then proceed as instructed below.

NOTE: Any modifications you made to the reports you just removed, you must re-configure in the newly installed package.

To add the package:

- 1. Start **Reporter** from the Start/Programs/HP Openview/Reporter menu.
- 2. In the Reporter main window from the File menu select Configure > Report Packages.



- 3. Select the appropriate OpenView Operations version from the Available Packages box; click the right-arrow to move to the Installed Packages box, and click **OK**.
 If you currently use report packages for ITO 5 or VPO 6, new packages are available:
- OV Operations for Unix 7
- OV Operations for Unix 8

Make sure to remove your current package before installing the new one (see **Important** preliminary information/instructions above).

- 1. Verify that the Reporter service is running (the service is not running if the 3rd through 6th toolbar buttons are disabled); if not, start it by clicking the 2nd button.
- In the Status pane, check for the messages: RepLoad: Loading package for "OV Operations for Unix 6 & 7" RepLoad: Completed loading template file (to indicate successful package installation)

Task 6♥ Configure the Database in Reporter

Now that you have configured the database connection to the Windows 2000 system and installed the OpenView Operations Report Package, you can configure Reporter to recognize the OpenView Operations database as the source for its data. With Reporter installed on the Windows system, follow the steps below:

- 1. In the Reporter main window, from the **File** menu select **Configure**, then **Databases** from the submenu.
- 2. In the Other Databases section (lower area) of the Configure Databases dialog box select the down-arrow in the Database text box, and choose **openview**.

(If openview does not appear, you will need to review the steps of the previous sections to configure the ODBC setup.)



NOTE: You must choose openview8 to configure OV Operations for Unix 8.

3. Complete the remaining text boxes as follows:

Server: ov_net

User ID: < your_OpenView Operations_ database_user_name > Password: <your OpenView Operations database password>

NOTE: You must choose ov_net8 as the Server to configure OV Operations for Unix 8.

IMPORTANT: Though asterisks appear for the password, you must enter the correct password for the OpenView Operations user ID.

- 4. Click OK.
- 5. Reboot the system.

Task 7 → Discover OpenView Operations Systems and Gather OVO Data

NOTE: Reporter's Discover_ITO.exe program targets the OpenView Operations database.

1. Select **Schedule** in the left pane to display a list of all scheduled actions in the right pane.

NOTE: If configured with OVO 8, add a new schedule entry for DISCOVER_ITO.exe and Gather_ITO.exe with openview8 as a parameter.

- 2. In the right pane, right-click **Discover_ITO.exe** and select **Run Now**.
- 3. In the Status pane, check for messages such as: 2005/12/27 15:12:19 Discover_ITO: Begin Discovery of ITO database openview2000/12/27 15:12:19 Discover_ITO: Found NEW ITO Agent on abc.xyz.domain.com 2005/12/27 15:12:19 Discover ITO: Found NEW ITO Agent on zephram.rose.hp.com 2005/12/27 15:12:19 Discover_ITO: Found NEW ITO Agent on ros59102raw.rose.hp.com 2005/12/27 15:12:19 Discover_ITO: Found NEW ITO Agent on highbeam.rose.hp.com 2005/12/27 15:12:19 Discover_ITO: Examined 4 systems, found 4 new ITO Agents for a total of 30 known 2005/12/27 15:12:20 Discover ITO: Examined systems in groups for 3 systems, found 3 new 2005/12/27 15:12:20 Scheduler: Next scheduled action at 12/28/00 00:15:0

If you see errors, return to Task 6 and make sure the password and other fields have been correctly filled in.

- 4. In the right pane, right-click **Gather_ITO.exe** and select **Run Now**.
- 5. In the Status pane, check for messages such as:

2005/12/27 15:12:40 Scheduler:

Starting program "Gather_ITO.exe" 2005/12/27 15:12:40 Gather_ITO: Begin synchronizing with ITO database openview

2005/12/27 15:12:41 Gather_ITO: Processing Historical messages

2005/12/27 15:13:19 Gather_ITO: Processed 2775 Historical messages, Added 860 Summaries, 854 Operator

2005/12/27 15:13:19 Gather_ITO: Processing Active messages

2005/12/27 15:13:21 Gather ITO: Processed 755 Active messages, Added 9 Summaries, 6 Operator Sums 2005/12/27 15:13:22 Scheduler: Next scheduled action at 12/28/00 00:15:00

6. If you want to see reports immediately, in right pane right-click RepCrys.exe and select Run Now.

Your configuration of the OpenView Operations database with Reporter is now complete. OpenView Operations reporting will now run in the normal nightly reporting cycle.

Oracle Setup/Connections

Part D: Configure Oracle 9i as the Database

Set Up Oracle 9i on HP-UX or Solaris and configure the the Reporter Windows Client System

🔼 IMPORTANT: If HP OpenView Internet Services 4.0 and Reporter are installed on the same system, migration of your OVIS/Reporter data from your existing database to Oracle 9i is not supported.

The following illustration shows the tasks you must complete to set up Oracle as the Reporter database. To the left are the steps on the HP-UX or Solaris system which differ for new and existing installations of Oracle. To the right is the procedure for configuring the Oracle Reporter database on the Windows system.

Configure Oracle on the HP-UX system....

Prepare the UNIX environment.....

(New Oracle 9i installations require all steps; existing installations require steps 5-6.)

Mount the CD Install Oracle softwar

Configure database listener.

Create Reporter database structure...

Create Reporter database user and privileges.

Configure the NT system...

Install Oracle 9i Client software...



Configure Oracle Net connection...

Verify the Oracle Net connection...

Configure the ODBC data source...

Configure the database in Reporter...

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 Release Notes for these parameters). Ensure you have the following available:

- Memory: 256 MB RAM minimum
- Swap space: disk space equivalent to greater of 2*RAM, or 400 MB
- CD-ROM: capable of reading ISO 9660 format with RockRidge extensions
- Disk space: 2.5 GB for database software; 1 GB for database
- Temp disk space: 400MB in /tmp directory
- HP-UX 11.0 (64-bit) or or HP-UX 11i (64-bit)

Solaris 7 (5.7) or Solaris 8 (5.8) or Solaris 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

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 Reporter system:

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

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

- i. Log in as the root user.
- ii. Create UNIX group "dba" (The OSDBA group)
- iii. Create UNIX group "oper" (The OSOPER group)
- iv. Create UNIX group "oinstall" (The ORAINVENTORY group)
- v. 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)

Create UNIX user "apache"

- Primary group: oinstall (The ORAINVENTORY group)
- Secondary group: group in which apache is only member.

The Apache account should have minimum privileges.

- 3. Create mount points for Oracle database software
 - i. Create Oracle Home mount point: mkdir -p /opt/oracle/product/9.0.1
 - ii. Enter: cd /opt
 - iii. Enter: chown -R oracle: oinstall oracle
 - iv. Make sure a local bin directory such as /usr/local/bin or /opt/bin exists.
 - v. Set UNIX system and Oracle environment variables

(add to .profile or set manually)

DISPLAY=<workstation name>:0.0 (where output from Oracle installer displays)

ORACLE_BASE=/opt/oracle

ORACLE_HOME=/opt/oracle/product/9.0.1

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/9.0.1; export ORACLE_HOME
ORACLE_SID=reporter; export ORACLE_SID
ORACLE_TERM=xterm; export ORACLE_TERM
TNS_ADMIN=/export/home/oracle/config/9.0.1; 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 Nount the Installation CD

 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 ISO9660 format, Rockridge extension

<translation_method> = unix

For example:

/dev/dsk/clt2d0 /SD_CDROM pfs-rrip xlat=unix 0 0
```

Perform the following steps as the root user:

2. Enter: /usr/sbin/pfs_mountd &

NOTE: pfs creates the correct format to read the CD

Enter: /usr/sbin/pfsd &

- Insert the CD into the CD-ROM and mount the device as follows: /usr/sbin/pfs_mount /SD_CDROM
- 4. Change directories to /SD_CDROM where you can see a lower-case listing of the directories and files on the CD-ROM. (The mounted CD should appear as another read-only file system.)

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 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 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! Do not launch the installer from within the CDROM directory or you will not be able to mount multiple CDs. Example:

/cdrom/oracle9i/runInstaller or /SD_CDROM/runInstaller.

- 3. For first-time Oracle9i installations the Welcome window appears, where you click Next.
- 4. In the Inventory Location window specify a base directory and click OK.
- 5. In the UNIX Group Name window enter cinstall (the ORAINVENTORY Group) and click Next.
- 6. You may have to run a script if pre-installation tasks were not completed.
- 7. In the File Locations window do not change the text in the source field and click Next.
- 8. In the Available Products window select **Oracle9i Database** and click **Next**.
- 9. 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.
- In the Database Configuration Window select Software Only and click Next.
- 11. In the Choose JDK Home Directory enter the appropriate location and click Next.
- 12. Review the Summary Window and click Install.
 - (When the Install window appears, wait as the products is installed.)
- 13. When the Setup Privileges window appears, run the script as instructed.

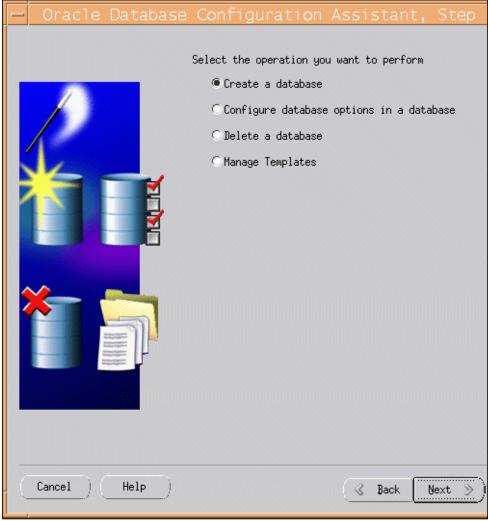
14. In the End of Installation window select Exit.

Task 4 → Configure a database listener

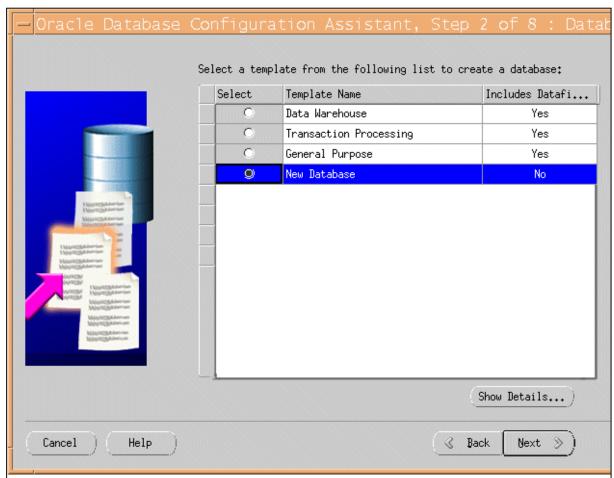
- 1. At a UNIX console window, logged in as the Oracle user, enter netca to start the Oracle Net Configuration Assistant.
- 2. In the Welcome window select Listener configuration and click Next.
- 3. Select Add and click Next.
- 4. Enter a listener name (LISTENER is suggested) and click Next.
- 5. For 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

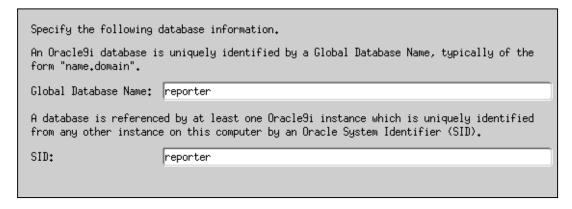
- 1. At a UNIX console window, logged in as the Oracle user, enter dbca to Start the Oracle Database Configuration Assistant.
- 2. Select the Create a Database option and click Next.



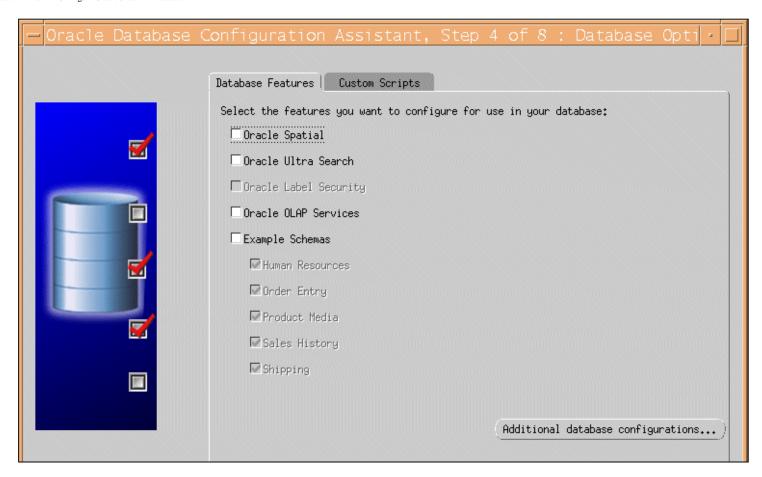
3. Select the **New Database** template and click **Next**.



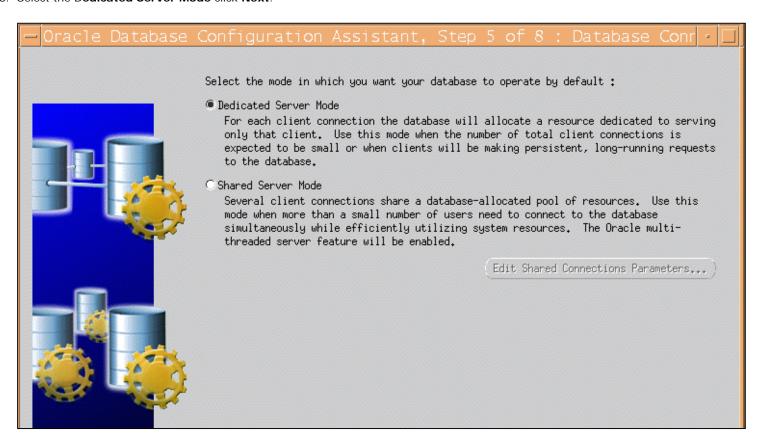
4. Supply Global Database Name and the SID and click Next.



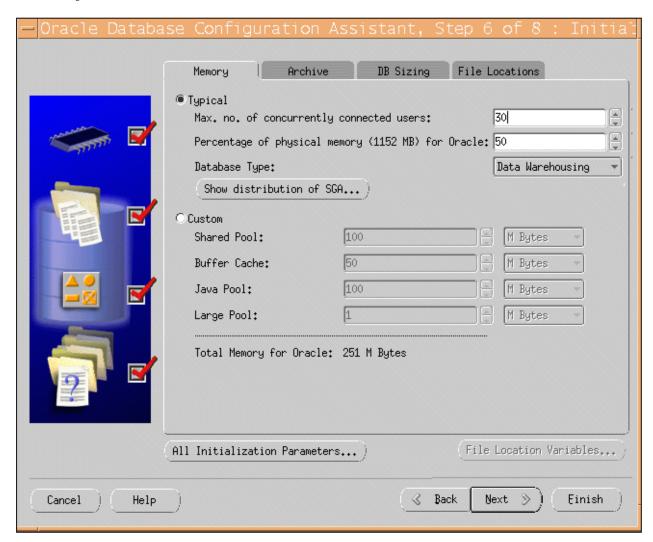
5. You can optionally de-select the listed features, which are not required for Reporter, and click Next.



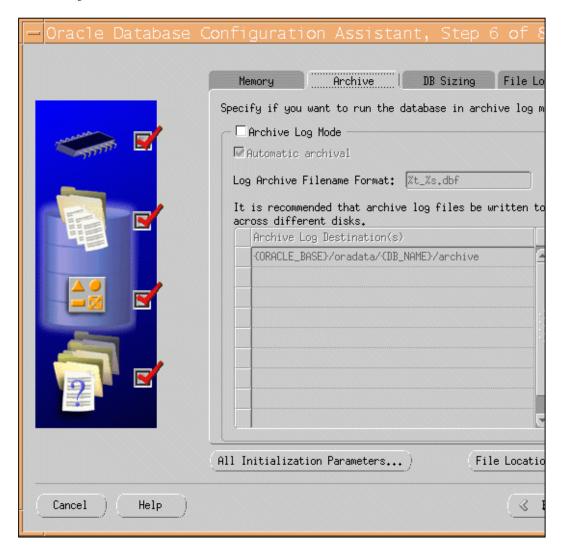
6. Select the Dedicated Server Mode click Next.



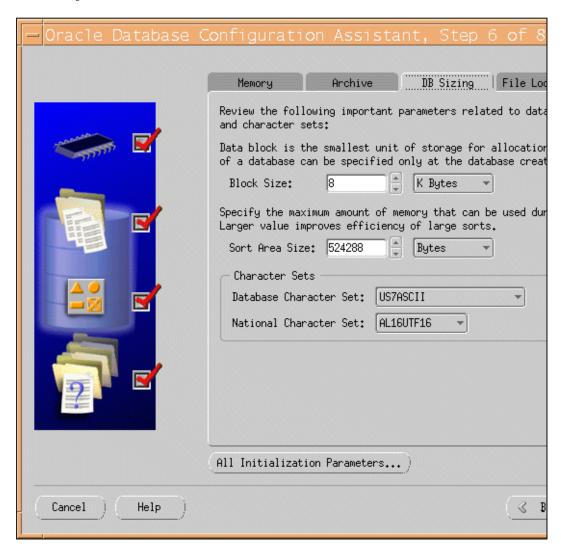
7. For Memory Parameters, the user concurrency may be as high as 40, depending upon the options selected in reporter; use 200 - 300 MB of RAM (or as directed by your DBA) and click **Next**.



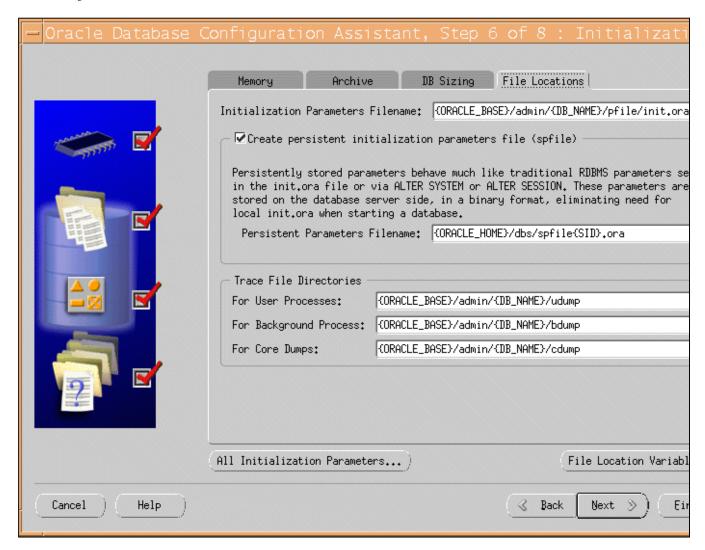
8. (optional) Select the **Archive** tab and the Archive Log Mode if you want a back up strategy that ensures data recoverability that goes beyond the most recent backup.



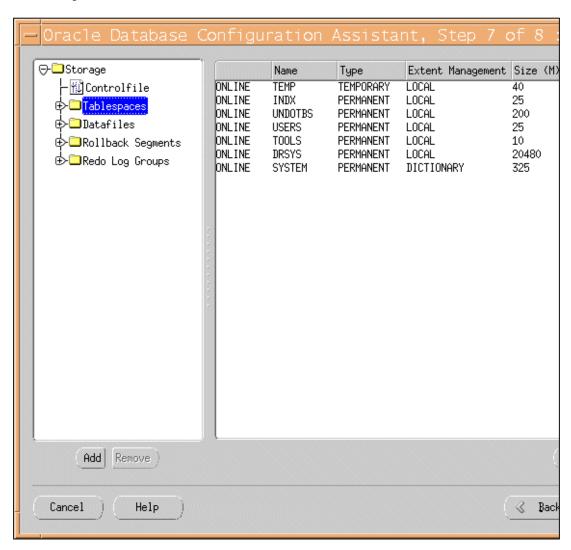
- 9. Click Next.
- 10. Select the **DB Sizing** tab and set the Block Size to **8K**.



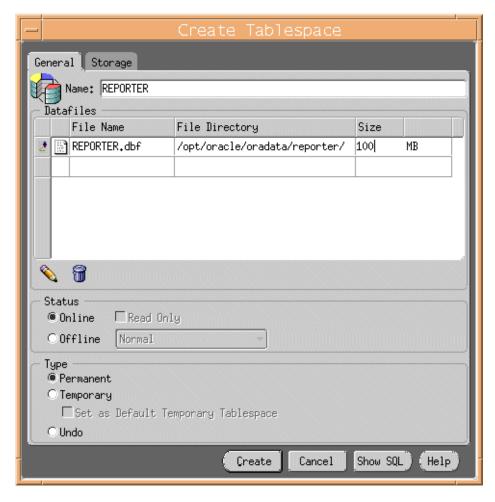
11. Select the File Locations tab, where you can review the location settings, and click Next.



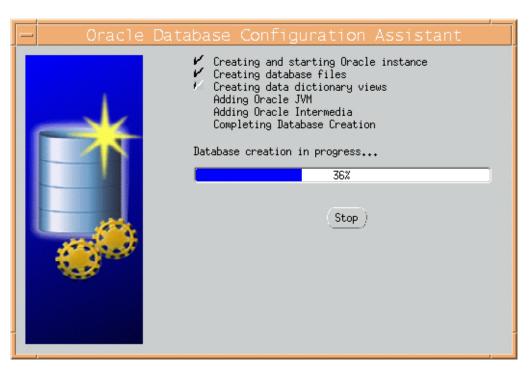
12. In the Database Storage window click the Tablespaces entry in the tree to view current tablespace configuration.



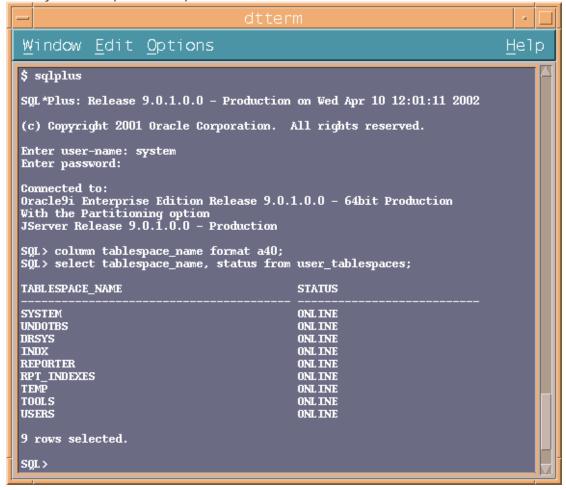
13. Click the Add button to add the REPORTER tablespace. Size the tablespace to 100MB.



- 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 100MB.
- 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.



- 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.



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,
select any table,
connect to openview;
grant SELECT ANY DICTIONARY to openview;
```

Configure Reporter on the Windows System

This section covers the installation of the software that allows the Windows system, on which Reporter runs, to connect to the HP-UX or Solaris

system, from which the Oracle database is accessed.

Task 1 Install Oracle 9i Client software

- At the Windows NT/2000 system that hosts reporter, 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

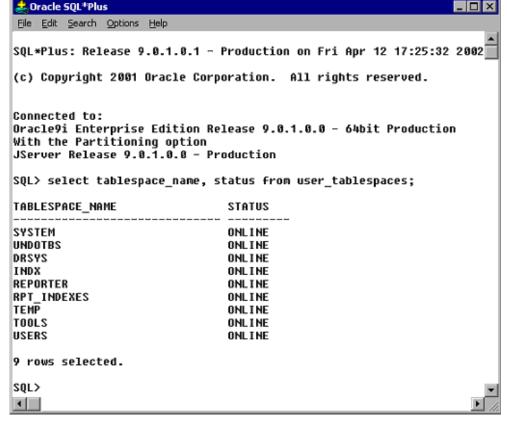
Start > Programs > Oracle-OraHome9 > Configuration and Migration Tools > Net Configuration Assistant. The first few dialogs differ between an installation-initiated Assistant compared with an independently started Assistant. The steps below use the dialogs encountered when the Assistant is started as 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.
- 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;

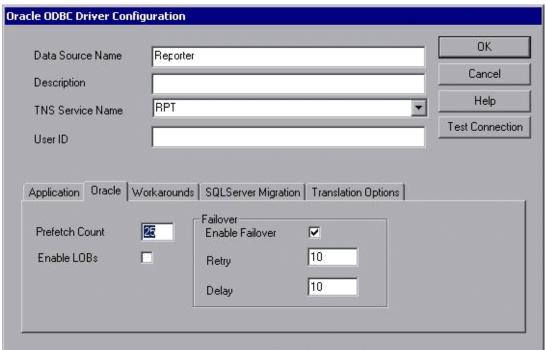


If you cannot connect to the database, or do not see these tablespaces, check with the Oracle database administrator for the UNIX host system.

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**.
- For Windows 2000, double-click Administrative Tools, then double-click Data Sources (ODBC).
 For Windows NT4, double-click ODBC Data Sources.
- 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.
- In the Oracle ODBC Driver Configuration window enter Reporter as the Data Source name.
 For the TNS Service Name, from the drop-down menu select the name configured in
 Task 2, step 9 (RPT).
- 7. Select the Oracle tab and set Prefetch Count to 25 and disable LOBs.



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

Task 5 → Configure the Database in Reporter

- 1. To start Reporter, select Start -> Programs -> HP OpenView -> Reporter.
- 2. (An error message about the table or view not existing is expected.) Click OK to proceed.
- 3. In the Reporter main window, from the File menu select **Configure** -> **Databases** and click **OK** to proceed past another similar error message.
- 4. In the Configure Databases dialog box in the Reporter Database segment, enter the database User ID and Password as determined in the UNIX setup, Task 6 (openview / openview).
 - If you intend to migrate data from the Reporter default database to Oracle, use a dba account such as system / manager.
- 5. Click **OK**, and then close and re-open the Reporter main window to allow the new username and password to be applied to the database connection.
- 6. *If you are migrating data* from the default database to Oracle, you do not need to run **newdb.exe** as directed below since the migration tools create the required database schema objects.
 - If you are not migrating data, create the required database schema objects in the Reporter Oracle database by running the C:\Program Files\hp OpenView\bin\newdb.exe program.

4 Oracle Setup/Connections

Part E: Configure Oracle 10g as the Database

Overview

This chapter provides instructions to configure Oracle as the database for HP OpenView Reporter (Reporter) and set up Oracle 10g on HP-UX or Solaris platforms. This chapter also includes information about configuring the Oracle client on Microsoft Windows platform.

IMPORTANT: If HP OpenView Internet Services and HP OpenView Reporter are installed on the same system, you cannot migrate Reporter data from the existing database to Oracle.

Prerequisites

A successful Oracle configuration depends on correct kernel parameter settings specified on the HP-UX and Solaris platforms. Refer to current versions Oracle documentation for more information about the kernel parameters.

Before installation make sure your system meets the following requirements:

- Memory: Minimum of 512 MB RAM
- Swap space: Disk space of minimum 1 GB
- 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 space in /tmp directory
- Solaris (Sun SPARC) and HP-UX (PARISC) refer to the current Oracle documentation for Oracle 10g server support on specific operating system versions
- Operating System patches (For more information, refer to the Oracle10g Release Notes)
- JAVA components (detailed in the Oracle10g Release Notes)

Note for HP-UX: An important pre-installation step is required relating to X library symbolic links

Oracle Documentation: The documents are available on the Oracle10g Database CD-ROMs. To access the documents, mount disk 1 of the Oracle10g Database CD-ROM and open the file **index.html**. Oracle also provides online resources for documentation at the Oracle Documentation Center and the Oracle Technology Network (http://www.oracle.com/technology/documentation/index.html). For the required information, refer to the following documents:

- Oracle10g Installation Guide
- Oracle10g Quick Installation Procedure
- Oracle10g Release Notes

NOTE:

• Before installing Oracle 10g, refer to Oracle documentation for current recommended settings.

Configure Oracle 10g as the Database for Reporter

The configuration is divided into two sets of tasks as follows:

- Server setup for Oracle10g on HP-UX or Solaris system
- Configure Oracle Client Software on the Windows System

Server Set Up for Oracle 10g on HP-UX or Solaris Platforms

To set up Oracle 10g on HP-UX or Solaris platforms, perform the following tasks:

- 1. Prepare the UNIX environment
- 2. Mount the installation CD
- 3. Install Oracle10g Database Server software
- 4. Configure a database listener
- 5. Create the Reporter database structure
- 6. Create the Reporter database user and privileges



- If your operating system is HP-UX, use the System Administrator's Manager (SAM) to create user groups.
- If your operating system is Solaris: use the admintool or groupadd utility to create UNIX user groups.

Task 1 → Prepare the UNIX Environment

- 1. Create the Oracle UNIX 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)

Note for HP-UX: See the Oracle10g Quick Installation Procedure for the special privileges that must be assigned to the OSDBA group.

- 2. Create the UNIX user "oracle":
 - a. Create UNIX user "oracle" (You can use this account only for Oracle software installation and upgrading)
 - Primary group: oinstall (The ORAINVENTORY group)
 - Secondary group: dba (The OSDBA group)
 - b. Create UNIX user "apache"
 - Primary group: oinstall (The ORAINVENTORY group)
 - Secondary group: group in which Apache is the only member.
 - c. Create mount points for Oracle database software (Example: cd /opt)
 - d. Enter the command:

chown -R oracle:oinstall oracle

e. Set the right permissions for the Oracle user, type:

chmod -R 755 for the installation directory (Example: /opt/oracle).

- f. Make sure a local bin directory such as ${\tt /usr/local/bin}$ or ${\tt /opt/bin}$ exists.
- g. Set UNIX system and Oracle environment variables (you can either add the variable to the .profile file 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
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; export ORACLE_HOME
ORACLE_SID=reporter; export ORACLE_SID

ORACLE_TERM=xterm; export ORACLE_TERM
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 file /etc/pfs_fstab 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

Example: /dev/dsk/c1t2d0 /CDROM pfs-rrip xlat=unix 0 0

- 2. If you are a root user, you must do the following:
 - a. Enter the command:

/usr/sbin/pfs_mountd

NOTE: pfs creates the correct format to read the CD

b. Enter the command:

/usr/sbin/pfsd

c. Insert the CD into the CD-ROM and mount the device by entering the following command: /usr/sbin/pfs_mount /CDROM

Keep 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 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. Insert the Oracle CD-ROM in the CD-ROM drive.
- 2. Log in as the **root** or **su** user and create a CD-ROM mount point directory as follows:

```
$ su root # mkdir cdrom_mount_point_directory
```

3. Mount the CD-ROM drive on the mount point directory and exit as follows:

```
# mount option device_name cdrom_mount_point_directory
# exit
```

Task 3 → Install Oracle 10g Database Server Software

- 1. Log in to the Oracle account.
- 2. Enter the full path to the installer executable to launch the **Oracle Universal Installer**.

Warning:

- Do not launch the installer from the CD-ROM directory because you will not be able to mount multiple CDs (Example: /<CD-Drive>/oracle10g/runInstaller or /<CD-Drive>/runInstaller.)
- You must run a script if pre-installation tasks were not completed before installation.
- 3. If you are installing the Oracle10g for the first-time, the **Welcome** window appears.
- 4. Click **Next**, the **File Locations** window appears. Do not change the text displayed in the source fields.
- 5. Click **Next**, the **Inventory Location** window appears.
- 6. Enter the directory name and path for ORACLE HOME. Click Next, the Available Products window appears.
- 7. Select Oracle10g Database and click Next.
- 8. Select the type of installation you are doing. You can select from the following options:
 - Enterprise or Standard Edition
 - Custom



Note: If you select a Custom Installation you must select the following items: Oracle, Oracle Net Services, and all the sub products on Oracle Net Services. For more information about the differences between installation types see the current versions of Oracle documentation.

- 3. Click Next, check product specific prerequisites and Click Next, the Database Configuration Window appears.
- 4. Select Do not create a starter database and click Next, the Summary Window appears.
- 5. Review the information displayed and click **Install**, the **Install window** appears, wait for the product installation to be completed.

- 6. When the Setup Privileges window appears, run the script if instructed.
- 7. In the End of Installation window select **Exit**.

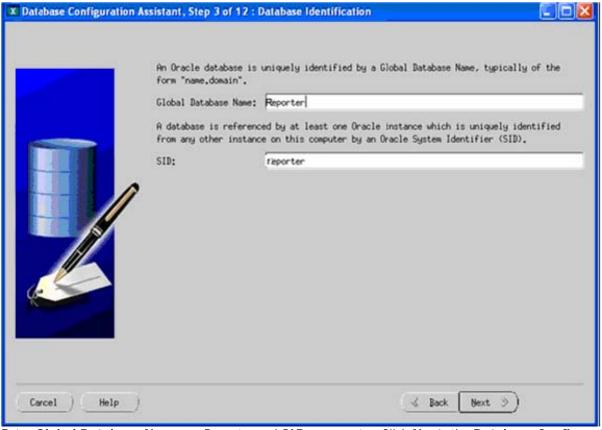
Task 4 - Configure a Database Listener

- 1. From the **UNIX console** window, log in as an *Oracle* user.
- 2. To start the Oracle Net Configuration Assistant, type the command **netca**. The **Welcome** window of the Configuration wizard opens.
- 3. Select Listener configuration and click Next.
- 4. Click Add, Click Next.
- 5. Enter any name Listener name (HP recommends LISTENER) and click Next.
- 6. For the connection protocol select TCP and click Next.
- 7. Select the standard port number 1521 and click Next.
- 8. For configuring another listener, select No. The configuration complete message appears. Click Next.
- 9. In the Final window, click Finish.

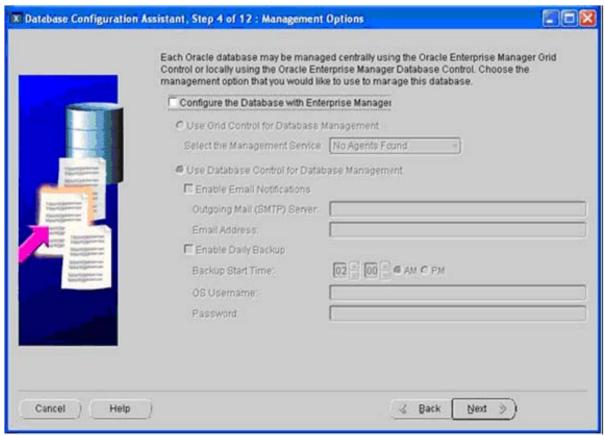
NOTE: Before creating the database, make sure that your system is upgraded to Oracle version 10.1.0.4 or later.

Task 5 Create the Reporter Database Structure

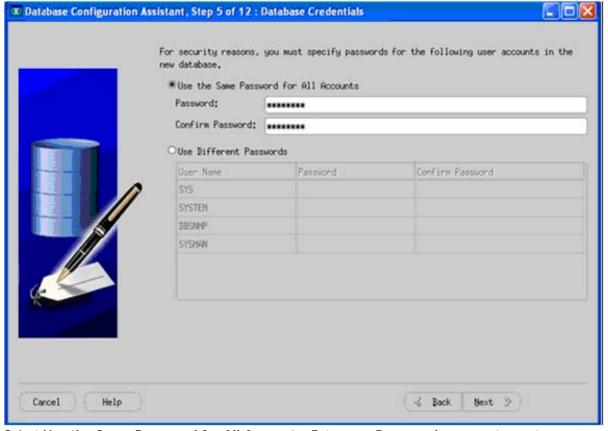
- 1. From the **UNIX console** window, log in as an Oracle user.
- 2. Enter the command dbca. The Oracle Database Configuration Assistant Welcome window appears.
- 3. Click Next, the Database Configurations Assistant, Step 1 of 12: Operations window appears.
- 4. Select Create a Database and click Next, the Database Configurations Assistant, Step 2 of 12: Database Templates window appears.
- Select the Custom Database template and click Next, the Database Configurations Assistant, Step 3 of 12: Database Identifications window appears.



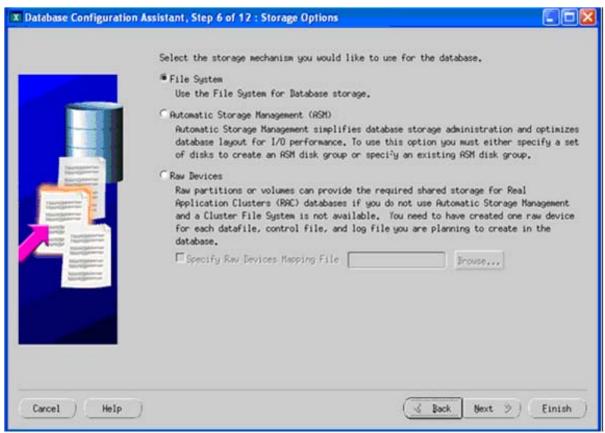
6. Enter Global Database Name as Reporter and SID as reporter. Click Next, the Database Configurations Assistant, Step 4 of 12: Management Options window appears.



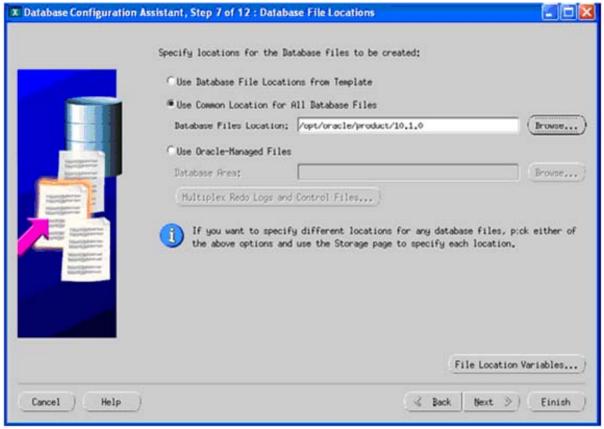
7. You can select the required options you want or default. Click **Next**, the **Database Configurations Assistant**, **Step 5 of 12: Database Credentials** window appears.



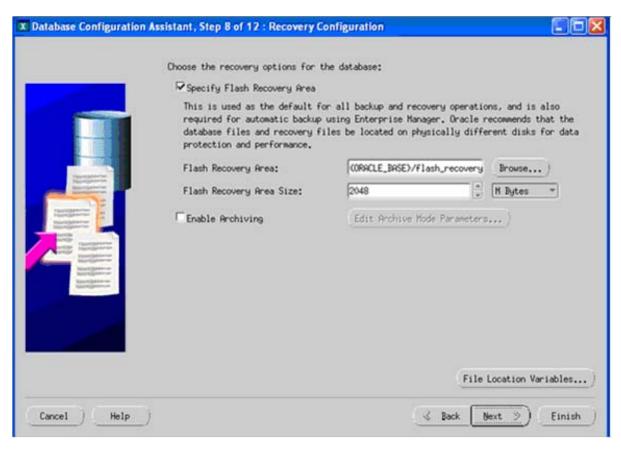
8. Select **Use the Same Password for All Accounts**. Enter your **Password**, you must re-enter your password in the **Confirm Password** text box for confirmation. Click **Next**, the **Database Configurations Assistant**, **Step 6 of 12: Storage Options** window appears.



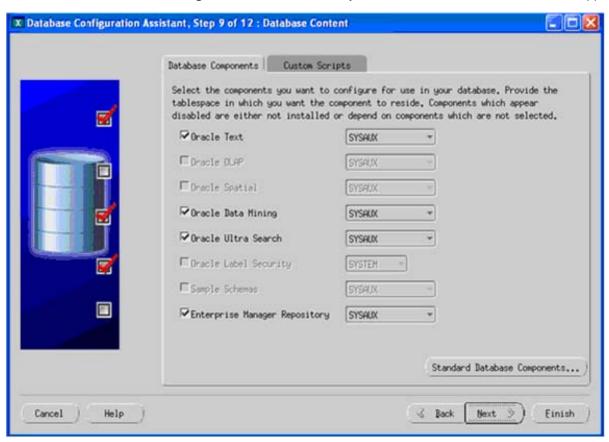
Select File System and click Next, the Database Configurations Assistant, Step 7 of 12: Database File Location window appears.



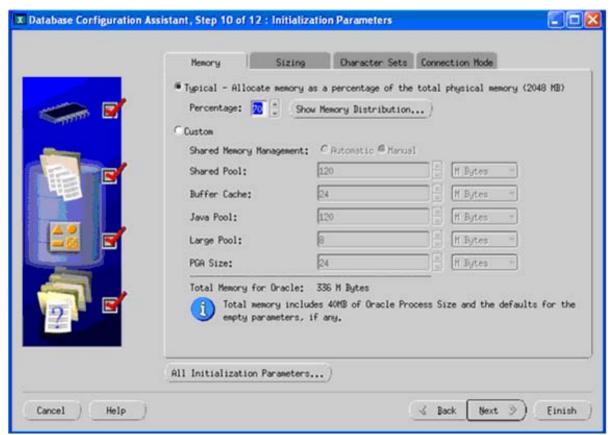
10. Select Use Common Location for All Database Files. Enter the path for database files to be created or click Browse to locate the directory on your system. Click Next, the Database Configurations Assistant, Step 8 of 12: Recovery Configuration window appears.



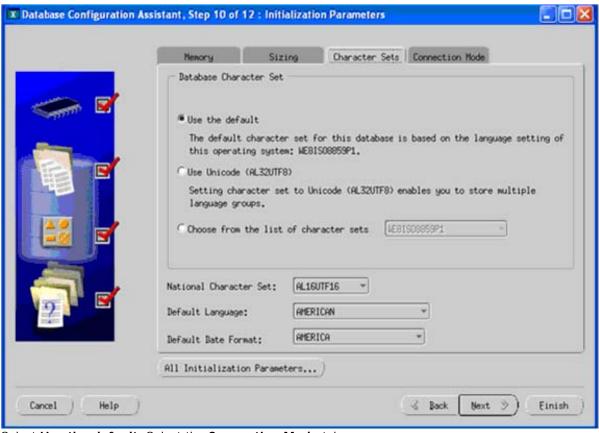
- 11. Select **Specify Flash Recovery Area**. Enter the following information:
 - Flash Recovery Area: Path where you want the backup and recovery files to be stored
 - Flash Recovery Area Size: Memory you want to allocate for the back up files
- 12. Click Next, the Database Configurations Assistant, Step 9 of 12: Database Content window appears.



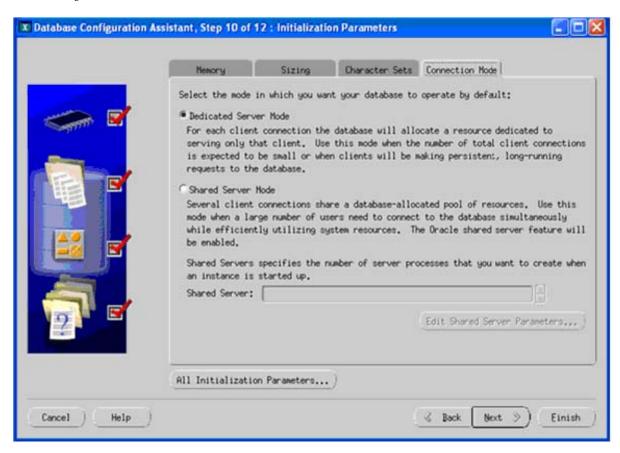
13. Select the components you want to configure in your database. Click **Next**, the **Database Configurations Assistant**, **Step 10 of 12: Initialization Parameters** window appears.



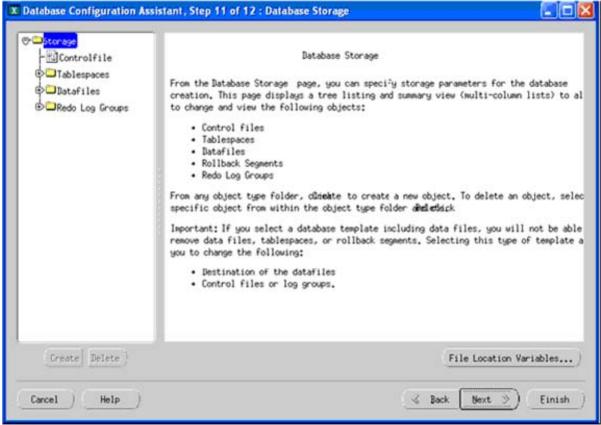
- 14. Click on the Memory tab. Select Typical.
- 15. Select the Character Sets tab.



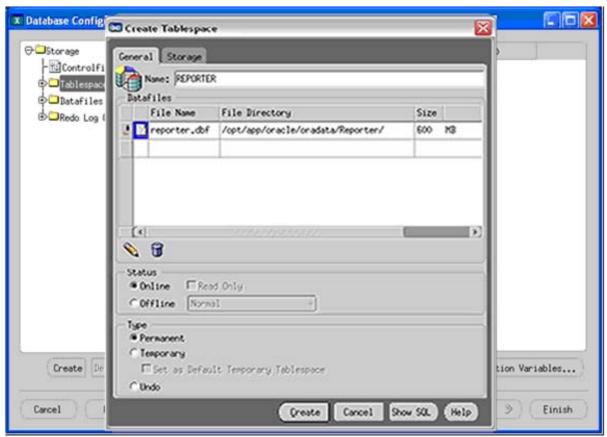
16. Select Use the default. Select the Connection Mode tab.



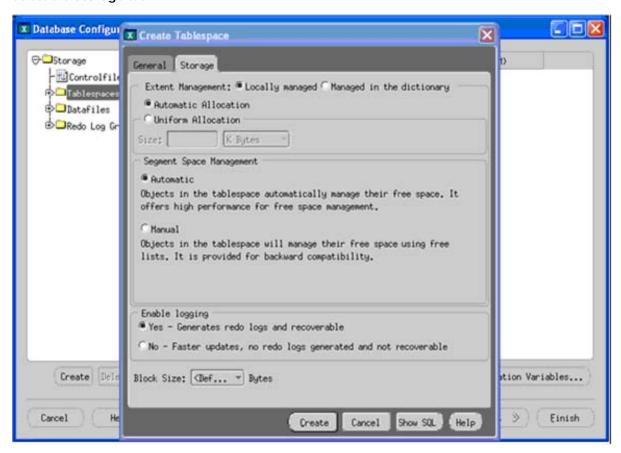
17. Select Dedicated Server Mode, Click Next and the Step 11 of 12: Database Storage window appears.



18. Select Tablespaces in the left pane. Click Create, the Create TableSpace dialog box opens.

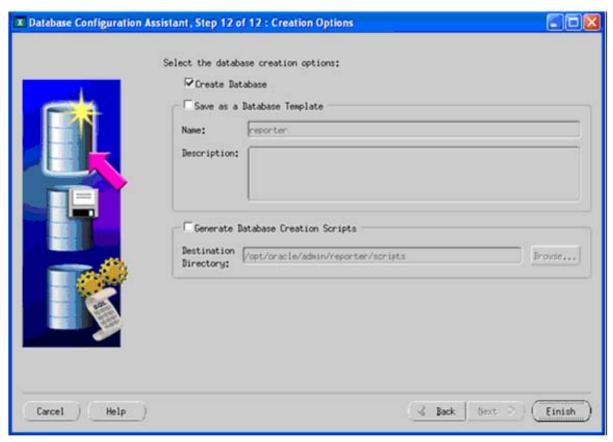


- 19. Enter the tablespace **Name** as REPORTER. Select the file name reporter.dpf and enter the size as 600 MB.
- 20. Select the Storage tab.



Important: If the actual storage size of 600 MB for REPORTER tablespace and 300 MB for the RPT_INDEXES tablespace is not large enough, please consult your Oracle database administrator for the appropriate size for your environment or how to setup the AUTOEXTEND data file feature in Oracle.

18. Select **Automatic Allocation**. In the **Segment Space Management** section, select **Automatic**. Click **Create** to create a data file.



- 19. Select Create Database. Click Finish, A confirmation window appears.
- 20. Click Ok. The Database Configuration Assistant window.
- 21. After the database has been created, you will see the Database creation complete message.
- 22. Respond to the database creation completion messages and close the Database Configuration Assistant.

Task 6 P Create the Reporter Database User and Privileges

- 1. To start the **SQL** ***Plus** environment, do the following:
 - a. From the UNIX console window, log in as the Oracle user.
 - b. Enter the following command to start the SQL *Plus environment: sqlplus
 - c. Enter the user name and password.

NOTE: You must have the system or administrator login permissions for the databases which you created.

- 2. To create a user for the Reporter database, run the following SQL commands:
 - o create user openview profile default
 - identified by openview
 - o default tablespace reporter
 - o temporary tablespace temp
 - o quota unlimited on reporter
 - o quota unlimited on rpt_indexes
 - o account unlock

A message which indicates that the user is created appears.

- 3. To assign permissions. Run the following commands:
 - o grant
 - create any index
 - create procedure
- 4. Configure Oracle 10g (HP-UX or Solaris) as the database
 - create sequence

- o create session
- o create table
- o create trigger
- create view
- o connect to openview

Configure Oracle Client Software on the Windows System

If Reporter is installed on a Microsoft Windows system and the Oracle database is installed on a HP-UX or a Solaris system, you must install Oracle 10g client software for the Reporter to access data. To configure install and configure Oracle client software on the windows system, perform the following tasks:

- 1. Install Oacle10g client software
- 2. Configure the Oracle Net connection
- 3. Verify the Oracle Net connection
- 4. Configure the ODBC data source
- 5. Configure the database in Reporter

Task 1 → Install Oracle 10g Client Software

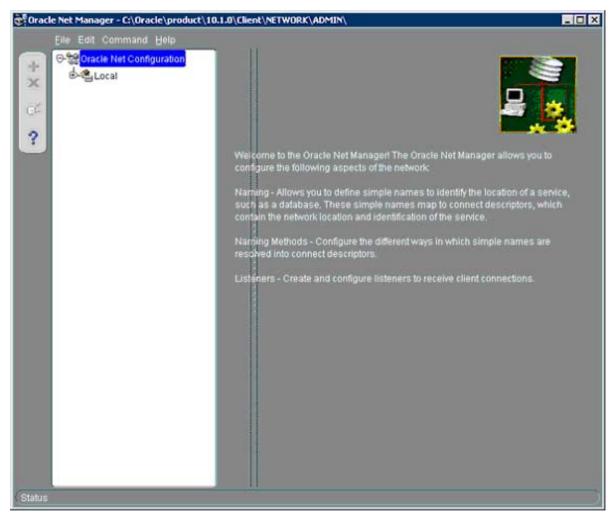
- 1. From a Windows NT or 2000 system, insert the Oracle10g client installation CD. Select Install/Deinstall Products.
- 2. The Oracle Universal Installer Welcome window appears, click Next.
- 3. Enter or select an **Oracle home** location where you want to install Oracle 10g client software and click **Next**, the **Available Products** window appears.
- 4. Select Oracle10g Client and click Next, the Installation Types window appears.
- 5. Select Administrator and click Next.
- 6. Verify the information in the Summary window and click Install.
- 7. A window which shows the installation progress will appear.

After the installation process is complete, the Oracle Net Manager tool starts by default. For instructions to configure the Oracle net connection, refer to <u>Task 2</u>: <u>Configure the Oracle Net connection</u>.

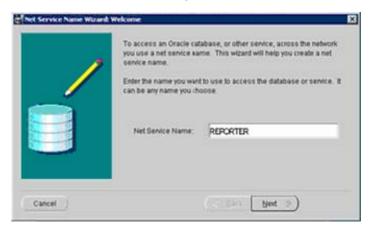
Task 2 → Configure Oracle Net Connection

After installing Oracle 10g client software you must configure the Oracle client. This section provides instructions for configuring Oracle 10g client software using the **Oracle Net Manager** tool. You can also configure the client using **Oracle Net Configuration Assistant**.

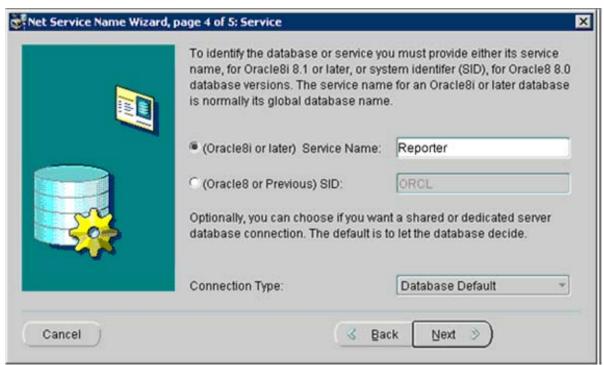
- 1. If you are continuing from the previous <u>Task 1: Install Oracle 10g Client Software</u>, the **Oracle Net Manager** tool will be displayed. Proceed to <u>step 3</u>
- 2. To start the Oracle Net Manager tool, click Start > Programs > Oracle-OraClient10g_home > Configuration and Migration Tools > Net Manager, the Oracle Net Manager window appears.



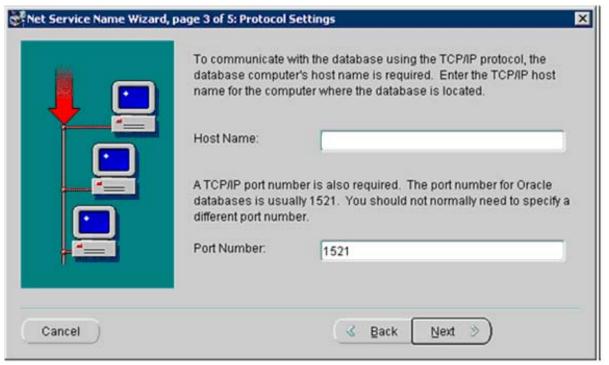
3. On the the Oracle Net Manager window, click +, the Net Service Name Wizard appears.



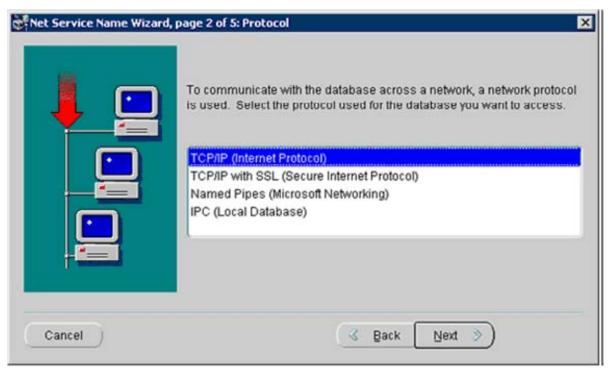
4. Enter **Net Service Name** as **REPORTER** (the service name specified during the Reporter database configuration). Click **Next**, the **Net Service Name Wizard**, **page 2 or 5: Protocol** window appears.



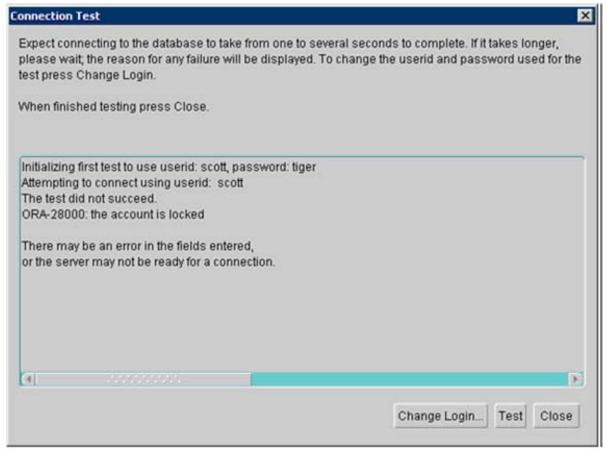
5. Select TCP/IP (Internet Protocol) and click Next, the Net Service Name Wizard, page 3 of 5: Protocol Settings window appears.



6. Enter **Host Name**. Host name is the fully qualified domain name of the machine where the Oracle server is installed. Enter the **Port Number** of the Oracle database. The default port for Oracle databases is **1521**. click **Next**, the **Net Service Name Wizard**, **page 4 of 5**: **Service** window appears.

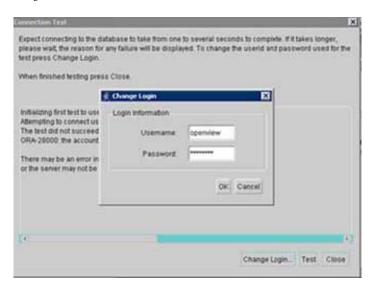


7. Select (Oracle 8i or later) and enter the Service Name as REPORTER (the service name specified during the Reporter database configuration). Click Next, the Connection Test window appears.



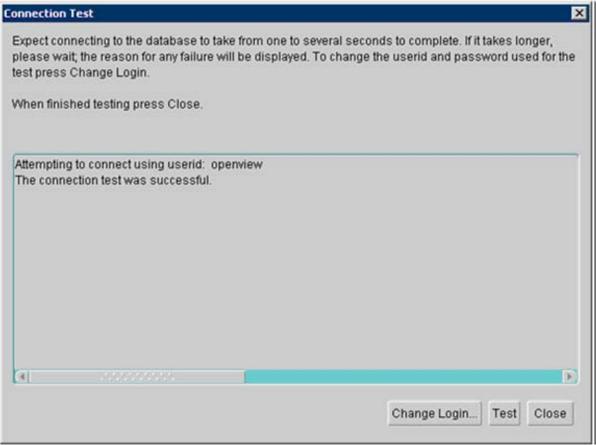
- 8. Click Test. The connection test begins, the Connection Test window displays the results of the connection test:
 - o If the connection test is a failure, Click **Change Login** button and enter / as User name as *openview* and Password as *openview* (or the username and password which you specified during the database server installation). Click **Ok**.

NOTE: The connection test fails because the user name and password is set to the default Oracle settings and hence does not match with the user name and password assigned to the database for Reporter.

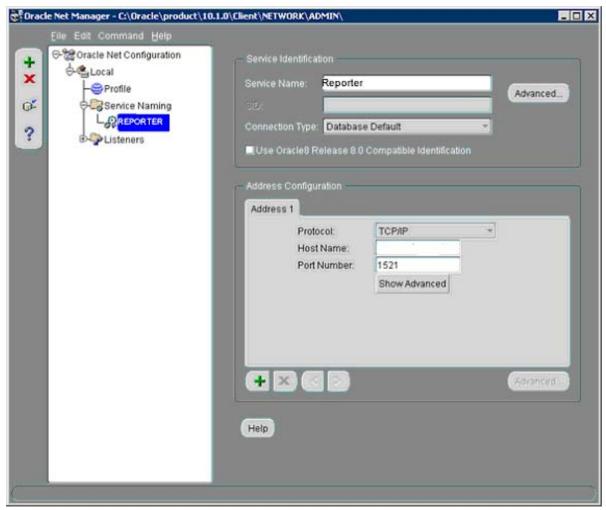


You can test the connection again. Click **Test**.

o If the connection test is success, a message which indicates that the installation is successful appears. This is the indication that the Oracle client is successfully connecting to the Oracle Server.



9. Click Close, the Oracle Net Manager window appears.



- 10. To save the configuration settings, Click File -> Save Network Configuration.
- 11. Select File > Exit to exit the Oracle Net Manager wizard.

Task 3 → Verify the Oracle Net Connection

After configuring Oracle Net, you can perform the following steps to verify connection to the Reporter database from the Microsoft Windows system:

- 1. To start the SQL *Plus tool by selecting Start -> Programs -> Oracle-OraClient10g_Home -> Application Development -> SQL Plus.
- 2. Enter the User Name and Password, and Host String (REPORTER), (the Net Service Name supplied earlier).
- 3. Enter the following SQL statement: select tablespace_name, status from user_tablespaces;
- 4. If you cannot connect to the database or do not see these tablespaces, check with the Oracle database administrator for the UNIX host system.
- 5. To leave the SQL *Plus environment, type Exit.

Task 4 → Configure the ODBC Data Source

- 1. To launch the Windows Control Panel, click Start -> Settings -> Control Panel.
- 2. Double-click Administrative Tools, then double-click Data Sources (ODBC).
- 3. From the ODBC Data Source Administrator window, select the tab System DSN. This screen displays a list of data sources.
- 4. If Reporter DSN is displayed, select Reporter DSN and click Remove.
- 5. Click Add, select Oracle driver and click Finish. The Oracle ODBC Driver Configuration window appears.
- 6. In the Oracle ODBC Driver Configuration window, enter the Data Source name as Reporter.

⚠IMPORTANT: Data source name is case sensitive. You must enter Reporter in title case (only "R" uppercase) to match references to Reporter in Internet Services executables.

- 7. From the TNS Service Name drop-down list, select the name configured.
- 8. Select the Oracle tab and set Prefetch Count to 25 and clear the checkbox Enable LOBs.

- 9. If you want to test the connection, click **Test Connection**.
- 10. Enter your username and password (which you had specified in the while setting up the database) and click Ok.
- 11. To add this data source to the System DSN, click Ok on the Oracle ODBC Driver Configuration window.

Task 5 → Configure the Database in Reporter

- 1. To start Reporter, select **Start** -> **Programs** -> **HP OpenView** -> **Reporter**.
- 2. An error message appears, this message indicates that the table or view does not exist. Ignore this error message and click Ok.
- 3. From the Reporter main window, from the **File** -> **Configure** -> **Databases** and click **Ok** to proceed past another similar error message.
- 4. From the **Configure Databases** dialog box in the Reporter Database segment, enter the database User ID and Password (assigned in the UNIX setup, Task 6 (openview / openview).

NOTE: If you want to migrate data from the default Reporter database to Oracle, you must use a database administrator account such as System or Manager.

5. Click Ok, You must restart Reporter to apply the new user name and password for the database connection.

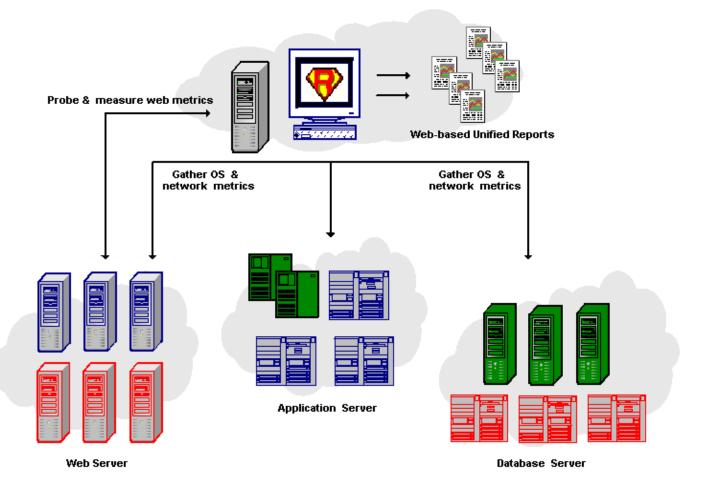
NOTE: If you are not migrating data from the default database, you must create the required database schema objects in the Reporter Oracle database. To create database schema objects, run the program C:\Program Files\hp OpenView\bin\newdb.exe. If you are migrating data from the default database to Oracle, the migration tools create the required database schema objects.

Set Up Unified Reporting

Unified Reporting Overview

Unified Reports is an additional Reporter component that further expands its Web-based reporting system. Working in conjunction with specific OpenView products/agents—OpenView Internet Services, the Smart Plug-ins for Databases, and the Network Diagnosis Add-On Module—Unified Reports captures and summarizes the data into a unique overview. With this new, consolidated view of the data, you can generate reports on Web servers, application servers, and database servers, provided those systems are accessible to OpenView data collectors/agents. The following areas of your distributed environment are accessed as shown in the diagram below:

IMPORTANT: Please do not attempt to run multiple copies of Reporter as unexpected results occur.



Unified Reports Configuration

Prerequisite: To successfully generate reports using Unified Reports, Reporter requires the following HP OpenView products/ components be installed and running:

Required			Installation Location			
Products/ Components	Description/ Function	Minimum Version	Reporter system	Web Server System	Application Server system	Database Server System
OpenView Reporter	OpenView data gathering/ report generating	A.03.6	Х	-	-	-

OpenView Internet Services	Probe deployment for Web performance monitoring	A.04.00 or A.03.50	X	Х	-	-
Database SPI: SPI for Oracle or SPI for MS SQL Server	Monitors Oracle or SQL Server databases.	A.03.51 or higher	-	-	-	Х
Network Diagnosis Add-On Module (NDAOM) ¹	Monitors the performance of the network path between specified nodes. An addon module to the Problem Diagnosis product that allows integration into OpenView Operations (OVO)	A.01.50	-	X	X	X
Problem Diagnosis	Prerequisite for NDAOM	A.01.00	-	-	-	-
OpenView Operations performance subagent (Coda) or OpenView Performance Agent (MeasureWare Agent)	Monitors operating system performance metrics and collects/logs data from the Database SPIs and NDAOM metrics.	All	-	Х	X	X
OpenView Operations for UNIX	Used for configuring some of the above required components.	Version 7, or 8	-	-	-	-

¹ Problem Diagnosis must be installed prior to NDAOM installation.

NOTE: The following databases are supported by Unified Reports:

- -SQL Server
- -MSDE
- -Oracle

Access databases are *not* supported by Unified Reports. To use Unified Reports, you must migrate data from Access to a supported database, then configure Unified Reports.

Unified Reports Configuration: Step-by-step

Complete the tasks below to configure and use Unified Reporting. Click the task below to jump to the specific instructions.

- Task 1 Configure Service Targets in OpenView Internet Services
- Task 2 Install the Unified Reports Package in Reporter
- Task 3 Add Web server systems to Reporter discovered systems
- Task 4 Confirm a successful configuration
- Task 5 Assign reports to systems

- Task 6 Set up NDAOM configuration
- Task 7 Verify DB-SPI configuration
- Task 8 Review types and descriptions of Unified Reports

Group Reports

System Reports

Report Descriptions

• Task 9 View Unified Reports

Task 1 → Configure Service Targets in OpenView Internet Services

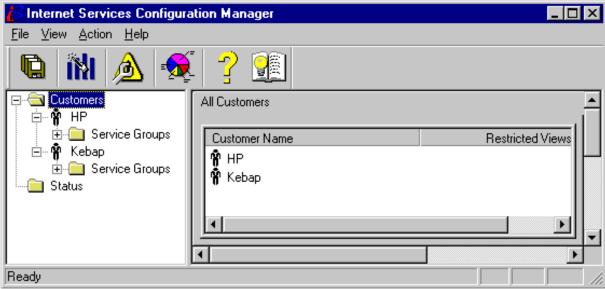
Prerequisites:

- OpenView Reporter A.03 installed/configured
- OpenView Internet Services installed/configured

Complete the following tasks to set up Unified Reports for OpenView Internet Services.

Open the OpenView Internet Services main window by selecting: Start>Programs>HP OpenView>
 OpenView Internet Services>Configuration Manager.

(The Internet Services Configuration Manager window appears as illustrated below.)



 In the left pane under a customer you have defined, highlight the Service Groups folder. and select File>New>Service Group

Right-click the Service Groups folder and select **New>Service Group**. (The Create Service Group dialog box appears as illustrated below.)



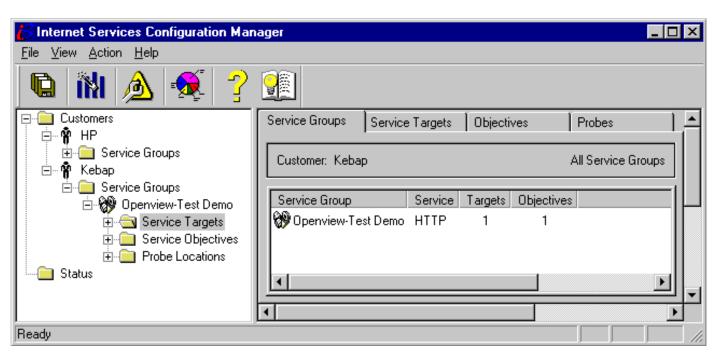
- 3. In the Create Service Type dialog, enter the name of the service group in the Service Group Name box.
- 4. In the Create Service Group dialog box, click the down-arrow in the Monitored Service box and select the type of service you want to monitor from the drop-down list and click **OK**.

In the left pane of the OVIS Configuration Manager window, the following folders appear under the Service Group you just created.

- Service Targets
- Service Objectives
- Probe Locations

And in the right pane of the OVIS Configuration Manager window, the following tabs appear:

- Service Groups
- Service Targets
- Objectives
- Probes



Editing the Service Targets Folder

- 1. Right-click Service Targets and select New Service Targets.
- 2. Complete the field information.
- 3. Click **OK** when you are finished.

Editing the Service Objectives Folder (Optional)

- 1. Right-click Service Objectives and select **New Objective**.
- 2. Complete the field information.
- 3. Click **OK** when you are finished.

Editing the Probe Locations Folder

- 1. Right click Probe Locations and select **New Probe Location**.
- 2. Complete the field information (use the default settings for Local Probe field).
- 3. Click **OK** when you are finished.

NOTE: The information you provide is displayed in tabs located in the right pane of the Internet Services Configuration Manager window.

For more information on OpenView Internet Services, refer to the *OpenView Internet Services Active Monitoring Concepts Guide*.

Task 2 → Install the Unified Reports Package in Reporter

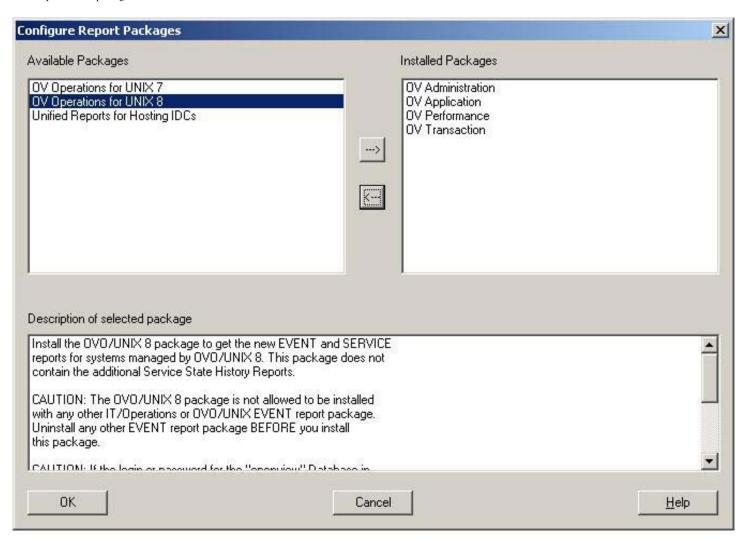
Configure Reporter

 Open the Reporter main window by selecting Start>Programs>HP OpenView> Reporter>Reporter.

(The Report window appears as illustrated below.)



- NOTE: If you require additional information on using Reporter, see the Reporter Concepts Guide.
 - 2. From the **File** menu, select **Configure>Report Packages**. The Reporter Packages window appears as illustrated in the figure below.



- 2. In the left pane of the Available Packages window, select Unified Reporter for Hosting IDCs and click the right arrow.
- 3. Click OK.

Task 3 → Add Web server systems to Reporter (AppServer, DBServer, or WebServer groups)

In the Web Services monitoring task, you are asked to provide information on the Web site(s) you want to monitor. Before Reporter can access a system and gather metrics, the system must be discovered. In this task, if necessary, you set up system to be discovered. Once discovered, the system can be added to the appropriate Unified Reports node group.

In the procedures below, you need to identify those physical systems responsible for Web service and add the system to the appropriate node group. You must have each physical system available as a discovered system in order for Reporter to generate reports on it.

Discover/Assign Systems to Appropriate Server Groups

When you added the Unified Reports package to Reporter, you not only added reports but the system groups to which you want to assign those reports. They are: **AppServer**, **DBServer**, **and WebServer**. In the procedure below, as appropriate, add application server, database server, and Web server systems to those groups. But first, the systems must be discovered by Reporter. If a system is among those discovered by Reporter, you can skip step #1 and go to steps #2-4, where you add the discovered system (s) to the system group:

- 1. In the Reporter main window in the Discovery Area identify each system (providing Web services) that you want to monitor and add it to the Discovered Area (please see the Reporter online Help if you need instructions for how to discover systems both inside and outside the Reporter system local domain).
- 2. After all Web service systems have been discovered, expand the All group under the Discovered Systems area (Reporter shows the current discovered systems in the left pane and the groups in the right pane).
- 3. In the left pane, click the group you want to assign a system to.
- 4. In the All group of systems in the left pane, select system(s) you want to assign to the group in the right pane and drag and

drop each system from left to right. (Use the Shift or Ctrl keys to select multiple systems.)

5. Using drag and drop from left to right, add *application server systems* to the **AppServer** group.

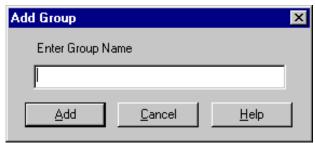
Repeat the steps for all database servers; discovering systems as necessary and adding them to the **DBServer** group.

Repeat the steps for the all Web servers; discovering systems as necessary and adding them to the **WebServer** group.

Add the Service Group (created in OpenView Internet Services)

Now you must add an additional group to match the name you typed in Task 1, Step 3:

- 1. Highlight Discovered Systems and right-click it.
- 2. From the submenu, Select Add Group. The Add Group Name dialog box appears as illustrated below.



- 3. Type the name of your group in the box. The group name you typed appears in the Groups pane.
- 4. Add all Application, Database, and Web Server nodes you previously created in <u>Adding Systems to Appropriate Server</u> Groups to the newly created group.

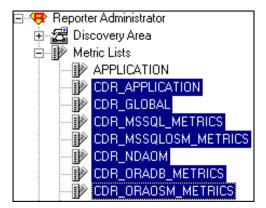
How to Delete a Group

- 1. Select Discovered Systems and right-click it.
- 2. In the right-pane of the window, select the group you want to Delete.
- 3. Right-click and select Delete.

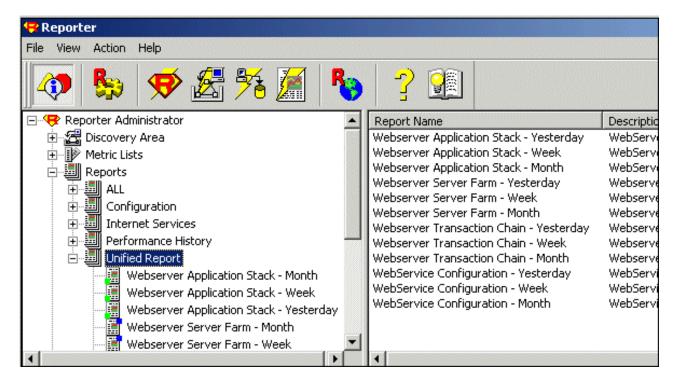
Task 4 Confirm a Successful Configuration

To confirm that the configuration was successful, verify that you can view the information below:

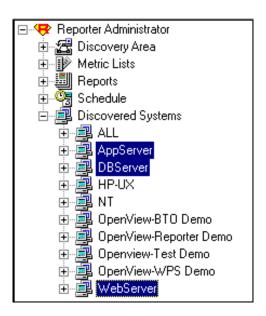
- 1. From the Reporter window, select Metric Lists. The following metric lists should be displayed as illustrated in the graphic below:
 - CDR_GLOBAL
 - CDR_MSSQL_METRICS
 - CDR_MSSQLOSM
 - CDR_NDAOM
 - CDR_ORADB_METRICS
 - CDR_ORAOSM_METRICS



- 2. From the Reporter window tree hierarchy, select Reports>Unified Report. The following reports should appear in the right pane of the Reporter window:
 - Webserver Application Stack Month, Week, and Day
 - Webserver Farm Month, Week, and Day
 - Webserver Transaction Chain Month, Week, and Day
 - Web Service Configuration Month, Week, and Day



- 3. From the Reporter window, select Discovered Systems. The following node groups have been created and will appear in the right pane of the Reporter window:
- AppServer (for all application servers)
- DBServer (for all database servers)
- WebServer (for all HTTP servers)



- 4. Highlight **AppServer** and expand it by clicking on the App Server icon. In the right pane beneath Systems, all AppServer nodes you added should appear.
- 5. Add additional nodes by selecting the node in the left pane and dragging it to the right pane.
- 6. Highlight **DBServer** and repeat Step 5 to add Database Server nodes.
- 7. Highlight **WebServer** and repeat Step 5 to add Web Servers nodes.

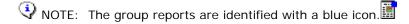
NOTE: All identified physical systems must be added to Discovery Systems prior to creating node groups and after a successful installation has been completed.

Task 5 → Assign Reports to System Groups or Single Systems

Assign Group Reports

Group reports provide information for the system group you want to monitor. Complete the following steps to add Group reports to Unified Reports.

- 1. Select the Group reports you want to add to the the newly created node. Use the drag and drop functionality to add the desired group reports of the Unified Reports to the AppServer, DBServer, or WebServer group.
- 2. Press **F5** to refresh the screen.



Assign System Reports

System reports provide information on the single system you have chosen to monitor. The system can include a Web server, application server, or database server you have chosen to monitor. Complete the following steps to add System Reports to Unified Reports.

- 1. Select the System reports you want to add to the newly created AppServer, DBServer, or WebServer group. Use drag and drop to add the System reports of the Unified Reports to the single system in the WebServer group.
- 2. Click **F5** to refresh the screen.
- 3. Repeat Step 1-2 for all systems in the node group.

NOTE: The system reports are identified with a green icon.

Report Template Descriptions

The table below lists provides detailed information on each report template:

Report Template	Timeframe	Group/ System Template	Description
s_webappstack_d.rpt	Yesterday	System	
s_webappstack_w.rpt	Week	System	Correlation of top metrics for a single system, represented in multiple graphs.
s_webappstack_m.rpt	Last 31 days	System	l oprosontou in munipio graphis.
g_webtrans_d.rpt	Yesterday	Group	
g_webtrans_w.rpt	Week	Group	Correlation of metrics across servers along one transaction chain.
g_webtrans_m.rpt	Last 31 days	Group	transaction chain.
g_websvrfarm_d.rpt	Yesterday	Group	
g_websvrfarm_w.rpt	Week	Group	Correlation of the same metric across several of the same classification of servers.
g_websvrfarm_m.rpt	Last 31 days	Group	Same diastinction of servers.
g_config_d.rpt	Yesterday	Group	Displays the used available and hardware platforms
g_config_w.rpt	Week	Group	running the applications and the utilization of the
g_config_m.rpt	Last 31 days	Group	CPUs on separate hardware platforms.

Task 7 → Configure NDAOM

The section provides a description of the NDAOM commands that must be run in order to integrate with Unified Reports. Please see the *HP OpenView Network Diagnosis Add-On Module Administrator's Guide*, included with NDAOM, for full details on installing/configuring NDAOM.

Upon completion of these instructions you will be able to monitor the performance of the path between a Web server, application server, and a database server on the managed node.

Configuring NDAOM information into the database

1. From the OpenView Operation Server directory **/opt/OV/ndaom/bin** enter the full command below:

```
./ovnwlinkmon -add
root=america
parent=Application_Server
interval=10m
source=parsley.london.mycom.com
target=sundev1.london.mycom.com
label=parsley_to_sundev1
```

W NOTE: The NDAOM Field Descriptions below offer additional information.

To monitor the path, deploy it by entering the command line below: ovnwlinkmon -deploy -NoGUI

(The path will not be monitored until it is deployed.)

2. Configure all available network connections between source servers and target servers in monitored environments.

NDAOM Field Descriptions

Field	Description
<rootserviceid></rootserviceid>	The Service Object ID where infrastructure information is inserted. The infrastructure information is inserted as sub-service. If the NoNewObject field is selected, the RootServiceID is used to determine which service object the network connection belongs to. The information in this field is used for delete operations.
<parentserviceid></parentserviceid>	The Service ID of the service object (which is the parent of all new service objects). If the NoNewObject field is selected, this field receives messages for monitored network connections. The Parent Service ID is located either in root service or the sub-tree of the root service.
<label></label>	Service label of the newly created service object parameter. If not specified, the label is the same as the Service ID. Use this parameter when NoNewObject is not specified. This field entry is optional.
<pollinginterval></pollinginterval>	Defines the unit of measures for how often the network connections are polled. The default is minutes.
<sourcenode></sourcenode>	The IP address or node name at the beginning of a path (for example, AppServer).
<targetnode></targetnode>	The IP address or node name at the end of a path (for example, DBServer).

Task 8 → Configure the Database SPI (as necessary)

To monitor database performance/availability in a Web service environment, you can use your currently installed/configured HP OpenView Smart Plug-in for Databases (specifically Oracle or Microsoft SQL Server). As part of the Database SPI configuration, you should have **reporting and graphing enabled** for each managed node.

For full details on installing and configuring the Database SPI, please see:

 the HP OpenView Smart Plug-in for Databases User's Guide (for A.04.x or earlier) or o the HP OpenView Smart Plug-in for Databases Configuration Guide (for A.05 or later).

In both earlier and later releases of the product the manuals covering installation/configuration and reports are the same. Please see *Chapter 2* for installation and configuration, including enabling reports; see *Chapter 5* for details on Database SPI reports. The guide covers four database types, but for Unified Reports only those areas referencing Oracle and/or Microsoft SQL Server are relevant.

Task 9 → Review Unified Reports content

Unified Reports offers the following three group report packages. Each report package includes various graphs that display metrics, system availability, etc.

Group Reports

- Server Farm
- Transaction Chain
- Configuration

(1) Server Farm Reports Package (Group)

Application Server graphs display the following:

- Operating System CPU utilization for all applications servers.
- Network Response Time Network response time for all application servers.
- Availability System availability.

Web Server graphs display the following:

- Operating System CPU utilization for all applications servers.
- Network Response Time Network response time for all web servers by source.
- Network Response Time for Group Network response time of web servers (i.e., application, database).
- Application Performance Response time for the web servers.
- Availability Web server availability.

Database Server graphs display the following:

- Operating System CPU utilization for all database servers.
- Network Response Time by Source Network response time for all database servers.
- Network Response Time for Group Network response time from database server to other servers (i.e., application, webserver).
- Application Performance Graph Commit rate for the database servers.
- Availability Database server availability.

(2) Transaction Chain Reports Package

The Transaction Chain group consists of the following graphs:

The Operating System CPU Utilization graphs display the following:

■ CPU utilization for the transaction servers, (that is; database, application, and web servers). The down time for the systems are displayed in the graph.

<u>The Network Response Time</u> (ms) by Source graph displays the following:

■ The Network time of the transaction servers of the database and web servers.

The Application Performance graph displays the following:

- Web server response time
- Web server throughput in KB
- Database transaction commit rate
- Downtime

The Availability Graph displays the following:

Availability of the database server, web server, and the entire system of the transaction displayed as a percentage.

(3) Configuration Reports Package

The Configuration group consists of the following graphs:

The Operating System graph displays the following:

Quantity of running operating systems

The Server Type graph displays the following:

Quantity of server types

The CPU Utilization per Operating System graph displays the following:

CPU utilization on various operating systems

Unified reporting also includes the following single system report package. This report package contains, like the group packages, various graphs that display metrics, system availability, etc.

System Reports

Application Stack

Application Stack Reports Package

The Application Group group consists of the following graphs:

The Overview for Systems graph displays the following averages:

- Cache hit ratio
- Commit rate
- CPU utilization

The <u>Database</u> for system graph displays the following averages:

- Commit rate
- Cache hit ratio
- Number of users

The Web Server Performance for System graph displays

the following averages:

- Throughput (Kb)
- Server time
- Transfer time
- DNS_time
- Connect time

The Operating System for Systems graph displays the following averages:

- Run queue
- CPU utilization
- Memory utilization
- Normal average net packet rate
- Normal average disk physical IO rate

The **Availability** graph displays the following:

- Database
- Web server
- System

Unified Reports table names and report descriptions

The table below identifies the components, fields, and descriptions identified with the Unified Reporting reports.

Report	Used Views	Description
g_websvrfarm_d.rpt g_websvrfarm_w.rpt g_websvrfarm_m.rpt	VUR_GLOBAL, VUR_GROUPS, VUR_DOWNTIME, VUR_NDAOM_AVG_UPTIME, VUR_APPL_WEBFARM, VUR_AVAIL_WEBFARM	Correlating the same metrics across several servers of the same type (for example, CPU utilization across several web servers) and determining which server is underutilized/overloaded.
g_webtrans_d.rpt g_webtrans_w.rpt g_webtrans_m.rpt	VUR_GLOBAL, VUR_GROUPS, VUR_NDAOM_AVG_UPTIME, VUR_APPL_WEBFARM, VUR_AVAIL_WEBFARM	Correlating metrics across servers along one transaction chain, potentially displaying a bottleneck and providing additional information for transaction breakdown.
g_webappstack_d.rpt g_webappstack_w.rpt g_webappstack_m.rpt	VUR_GROUPS, VUR_APPLSTACK_WEBFARM, VUR_GLOBAL, VUR_AVAIL_WEBFARM, VUR_DOWNTIME	Correlating top metrics for a single system represented in several graphs (e.g. OS metrics for a system are correlated into a single graph, database performance metrics for the system are correlated into a single graph).
g_config_d.rpt g_config_w.rpt g_config_m.rpt	VUR_SYSCONFIG	displays the used and available hardware platforms running the applications CPU utilization on the separate hardware platforms.

Unified Reports View Designs

The table below identifies the components, fields, and descriptions identified with the Unified Reporting views

Table Name	Reports (used by)	Views (used by)	Referenced Tables/ Views	Fields
VUR_APPL_WEBFARM	Websvr farm, Webtrans		VUR_DBMetrics, VUR_VP_IS	System name, Date/ Time, Service name, Response time, VPIS availability, VPIS group count, IS transfer throughput, Probe name, Commit rate, Buffer cache hit ratio, User logon count

	1		1	
VUR_APPLSTACK _WEBFARM	Webappstack		VUR_DBMetrics, VUR_VP_IS_DETAIL, VUR_GLOBAL	System name, Date/ Time, Service name, Response time, VPIS availability, VPIS group count, VPIS transfer throughput, Probe name, -DNS Tim, Connect Time, Server Time, Transfer Time, Commit rate, Buffer cache hit ratio, User logon count, CPU Utilization
VUR_AVAIL_WEBFARM	Websvrfarm, Webtrans, Webappstack		VUR_GROUPS, VUR_VP_IS, DOWNTIME, VUR_DB_UPTIME	Group name, Subgroups, System name, Time bucket, Sysdowntime, SysShifttime, DbUpMin, Servicename, ISDBServer, OVIS (VPIS) availability, OVIS (VPIS) group count
VUR_DB_UPTIME		VUR_AVAIL_WEBFARM	CDR_ORAOSM_METRICS, CDR_MSSQL_METRICS	Time bucket, DbUpMin, Systemname
VUR_DBMetrics		VUR_APPLSTACK _WEBFARM, VUR_APPLWEBFARM	CDR_ORAB_METRICS, CDR_MSSQL_METRICS	System name, Date/ time, Commit rate, Buffer cache hit ratio, User logon count
VUR_DOWNTIME	Websvrfarm, Webappstack	V_AVAIL_WEBFARM	DOWNTIME	System name, Date/ time, Shift name, Shift time, Downtime
VUR_GLOBAL	Websvrfarm, Webtrans, Webappstack	VUR_APPLSTACK _WEBFARM	CDR_GLOBAL	System name, Time bucket, Run queue, CPU total util, System CPU utili ratio, User CPU utili ratio, FS Space Util Peak, Disk Phys IO rate, Memory util, Net packet rate Interval, Swap space util, empty
VUR_GROUPS	Websvrfarm, Webtrans, Webappstack	VUR_AVAIL_WEBFARM	SYSTEMS GROUPS, SUBGROUPS, IOPS_SERVICES, IOPS_SERVICE-TARGETS	Group name, Subgroup, Systemname, System ID
VUR_NDAOM_AVG_UPTIME	Websvrfarm, Webtrans		CDR_NDAOM, GROUPS	Systemname, Time bucket, ndaom destination, NDAOM Path ID, NDAOM Hop Num, NDAOM mean, MM Systemname, Num, Dest group
VUR_SYSCONFIG	Config		SYSTEMS	System ID, Systemname, OSname, OSrelease, OSversion, Machine type, Exclude

VUR_VP_IS	VUR_AVAIL_WEBFARM, VUR_APPL_WEBFARM	IOPS_PROBE_DATA, IOPS_SERVICES, IOPS_SERVICE_TARGETS	Systemname, Time bucket, Service name, Response time availability, Group count, Transfer, hroughput, Host, Probe name, System ID
VUR_VP_IS_DETAIL	VUR_APPLSTACK _WEBFARM	IOPS_PROBE_DATA, IOPS_SERVICES, IOPS_SERVICE_TARGETS	Systemname, Time bucket, Service name, Response time availability, Group count, Transfer throughput, Probe name, DNS time, Connect time, Server time, Transfer time

Task 9 → View Unified Reports

Reports should be ready the next day as Reporter generates new reports with new data every 24 hours. When you are ready, you can view reports by following these instructions. The Unified Reports should also appear on Reporter's cover Web page with all other reports.

Viewing Group Reports

- 1. Select the group for the reports you want to view.
- From the Action menu select Show>Reports
 or
 Click the Show Reports toolbar button.



NOTE: To toggle from the Group to System reports view press Refresh (F5) to access the appropriate report group.

Viewing System Reports

- 1. Select the system for the reports you want to view.
- From the Action menu select Show > Reports or Click the Show Reports toolbar button.



Running Reporter and OVOW 7.5 on Separate Systems

It is possible to integrate Reporter with remote OVO W 7.5 to collect managed node information and generate OVO W reports.

NOTE: This configuration is not supported with OVO W 7.2 or older versions of the OVO W.

Follow the steps mentioned in the following sections to configure the OVO W and Reporter system.

Configuring the OVO W 7.5 System

- 1. Select the Reporter service using the Start menu, select **Settings** > **Control Panel** > **Administrative tools** > **Services applet**.
- 2. From the Startup type drop-down list box, select Manual.

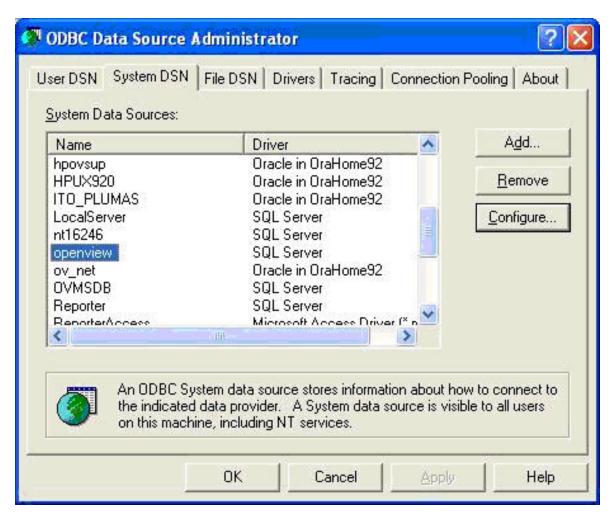




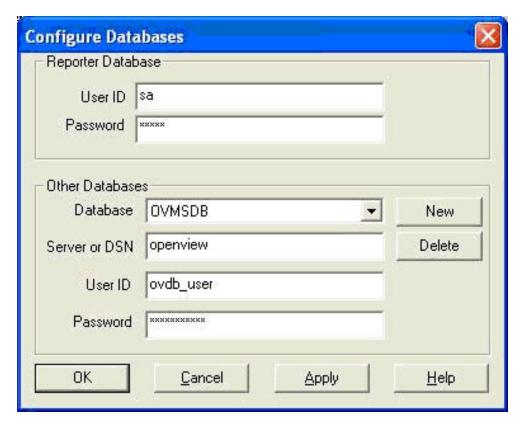
3. Click **Stop** to stop the Reporter Service. Refer to section "*How to add a user to user group*" to add a user to a user group on OVO W system.

Configuring the Reporter System

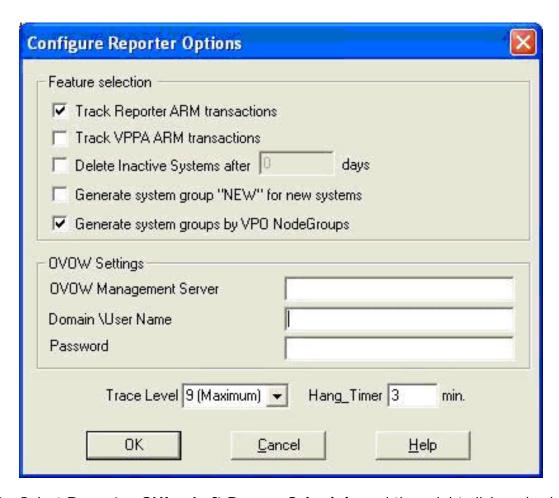
- 1. Install OVO W package from the OVO W CD.
- 2. From the Start menu, select **Settings** > **Control Panel** >**Administrative Tools** >**Data sources** (**ODBC**).
- 3. Click **Add** in the **ODBC Data Source Administrator** dialog box to add **Openview DSN** pointing to OVOW database.



1. Select **Reporter GUI** > **File** > **Configure** > **Databases** and create a new database OVMSDB using openview DSN added in step 2.



- 4. Select **Reporter GUI** > **File** > **Configure** > **Options** and specify the OVOW Settings parameters.
- 5. Enter the OVOW system name as **OVOW Management Server**, a user name as **Domain \User Name** (with or without domain) and the password as **Password** in the OVOW Settings.



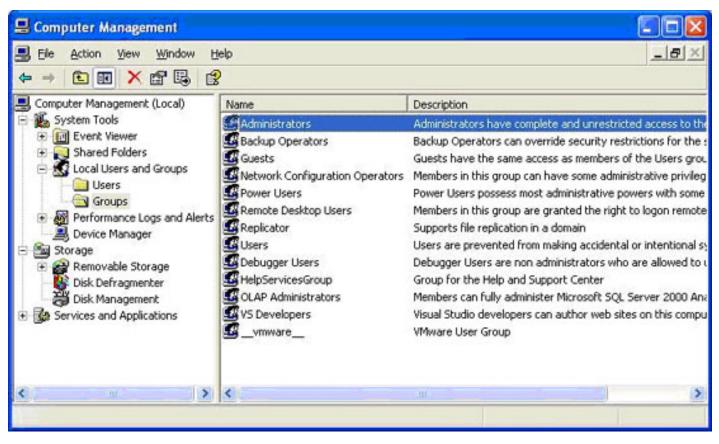
6. Select Reporter GUI > Left Pane > Schedule and then right click and select Add Schedule to add

Discovery_Neutron to reporter scheduler.

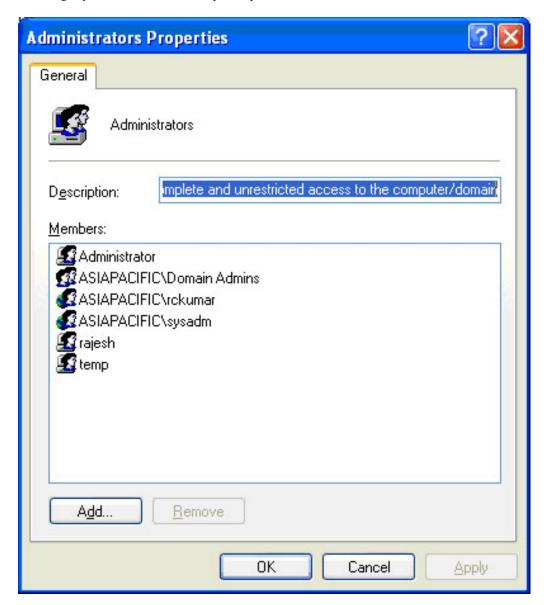
IMPORTANT: The User Name entered in the OVOW Settings panel must be part of the Administrators, HP-OVE-ADMINS, or HP-OVE-OPERATORS user group on the OVOW management server System.

Adding a user to a user group on OVOW system

- 1. From the Start menu, select **Settings** > **Control Panel** > **Administrative tools** > **Computer Management**.
- 2. Select System Tools > Local Users and Groups > Groups from the left pane.



3. Right click on a group in the right pane, in which you want to add a user and follow the procedure to add a user.



Installation in Microsoft Cluster Server (MSCS)

PREREQUISITES

The following are the prerequisites for installing Reporter in MSCS:

- Windows Server 2003 Enterprise Edition or Datacenter Edition.
- Install and Configure Microsoft cluster server before installing Reporter (Refer to the URL: http://www.microsoft.com/resources/documentation/WindowsServ/2003/datacenter/proddocs/en-us/cluad_pr_50.asp to create cluster server).
- Install and cluster SQL Server 2000 Enterprise Edition with Service Pack 3a or later on cluster nodes.
- Configure the Reporter ODBC DSN before installing Reporter.
- A MSCS cluster resource group containing a Physical Disk, IP, and Network Name (Virtual Server) resource must be running.
- Logged in user must have administrative permissions to access or modify the cluster.

Installing and configuring Reporter

Follow the procedures in the sections below to install Reporter in MSCS.

Installing SQL Server 2000 SP 3a

Refer to the URL http://msdn.microsoft.com/library/default.asp?url=/library/en-us/adminsql/ad_clustering_2icn.asp for Installing and Administering SQL Server in Microsoft cluster.

Creating the Reporter Database

Follow the steps mentioned in *Task 3 Configure the Reporter Database on SQL Server 2000* of the *Install and Configure MS SQL Server Software* section of the *Installation and Special Configurations Guide*, to create a reporter database.

NOTE: The Data files and Transaction log must be stored to the shared disk for high availability.

Establishing an ODBC Connection to the Database

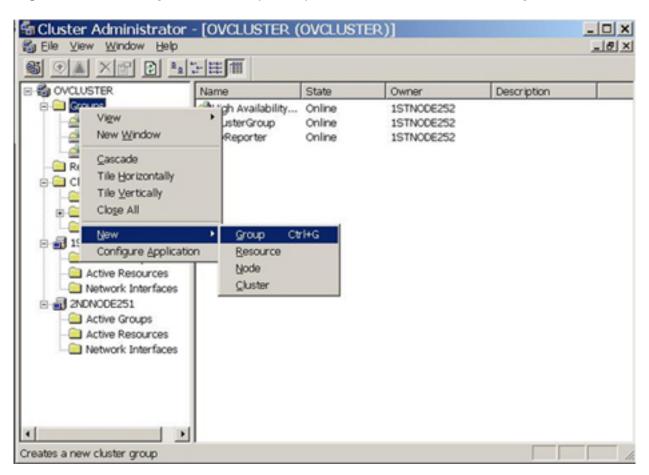
Follow the steps mentioned in Task 3 Establish the ODBC Connection of the Install and Configure SQL

Client Software section in the Installation and Special Configurations Guide to create an ODBC connection to the Reporter database.

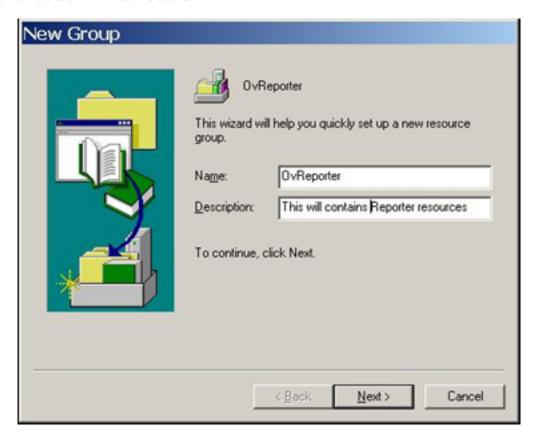
NOTE: Create and Configure Reporter ODBC DSN on each node you will be installing Reporter.

Adding a Group or IP Address or a Network Name

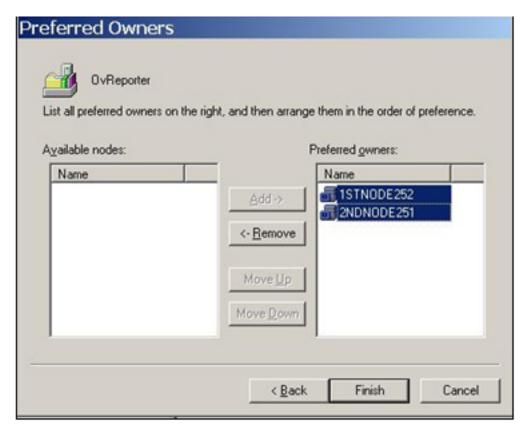
- 1. From the Start menu, select **Programs > Administrative Tools > Cluster administrator** (Microsoft Cluster Administrator Tool) to create a resource group or IP Address and a Virtual Server(Network Name).
- 2. Right click on **Groups** in the left pane, point to **New**, and click **Group**.



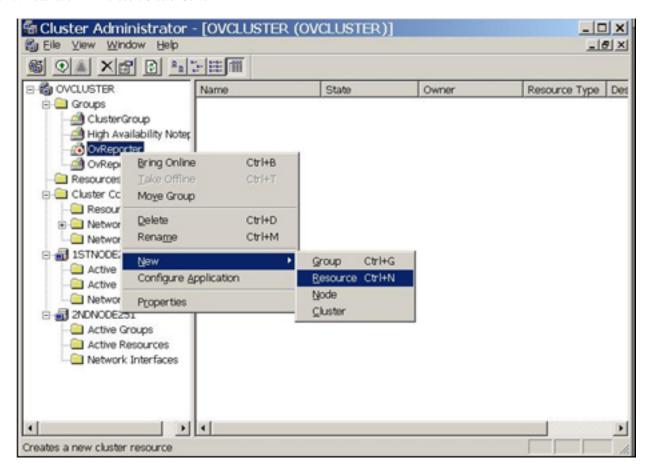
3. Add a new group, for example, **OvReporter** and press the **Next** button. The User can choose any name for group.



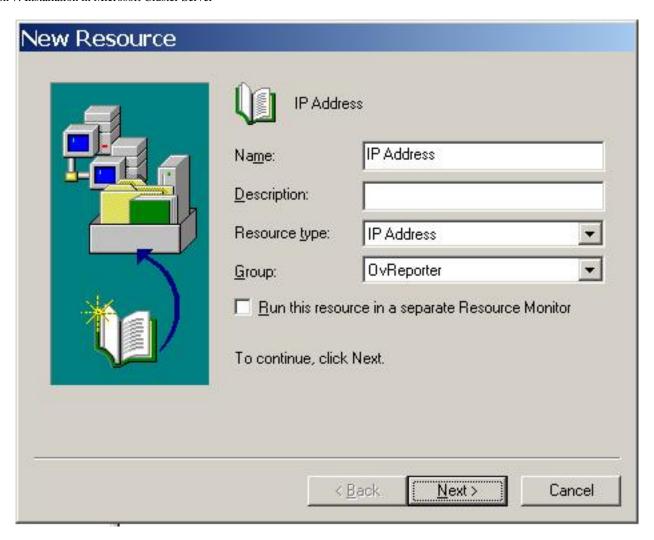
4. Add Preferred owners from the list of Available nodes.



- 5. Click **Finish** to add OvReporter group to the cluster.
- 6. Right click on **OvReporter**, point to **New**, and then click **Resource**.



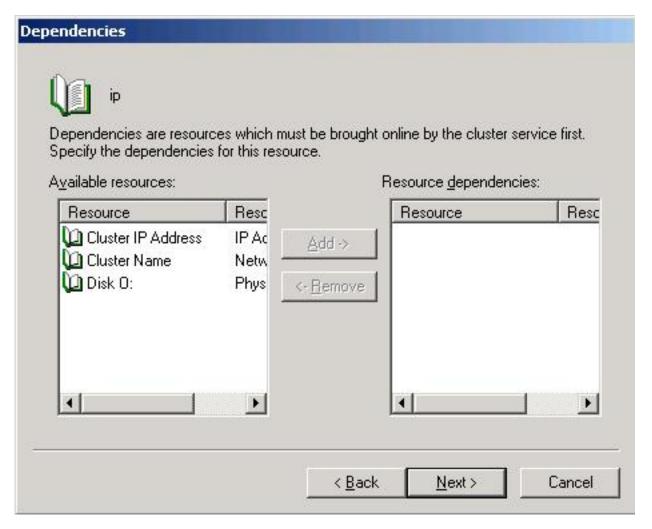
- 7. Select **Resource Type** as IP Address and **Group** as OvReporter.
- 8. Enter Name as IP Address. The User can choose any name for IP Address.



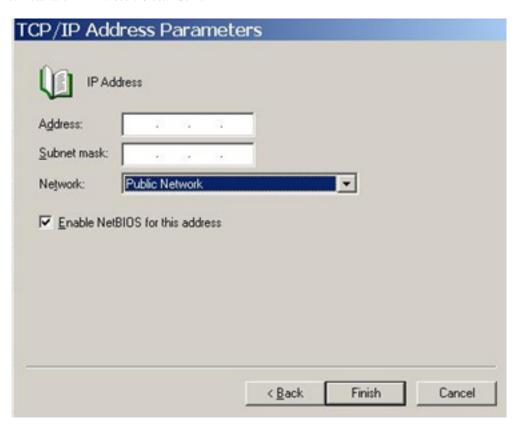
9. Click **Next** and add preferred owners from the list of **Available nodes**.



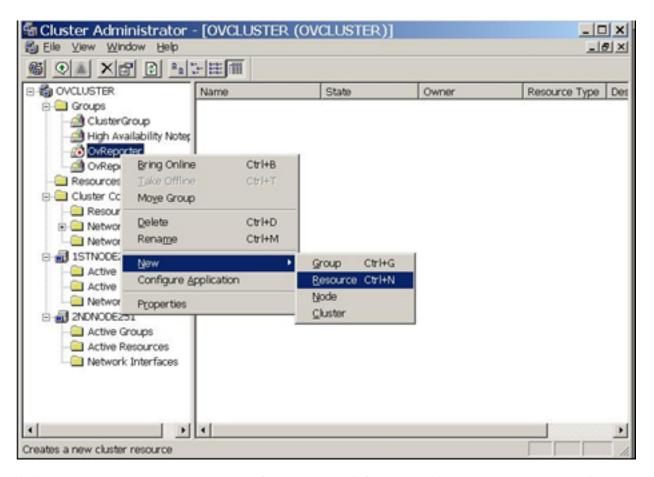
10. Do not add any dependencies and click **Next**.



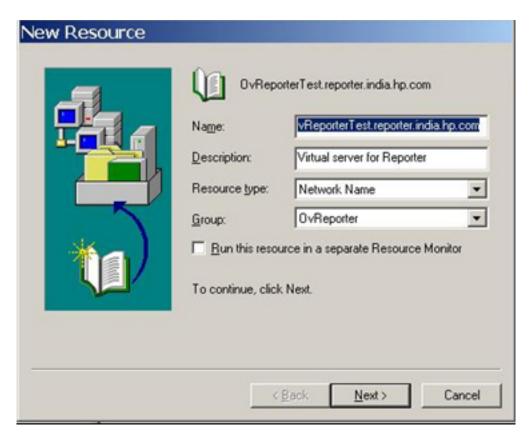
11. Enter **Address** and **Subnet mask**. Click **Finish** to add the IP Address resource to the OvReporter group.



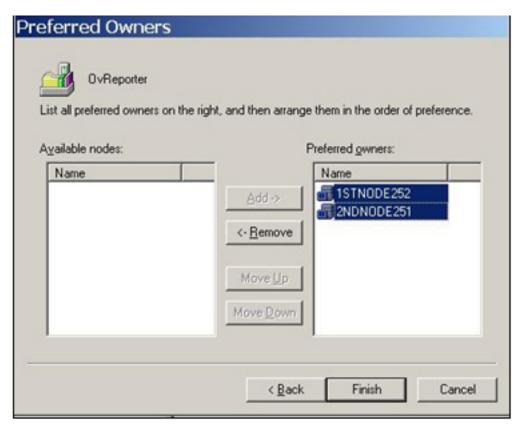
12. Right click on OvReporter group, point to New, and click on Resource



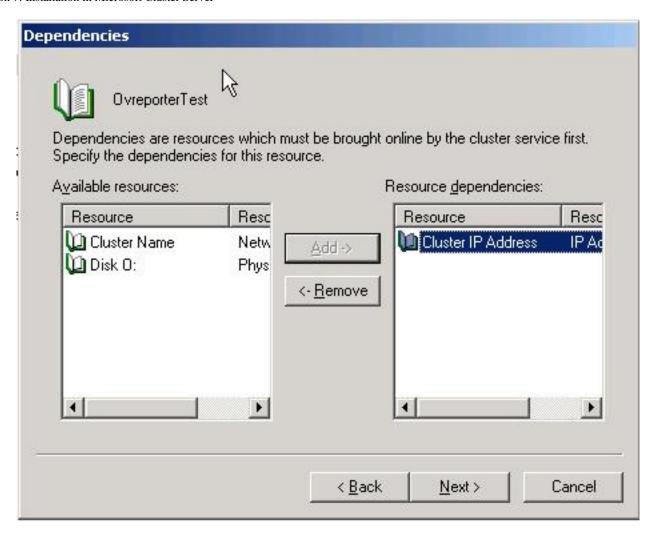
13. Select Resource Type as **Network Name** and Group as **OvReporter**. Enter the name for the network name and click **Next**. The User can choose any name for Network Name.



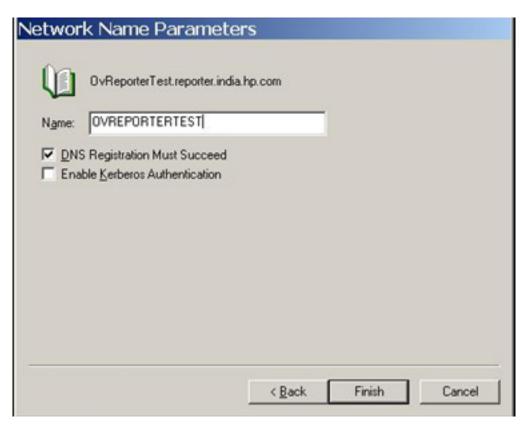
14. Add Preferred owners from the list of Available nodes and click Next.



15. Select IP Address as the Resource Dependencies and click Next.



16. Enter your choice as the Virtual Server name. Click **Finish** to add the network name to the **OvReporter** group.



Installing Reporter on an active node

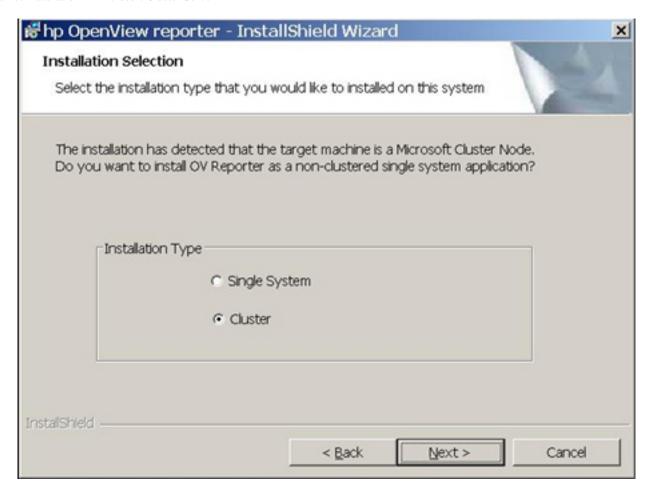
1. From the Start menu, select **Programs > Administrative Tools > Cluster administrator** (Microsoft Cluster Administrator Tool) to create a resource group containing Virtual server, IP address, and shared disk cluster resources.

NOTE: The user can skip the creation of a resource group containing the Virtual server, IP address, and the shared disk cluster resources if these have already been configured in MSCS. Refer to section How to add resource group / IP Address and Virtual Server to create resource group, Virtual server, IP address and shared disk cluster resources.

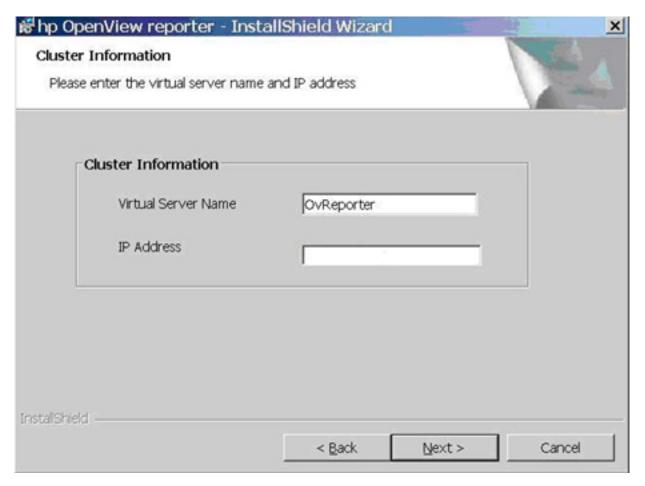
⚠ IMPORTANT: The resource group containing Physical Disk, IP and Network Name resource must be running on the current node.

- 2. Insert the Reporter Installation CD into the CD-ROM drive on the node that has active ownership of the virtual server.
- 3. Select Install Reporter and follow the instructions to install the Reporter.

NOTE: The Installation Selection dialog box shown below is not displayed if the current user does not have administrative rights or if the system is not clustered.



- 4. Select **Cluster** for the Cluster installation of Reporter.
- 5. Click **Next** to display the dialog box showing the cluster details.



- 6. Enter the existing Virtual Server name and IP address as you specified in step 1.
- 7. Select a valid shared folder and make sure to select a local drive for the program files and a shared drive for the shared data files.

For example, if S is your shared drive you must select:

Install hp OpenView reporter to: C:\Program Files\HP OpenView\

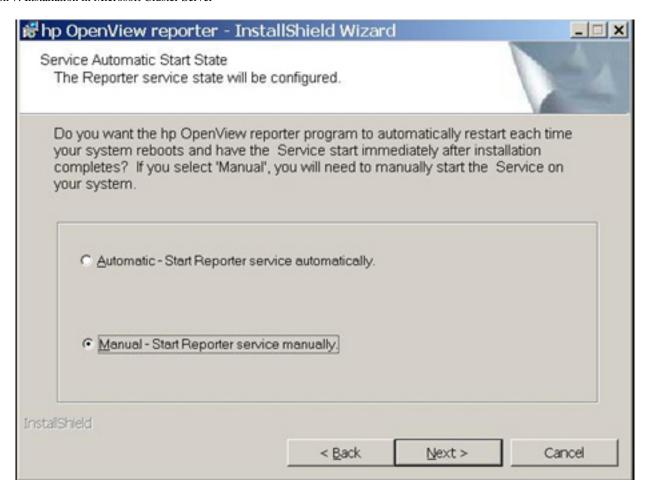
Install hp OpenView reporter local Data to: C:\Program Files\HP OpenView\Data

Install hp OpenView reporter Shared Data to: S:\MyShare\



⚠Important: Make sure you select the same Program files, Shared Data and Data directory when you install Reporter on other nodes in the cluster.

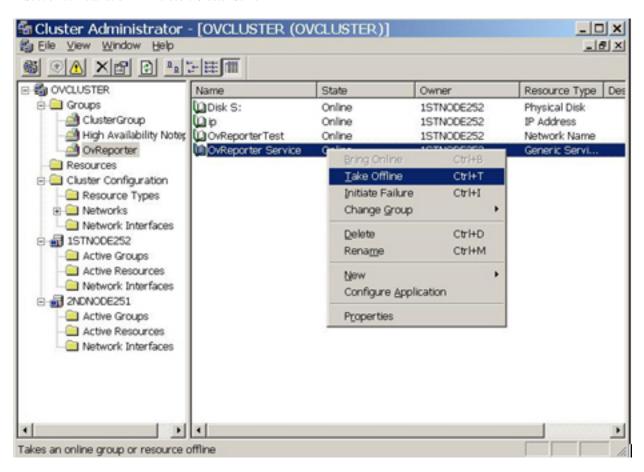
8. Select the Manual- Start Reporter service manually check box.



9. Click **Next** and follow the instructions to install the Reporter

Installing OvReporter on Additional Node

- 1. Use Microsoft Cluster Administrator Tool and select **OvReporter Service.** Right-click and select **Take Offline** option to move the resource status to offline.
- 2. Do not move the OVReporter Group (containing the OvReporter Service) to the subsequent node.



Installing OvReporter on Current Node

- 1. Follow the instructions from the previous section <u>Installing OvReporter on an active node</u> to install Reporter on the current node.
- 2. Repeat steps 1 and 2 to install Reporter on the remaining nodes within the cluster.

Uninstalling Reporter

- 1. Last installed node should be the first node during uninstallation. Make sure that the OvReporter Service is offline before uninstalling Reporter. (Refer Step 1 of the previous section Installing OvReporter on additional nodes to turn the OvReporter service offline
- 2. Uninstall Reporter from the active node that manages the **OvReporter Service** resource.
 - NOTE: The data on the shared drive is removed only if the current node is the last node.
- 3. Move the resource group (containing the resource, OvReporter Service) to the next Reporter node in MSCS using the Microsoft Cluster Administrator tool.
- 4. Repeat steps 2 and 3 till Reporter is uninstalled from all nodes.

Constraints

- 1. The Clustered Reporter is not supported with other non-Clustered OpenView products.
- 2. No OpenView performance products (for example, OVOW or OVIS) must be installed on the same system as long as they do not support running with a clustered Reporter installation.

- 3. Only an **active/passive** configuration is supported. This means that the Reporter can be installed on all cluster nodes, but can run only once at a time. No load balancing is possible and supported. Only one running Reporter service per cluster is allowed.
- 4. The upgrades from Reporter 3.1 or 3.5 to Clustered Reporter are not possible and are also not supported.

Section 8: Configure multiple OVO UNIX Management Servers to Reporter

This chapter provides instructions to configure HP OpenView Reporter (Reporter) to generate reports on multiple HP OpenView Operations (OVO) for UNIX Server. This feature allows you to generate reports for systems that do not use the database connected to Reporter.

Limitations

You cannot generate the following reports from the OVO UNIX family of reports:

- 1. UNIX Discovered Systems
- 2. UNIX Messages by Node and Application
- 3. UNIX Operator Acknowledgements
- 4. UNIX Messages by Application and Severity (Full Time Range)
- 5. UNIX Messages by Application and Severity (Last Month)
- 6. UNIX Messages by Application and Severity (Last Week)
- 7. UNIX Messages by Application and Severity (Yesterday)

Remove Existing OVO Configurations from Reporter

Before you configure HP OpenView Reporter to generate reports on multiple OpenView Operations (OVO) UNIX Server, you can remove existing OVO configuration from the Reporter window. This is optional.

Remove currently installed "OV Operation for UNIX 7 or 8" package. You can do this either from the Reporter window or from the command prompt:

- To remove currently installed OV Operations for UNIX 7 or 8 package from Reporter window:
 - Select File -> Configure -> Report Packages, from the Reporter window. The Configure Report Packages window opens.
 - b. Select **OV Operations for UNIX 7** or **OV Operations for UNIX 8** packages from **Installed Packages** pane and click <--.
 - c. The selected packages will now be displayed in the **Available Packages** pane.
 - d. Click **Ok**, the Reporter main window will be displayed.
- o To remove currently installed OV Operations for UNIX package from the command prompt:

Run the following command according to version of OpenView Operations for UNIX installed on your system:

■ If you have OpenView Operations for UNIX (OVOU) 7.0 package

installed on your system:

```
Repload -remove "<InstallDIR>\newconfig \packages\repload_ovoux71.srp".
```

■ If you have OpenView Operations for UNIX (OVOU) 8.0 package installed on your system:

```
Repload -remove "<InstallDIR>\newconfig
\packages\repload_ovoux8.srp"
```

- 2. Remove existing database configurations in Reporter GUI.
- 3. Remove the Data Source Names (DSN) configured for OVO UNIX from your system.
 - a. Click Start -> Run
 - b. Type odbcad32 and click Ok. The ODBC Data Source Administrator Window appears
 - c. Select System DSN tab
 - d. Select **DSN configured to OVO/U** database from the list and click **Remove**

Configure HP OpenView Reporter to generate reports on multiple OpenView Operations (OVO) UNIX Server database

To configure HP OpenView Reporter to generate reports for multiple OpenView Operations (OVO) UNIX Server database, perform the following tasks:

- 1. Configure Oracle client
- 2. Configure ODBC
- 3. Configure Reporter databases
- 4. Create the SRP file
- 5. Load created SRP file to Reporter DB

Configure Oracle client

Configure the Oracle client for OVO UNIX server and for Oracle database server. For instructions, refer to the section **Reporting From Other Databases**, in 'Chapter 5: Customizing Reporter' of the *HP OpenView Reporter Concepts Guide*.

Configure ODBC

Create Data Source Names (DSN) for all the Oracle database servers and OVO UNIX management servers. Every server should have a corresponding DSN. For instructions, refer to Section 4: Part C: Connect the OpenView Operations 7 or 8 (Oracle 9i / 10g), Database to Reporter.

Configure the database for Reporter

To configure databases,

- 1. Select **File** -> **Configure** -> **Databases**, from the **Reporter** window. The **Configure Databases** window opens.
- 2. Click New. Enter the Database name. For example: OVO_DB1
- 3. From the drop-down list, select the database that you created.
- 4. Enter the **DSN** name that you created.
- 5. Enter the database User ID and password.
- 6. Click **Ok**. The database is now configured.

The above DSN and database names can be replaced by any name of your choice. Database name should not be more than 15 characters.

Create the Service Reporter Package (SRP) file

- Insert the Reporter CD into the CD-Rom drive. From the CD drive, open the folder support \Multiple_OVO Folder. Open one of the following files from a text editor, based on the management server installed on your system:
 - o multiple_management_server_template_7.srp (if you are using OVO/U 7.x database)
 - o multiple_management_server_template_8.srp (if you are using OVO/U 8.x database)
- Find and replace all instances of [DATABASENAME] (including the square brackets) with the database name configured in Reporter.
 For example: If the database name that you configured was OVO_DB1, replace

[DATABASENAME] with **OVO_DB1**

- Click File -> Save As and save the file to the directory < INSTALLDIR>\newconfig\packages
 as:
 - o multiple_management_server_template_7_0VO_DB1.SRP (if you are using OVO/U 7.x database)
 - multiple_management_server_template_8_OVO_DB1.SRP (if you are using OVO/U 7.x database)

NOTE: While saving the file, make sure you always include **.srp** as the file extension. By default text editors such as Notepad includes **.txt** as the extension.

Load SRP file to Reporter Database

You can load the SRP file either from the Reporter window or from the command prompt:

- To load SRP file from the Reporter window:
 - 1. Start the Reporter service either using Reporter window or Control panel.
 - 2. Select File -> Configure -> Report Packages in Reporter window.
 - 3. Select the packages you created from the **Available Packages**. Click -->, the Report Packages which you select will now be displayed in the **Installed Packages** pane.
 - 4. Click **Ok**, the **Repload** program starts.
 - 5. Wait till **Repload** program finishes.

Or

• To load SRP file from the command prompt:

Run the following command:

- Repload -load <INSTALLDIR>\newconfig\packages
 \multiple_management_server_template_7_OVO_DB1.SRP if you are using OVO/U 7.x database
- Repload -load <INSTALLDIR>\newconfig\packages
 \multiple_management_server_template_8_OVO_DB1.SRP if you are using OVO/U 8.x database

After loading the SRP files, Reporter window displays the following:

- List of Report families which are newly created with the database name as the prefix.
- List of Reports under each family with database name as the prefix.

Report generation.

From the command prompt, run the following command:

repcrys

NOTE: You can also generate specific reports with the report name as a command line parameter.

After report generation, the Reporter web page displays separate links created for each of the Report families

Uninstalling Report packages.

You can uninstall Reporter packages either from the Reporter window or from the command prompt. The steps are as follows:

- To uninstall Reporter packages from Reporter window:
 - Click File -> Configuration -> Report packages, the Configure Report Packages window appears
 - 2. Select the packages you want to remove from the Install Packages pane, Click <--
 - 3. The packages which you select will now be displayed in the **Available Packages** pane. Click **Ok**.
 - 4. Click **File** -> **Configuration** -> **Databases** dialog. Delete **Databases** defined in Reporter window.
 - 5. Remove DSN created using ODBC configuration.
- To uninstall Reporter packages from Command prompt:

Run the command:

- o Repload -Remove <INSTALLDIR>\newconfig\packages \multiple_management_server_template_8_OVO_DB2.SRP if you are using OVO/U 8.x database
- o Repload -Remove <INSTALLDIR>\newconfig\packages \multiple_management_server_template_7_OVO_DB1.SRP if you are using OVO/U 7.x database

INDEX

$\underline{A},\ \underline{B},\ \underline{C},\ \underline{D},\ \underline{E},\ \underline{F},\ \underline{G},\ \underline{H},\ \underline{I},\ \underline{J},\ \underline{K},\ \underline{L},\ \underline{M},\ \underline{N},\ \underline{O},\ \underline{P},\ \underline{Q},\ \underline{R},\ \underline{S},\ \underline{T},\ \underline{U},\ \underline{V},\ \underline{W}$

A	N
application servers, reporting on	0
В С	ODBC, as used by Reporter Oracle, configuration recommendations, scalability (please see Chapter 6 of the Concepts Guide
configure OpenView Operations database Oracle as the default database SQL Server as the default database Unified Reports To generate reports on multiple HP OpenView Operations (OVO) for UNIX Server	Oracle, templates for configuring listener and database instance for Reporter Oracle, transferring data to Oracle Oracle 9i as the Reporter database (available in the PDF version of the Installation/Special Configurations Guide OVO 5 configuration OVO 6 configuration
D	
database, transferring data from to Oracle transferring data to SQL Server discovery, description of	P R
E environment variables, for HP-UX system installations of Oracle	reports (Unified Reporting) adding report templates for Unified Reporting group reports for Unified Reporting system reports for Unified Reporting viewing Unified Reporting
F	s
G	
I .	SQL Server, setting up to use as the Reporter database
installation, of Reporter	Solaris/Sun, connecting to the OVO database on systems running Solaris, configuring Oracle 9.2.0.1 as Reporter database Solaris/Sun, kernel parameters for
J	Т
K	templates, Oracle listener and tsnnames files
kernel parameters settings for Oracle database installations	tnsnames file, editing for Oracle connection

Index

L

listener.ora file, entries for Oracle database setup

M

migrating data to Oracle

Microsoft SQL Server setup, please see SQL Server monitored Web services, (for Unified Reports) adding

U

Unified Reports
configuring
metrics list for
overview of
uninstall Reporter

٧

W

Web application servers, monitoring with Unified Reporting



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