

**Oracle® Retail Promotion Intelligence and
Promotion Planning and Optimization**

Installation Guide

Release 12.0.2

February 2007

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Preface

This guide enables you to install the Oracle Retail Promote application, along with the server-side components required for the Promote application.

Audience

This guide is intended for system administrators and assumes that you are familiar with the following:

- Installing and configuring application server software
- Installing and configuring relational database management systems
- Installing and configuring distributed client/server applications on a UNIX-based local area network

Related Documents

For more information, see the following documents in the Oracle Retail Promotion Intelligence and Promotion Planning and Optimization documentation set:

- *Oracle Retail Promotion Intelligence and Promotion Planning and Optimization 12.0.2 Release Notes*
- *Oracle Retail Promotion Intelligence User Guide*
- *Oracle Retail Promotion Planning and Optimization User Guide*
- *Oracle Retail Promotion Intelligence and Promotion Planning and Optimization Operations Guide*
- *Oracle Retail Promotion Intelligence and Promotion Planning and Optimization Configuration Guide*
- *Oracle Retail Promotion Intelligence and Promotion Planning and Optimization Sample Data Set Guide*

Customer Support

- <https://metalink.oracle.com>

When contacting Customer Support, please provide:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to recreate

- Exact error message received
- Screen shots of each step you take

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Overview

This chapter provides an overview of Oracle Retail Promotion Intelligence and Promotion Planning and Optimization application. It contains the following sections:

- [Overview of Promotion Intelligence and Promotion Planning and Optimization](#)
- [Roadmap for Implementing Promotion Intelligence and Promotion Planning and Optimization](#)

Overview of Promotion Intelligence and Promotion Planning and Optimization

Oracle® Retail Promotion Intelligence and Promotion Planning and Optimization products enable retailers to determine the most profitable way to execute day to day Ad content and promotion pricing decisions. These pricing decisions support the marketing strategy and fulfill the needs at each store to drive higher traffic and more profitable sales.

This product suite includes:

- Promotion Intelligence – Analytic engine
- Promotion Planning and Optimization – User interface that help manage the promotion calendar and other features.

About Promotion Intelligence Application

The Promotion Intelligence application allows the analysis of the historic ad information. It utilizes the Promote Calculation Engine, a Java-based application, run through command-line tools. It can be integrated with customer's tools and utilities for running historical analysis.

- Analyzing the results from past promotions and advertising across merchandise, region, time, and vehicle
- Evaluating the ROI of advertising vehicles.
- Analyzing the affinity effects of products on one another.

This product includes MicroStrategy reports.

About Promotion Planning and Optimization Application

The Promotion Planning and Optimization application provides a user interface that helps you manage the promotion calendar and perform What-If analysis. This application depends on the installation of the Promote Intelligence application, and uses the Promote Calc Engine API.

- Promotion Calendar
- Event Planning
- Whitespace Allocation
- Vehicle Design
- Forecasting
- What-If
- Workflow

The following figure outlines the both the products and the relation between them. The Promotion Intelligence product includes the green area (analytics DB + PCE + Ad Analysis Desktop), and the Promotion Planning and Optimization product includes the yellow area (Promotion Manager).

Figure 1–1 Promotion Intelligence and Promotion Planning and Optimization Architecture



Planning Your Installation

Before installing the Promotion Intelligence and Promotion Planning and Optimization applications, you must first determine the performance and availability goals for your business, and then plan the hardware, network, and storage requirements accordingly. This chapter provides some basic considerations for the implementation. It also includes the list of hardware and software requirements.

This chapter includes the following sections:

- [Overview of the Planning Process](#)
- [Supported Configurations](#)

Overview of the Planning Process

Planning your implementation prior to an installation also gives you a better understanding of the environment, and enables you to adapt faster to any future changes in the environment setup.

This section contains the following topics:

- [Planning Your Environment](#)
- [Planning for Optimal Promotion Intelligence and Promotion Planning and Optimization Performance](#)

Planning Your Environment

Use the following steps to plan and prepare the product environment:

1. Plan and design the infrastructure, based on your business needs, for the installation. This includes:
 - Meeting the hardware and associated software requirements.
 - Acquiring the prerequisite software (and licensing).
 - Setting up the load balancers and clusters.
 - Gathering the capacity data.
 - Planning the data security policies.
 - Designing the backup and recovery strategies.
2. Determine the size of the implementation.
3. Identify source systems. Identify the systems that will exchange data with Promotion Intelligence and Promotion Planning and Optimization.

Planning for Optimal Promotion Intelligence and Promotion Planning and Optimization Performance

Consider the following steps to plan and prepare the product environment.

1. Determine the Promotion Intelligence and Promotion Planning and Optimization metrics relevant to your business needs.
2. Determine your relevant business policies. The business policy is a statement of what rules govern the application processes. You need to develop a business policy based on your business rules. For more information about business rules, see the *Promotion Intelligence and Promotion Planning and Optimization Configuration Guide*.
3. Plan the periodic batch loading of business and historical databases. This also includes the data feeds needed from the external systems for nightly, weekly, and periodic batch updates and recycling.

Supported Configurations

You can install the Promotion Intelligence and Promotion Planning and Optimization application on one of the following configurations:

- AIX-based System Configuration
- Red Hat Enterprise Linux System Configuration

AIX-based System Configuration

The AIX-based system configuration must include the following components:

- **Application Server** – Oracle Application Server 10.1.3.1
 - *Operating System:* AIX 5.3, TL5, APAR IY75211
 - *Java Development Kit:* IBM SDK 1.4.2 (SR7)
- **Database** – Oracle 10g R2 (10.2.0.2)
 - *Operating System:* AIX 5.3.0, 64-bit, enhanced file system, APAR IY75211

Red Hat Enterprise Linux System Configuration

The Red Hat Linux system configuration must include the following components:

- **Application Server** – Oracle Application Server 10.1.3.1
 - *Operating System:* Red Hat Enterprise Linux Release 3.0, Taroon, Update 5, tzdata-2006m-3.el3
 - *Java Development Kit:* Sun JDK 1.4.2_13 for Installer and PCE
- **Database** – Oracle 10g R2 (10.2.0.2)
 - *Operating System:*
 - On SPARC Platform – Solaris 10, with time zone patch 122032-01 or later and libc patch 119689-07 or later
 - Or
 - On x86 Platform – Solaris 10, with time zone patch 122033-01 or later and libc patch 121208-03 or later

Merchant Desktop Requirements

Merchant Desktop is optional. If you are using Merchant Desktop, see the following table for the supported configuration.

If you are using Merchant Desktop with MicroStrategy, Merchant Desktop must be installed on the application server node and MicroStrategy must be installed on a system that hosts a Microsoft Windows 2003 server.

Table 2–1 Merchant Desktop Server Requirements

Software	Requirement
Operating System	Windows Server 2003
Business Intelligence Tool	MicroStrategy 8
Java	Sun JDK 1.4.1_05 (32 bit)

Client System Requirements

The following table lists the supported client system options:

Table 2–2 Client System Environment

Software	Requirements
Windows XP Pro SP2	<ul style="list-style-type: none"> ■ Microsoft® Internet Explorer® 6.0

Setting Up the Database

Before you run the Oracle installer to install the application, you must set up the database to include certain necessary tablespaces, and a database user account. This chapter describes how you can set up your database, and the various database components. It contains the following sections:

- [Creating the Default Tablespaces](#)
- [Creating the Default Data User Accounts](#)

Note: If your database requires multi-byte support, specify the following properties in your `init.ora` file:

```
CHARACTER_SET=AL32UTF8
NLS_LENGTH_SEMANTICS=CHAR
```

The application requires the use of the Oracle® 10g Release 2 (10.2.0.2) Database. Ensure that you have installed the Oracle Database software. For more information, see the *Oracle Database Installation Guide, 10g Release 2 (10.2)*.

Note: Information from the Promote Calc Engine gets stored in the analytics database in a binary file format. Ensure that a proper capacity planning is done, based on your business needs, to determine the disk storage requirements to support the analytics database.

Creating the Default Tablespaces

When you run the Oracle installer, schemas and tables for the application get installed on the database you create. For the schemas and tables to install successfully, the database must include certain default tablespaces.

Use the Oracle 10g Database Configuration Assistant to create a default database with the tablespaces mentioned in [Table 3–1, Business Database Tablespaces](#). For more information on using the Oracle 10g Database Configuration Assistant, see the Oracle 10g Release 2 Installation documentation.

Table 3–1 Business Database Tablespaces

Tablespace	Description
DATA_01	Required. Application tablespace for Place. Recommended size: 5 GB.

Table 3–1 Business Database Tablespaces

Tablespace	Description
INDEX_01	Required. Application tablespace for the indexes of Place, STG, and ASH. Recommended size: 5 GB.

Creating the Default Data User Accounts

You must also create two default database user accounts (*Promote* and *RDM*) that will be used during the installation to access the application database and Retail Data Mart (RDM).

To create the user accounts:

1. At the SQL prompt, type the following statement to create the users, and set the DATA_01 as the default tablespace:

```
CREATE USER Promote IDENTIFIED BY <PASSWORD>
DEFAULT TABLESPACE DATA_01;
CREATE USER RDM IDENTIFIED BY <PASSWORD>
DEFAULT TABLESPACE DATA_01;
```

2. Once the users are created, use the Oracle 10g Database Configuration Assistant and grant the relevant access privileges to both the users. The following table lists the access privileges you must assign to the users:

Table 3–2 Access Privileges for the Users

User	Privileges
Promote	Connect
	Resource
	Create/drop table
	Create/drop/rebuild index
	Select any table
	Query rewrite
	Create materialized view
	Create/recompile/drop trigger
	Create/recomile/drop package
	Create view
	Execute any procedure
	getClassLoader Java Runtime permission*

Table 3–2 Access Privileges for the Users

User	Privileges
RDM	Connect
	Resource
	Create/drop table
	Create/drop/rebuild index
	Select any table
	Select any table at Promote User schema
	Query rewrite
	Create materialized view
	Drop any table
	Create/recompile/drop trigger
	Create/recompile/drop package
	Create view
	Execute any procedure
	Execute any procedure at Promote User schema

Note: To assign the getClassLoader Java Runtime privilege, at the SQL prompt, run the following command:

```
exec dbms_java.grant_permission(
'<USERNAME>', 'SYS:java.lang.RuntimePermission', 'getClassLoader',
'' )
```

Setting Up Your Application Server

Before installing the application, you must set up an instance on the application server. Based on your business need, you must set up the application server to include one or more server instances, and logically related resources and services.

This chapter describes how you can set up the application server. It contains the following sections:

- [Installing the Oracle Application Server](#)
- [Configuring the Oracle Application Server](#)

If you plan to use clusters for the installation, Oracle recommends that you create the clusters before setting up the instance. Otherwise, the managed servers must be added manually. For information about managing clusters, see the documentation for your application server.

Installing the Oracle Application Server

The Promotion Intelligence and Promotion Planning and Optimization applications require the use of the Oracle Application Server 10g Release 3 (10.1.3.1). Install the Oracle Application Server, referring to the Oracle Application Server documentation for guidance.

During the installation, accept the default values for the multicast IP address and port settings; these settings will be automatically updated, as needed, when you run the Promotion Intelligence and Promotion Planning and Optimization Installer. If you want your OAS instance to be part of a cluster, specify the information relevant to your cluster topology.

In this guide, the Oracle Application Server installation directory is referred to as the <OAS_HOME>.

Configuring the Oracle Application Server

Before you start the application server instance, you must set up the configuration properties XML files to include JVM properties and enable global JNDI look ups.

To configure the Oracle Application Server:

1. Navigate to the following location in the Oracle Application Server installation folder:

```
<OAS_HOME>/opmn/conf/config/
```

2. Edit the **opmn.xml**, and modify the value property of the **category id** tag (in the **ias-component id** section) to include JVM arguments that specify the configuration root and the JVM switches to increase JVM-accessible memory.

For example:

```
<category id="start-parameters">
  <data id="java-options" value="-Xrs -server
    -Djava.security.policy=$ORACLE_HOME/j2ee/home/config/java2.policy
    -Dcom.profitlogic.configroot= <path-to-config-root>
    -Djava.awt.headless=true -Xmx512m -Xms256m -XX:MaxPermSize=256m
    -Dhttp.webdir.enable=false
    -Xrunjdpw:transport=dt_socket,server=y,suspend=n,address=5005"/>
</category>
```

3. Navigate to the following location in the Oracle Application Server installation folder:

```
<OAS_HOME>/j2ee/home/config/
```

4. Edit the **server.xml** file, and in the **application-server** section, add a new attribute **global-jndi-lookup-enabled** attribute, and set it to **true**.

For example:

```
<application-server xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:noNamespaceSchemaLocation="http://xmlns.oracle.com/oracleas/schema/application-server-10_1.xsd" localhostIsAdmin="true"
  application-directory="./applications"
  check-for-updates="adminClientOnly"
  deployment-directory="./application-deployments"
  connector-directory="./connectors"
  global-jndi-lookup-enabled="true"
  schema-major-version="10" schema-minor-version="0" >
```

Installing Promote

After you have set up your database and application server, you can install the applications using the guidelines provided in this chapter. This chapter contains the following sections:

- [Overview of the Installation Process](#)
- [Setting Up Install.properties File](#)
- [Installing the Promotion Intelligence Application](#)
- [Installing the Promotion Planning and Optimization Application](#)
- [About install.sh](#)
- [Post-Installation Tasks](#)

Overview of the Installation Process

Note: Although the options for BEA WebLogic Server, IBM DB2, and IBM WebSphere display on the Oracle Installer, they are not supported in this release.

In order to install Promotion Planning and Optimization, your first task is to obtain the installation media. You can then choose the installation mode you prefer. Whichever mode you use, you first need to set up the Promotion Planning and Optimization properties file. The installation modes are as follows:

- **Graphical mode** – In the graphical mode, the Oracle Installer displays a graphical user interface and prompts you to enter or modify the value of the properties specified in the properties file.
- **Silent mode** – In the silent mode, the installer processes the properties file without any manual intervention.

Setting Up Install.properties File

In order to install the Promotion Intelligence and Promotion Planning and Optimization applications, you first need to specify the properties to use during the installation process. The `install.properties` file, available for each installation, helps you specify the necessary properties for the installation.

To set up your `install.properties` file:

1. From the installation media, copy the **sample.install.properties** file to your system, and rename the file to **install.properties**.
2. Edit the `install.properties` file, specifying values as described within the file, and save it. For more information on the properties included in the `install.properties` file, see [Install.properties Parameters Reference](#).

Install.properties Parameters Reference

The following table describes the parameters in the `install.properties` file that you must set up before you install the Promotion Intelligence and Promotion Planning and Optimization applications:

Table 5–1 *Install.properties Parameters Reference*

Parameter	Description
<code>installdir</code>	Use this parameter to specify the path to the default base installation folder (includes modules, configuration root, and logs).
Promote Analytic Engine Parameters	
<code>KDE_NUM_CPUS</code>	Use this parameter to specify the number of CPUs that host the analytics engine.
<code>KDE_RMI_SERVER_PORT</code>	Use this parameter to specify the port to access the RMI server.
<code>KDE_RMI_SERVER_ADDRESS</code>	Use this parameter to specify the URL where the RMI server is installed.
<code>KDE_HOME</code>	Use this parameter to specify the default base folder for the analytics engine.
<code>KDE_TMP_DIR_PATH</code>	Use this parameter to specify the default temporary folder for the analytics engine.
Application Server Details	
<code>app.server</code>	The application server used for the application. The current release supports Oracle Application Server 10g Release 3 (10.1.3.1).
<code>install.appserver.default</code>	The default application server for the application.
<code>oracle.home</code>	The default base folder for the Oracle application server.
<code>oracle.server.address</code>	The base URL for the Oracle application server instance.
<code>oracle.admin.port</code>	Use this parameter to specify the port to connect to the
<code>oracle.admin.userid</code>	Use this parameter to specify the administrative user name for the application server.
<code>oracle.admin.password</code>	Use this parameter to specify the password associated with the administrative user.
<code>oracle.instance.name</code>	Use this parameter to specify the name of the application server instance.
<code>oracle.opmn.enabled</code>	Use this parameter to specify whether you want to use the OPMN server service. Set the value to 'Yes' for Oracle Application Server, and 'No' for OC4J instance.
<code>oracle.multicast.default</code>	Use this parameter to specify the multicast port number, when the application is installed over a clustered environment.
<code>oracle.group.name</code>	Use this parameter to specify the group name, that is 'default_group' in a standard OAS installation.

Table 5–1 Install.properties Parameters Reference

Parameter	Description
host list	Use this parameter to specify the list of nodes in the cluster.
suite.host	Use this parameter to specify the URL where the application server is installed. This value is used for the suite.properties file.
suite.port	Use this parameter to specify the port to connect to the application server. This value is used for the suite.properties file.
http.protocol	Use this parameter to specify the HTTP protocol that must be used to connect to the server.
Adobe Flex License	
flex.license	Use this parameter to specify the Adobe Flex license number. If you want to install the sample dataset, you must specify the license number before running the deploy.sh script.
Parameters for the Log and Spool Files	
basedest.basedest.dir	Use this parameter to specify the path to the default base installation folder.
basedest.baselog.dir	Use this parameter to specify the path to the folder where the installation log files get stored.
basedest.basespool.dir	Use this parameter to specify the path to the folder where the installation spool files get stored.
install.command.shell	Use this parameter to specify the command shell to be used for the installation.
install.properties.savefile	Use this parameter to specify the path to the folder where you want to store the properties file (last-session.properties) that contains the parameter values used in the last installation session.
missing.properties.savefile	Use this parameter to specify the path to the folder where you want to store the properties file (missing-entries.properties) that contains the parameter values the Oracle installer tried to use during installation.
install.database	Use this parameter to specify the database you want to use for the application.
Oracle Database Configuration	
database.commondb.oracle.create	Use this parameter to specify that a new database schema must be created. Valid values are Yes or No.
database.commondb.oracle.upgrade	Use this parameter to specify that the existing database schema be upgraded. Valid values are Yes or No.
database.commondb.oracle.address	Use this parameter to specify the URL where the Oracle database is installed.
database.commondb.oracle.dbalias	Use this parameter to specify the database alias name.
database.commondb.oracle.dbname	Use this parameter to specify the database name.
database.commondb.oracle.dbport	Use this parameter to specify the port to connect to the database.
database.commondb.oracle.auth. commonoracleauth.user	Use this parameter to specify the user name to connect to the database.

Table 5–1 Install.properties Parameters Reference

Parameter	Description
database.commondb.oracle.auth.commonoracleauth.password	Use this parameter to specify the password to connect to the database.
database.auditdb.oracle.address	Use this parameter to specify the URL where the Audit database is installed.
database.auditdb.oracle.dbalias	Use this parameter to specify the Audit database alias name.
database.auditdb.oracle.dbname	Use this parameter to specify the name of the Audit database.
database.auditdb.oracle.dbport	Use this parameter to specify the port to connect to the Audit database.
database.auditdb.oracle.auth.auditoracleauth.user	Use this parameter to specify the user name to connect to the Audit database.
database.auditdb.oracle.auth.auditoracleauth.password	Use this parameter to specify the password to connect to the Audit database.
database.auditdb.oracle.create	Use this parameter to indicate that a new Audit database must be created.
database.auditdb.oracle.upgrade	Use this parameter to specify that the existing database be upgraded to include the Audit schema.
common.feschema	Use this parameter to specify the database schema name for the application front end schema.
common.dblink	Use this parameter to specify the database link to access the common schema through the audit schema. If the schema exists in the same instance, specify <i>none</i> .
database.rdmdb.oracle.create	Use this parameter to indicate that a new Retail Data Mart (RDM) database must be created.
database.rdmdb.oracle.upgrade	Use this parameter to specify that the existing database be upgraded to include the RDM schema.
database.rdmdb.oracle.dbname	Use this parameter to specify the name of the RDM database.
database.rdmdb.oracle.dbalias	Use this parameter to specify the RDM database alias name.
database.rdmdb.oracle.address	Use this parameter to specify the URL where the RDM database is installed.
database.rdmdb.oracle.dbport	Use this parameter to specify the port to connect to the RDM database.
database.rdmdb.oracle.auth.rdmoracleauth.user	Use this parameter to specify the user name to connect to the RDM database.
database.rdmdb.oracle.auth.rdmoracleauth.password	Use this parameter to specify the password to connect to the RDM database.
rdm.feschema	Use this parameter to specify the RDM database schema name associated with the application front end schema.
database.elmdb.oracle.create	Use this parameter to indicate that a new ELM database be created. Valid values are Yes or No.
database.elmdb.oracle.dbname	Use this parameter to specify the ELM database name.
database.elmdb.oracle.dbalias	Use this parameter to specify the ELM database alias name.
database.elmdb.oracle.address	Use this parameter to specify the URL where the ELM database is installed.

Table 5–1 Install.properties Parameters Reference

Parameter	Description
database.elmdb.oracle.dbport	Use this parameter to specify the port to connect to the ELM database.
database.elmdb.oracle.auth.elmoracleauth.user	Use this parameter to specify the user name to connect to the ELM database.
database.elmdb.oracle.auth.elmoracleauth.password	Use this parameter to specify the password to connect to the ELM database.
database.elmdb.oracle.elm_main_dblink	Use this parameter to specify the database link name for the ELM schema to access the main database. If they exist in the same instance, specify <i>none</i> .
database.CommonDB.oracle.main_elm_dblink	Use this parameter to specify the database link to access the ELM schema through the common schema. If the schema exists in the same instance, specify <i>none</i> .

Installing the Promotion Intelligence Application

To install the Promotion Intelligence application:

1. Insert the Promotion Intelligence Installation CD, and navigate to the installation root folder.
2. Set up the `install.properties` file. For more information, see [Setting Up Install.properties File](#).
3. From the installation root folder, run the installer in the mode you want.

To run the installer in Silent mode, enter the following command:

```
bash install.sh -p <path-to-install.properties> -s
```

To run the installer in GUI mode, enter the following command:

```
bash install.sh -p <path-to-install.properties>
```

For more information on the `install.sh` script, see [About install.sh](#)

Installing the Promotion Planning and Optimization Application

To install the Promotion Planning and Optimization application:

1. Insert the Promotion Planning and Optimization Installation CD, and navigate to the installation root folder.
2. Set up the `install.properties` file. For more information, see [Setting Up Install.properties File](#).
3. From the installation root folder, run the installer in the mode you want.

To run the installer in Silent mode, enter the following command:

```
bash install.sh -p <path-to-install.properties> -s
```

To run the installer in GUI mode, enter the following command:

```
bash install.sh -p <path-to-install.properties>
```

For more information on the `install.sh` script, see [About install.sh](#)

About install.sh

The install.sh script enables you to launch the Oracle installer, and install the application.

Syntax

```
install.sh [-s] [-p <path-to-install.properties-file>]
```

Arguments

The following table describes the arguments you can use along with the install.sh:

Argument	Description
-s	Optional. Silent mode. If you omit this option, the Oracle Installer user interface displays.
-p <path-to- install.properties>	Optional. Specifies an alternate path to the install.properties file. Defaults to ./install.properties.
-l, --log-config	Optional. Specifies an alternate log4j configuration file (to change the verbosity level or the log file output location). Defaults to ./Install/conf/log4j.properties. The log4j log file is used for troubleshooting.
-y -n	Optional. Specifies whether or not to overwrite existing files. Defaults to -y (overwrite).
-d <XML path>	Optional. Specifies an alternate path to the XML install scripts. Defaults to ./InstallScripts.
-x <filename.xml>	Optional. Specifies an alternate XML install script file within the ./InstallScripts directory.
-i, --websphere -b, --weblogic	Optional. For specifying your application server.
-h	Optional. Prints a help message.

Post-Installation Tasks

This section includes the following tasks you can perform after the installation:

- [Installing the Adobe Flex License](#)
- [Restart the Application Server](#)
- [Installing the Sample Dataset](#)
- [Start the RMI Engine](#)
- [Verify the Promote URL](#)

Installing the Adobe Flex License

Adobe® Flex™ is an Independent Development Environment (IDE), based on Adobe® Flash framework, that enables you to create scalable and rich Internet applications (RIAs) within your enterprise or the Web.

To install the Adobe Flex license:

1. Navigate to the following location in the application installation folder:


```
<Promote_Installation>/modules/tools/
```
2. Run the following script, with the appropriate syntax:

```
bash license-flex.sh <OAS_HOME>/j2ee/home <Flex License Number>
```

Note: You can also install the Adobe Flex license, as part of the application installation.

Restart the Application Server

Once you install the Adobe Flex license, you must restart the application server.

To restart the application server:

- At the command prompt, run the following command:

```
opmnctl stopall
```

followed by,

```
opmnctl startall
```

Installing the Sample Dataset

The Promotion Intelligence and Promotion Planning and Optimization installation comes along with a sample dataset that can be used during implementation and demonstrations. This dataset contains generic data and is designed to work along with the default product configuration. The data files, along with the necessary data load scripts, are included as part of the installation media.

When you run the Oracle Installer, the sample dataset does not get installed by default. You must manually access and run the data load script to load the sample data.

You can find the sample dataset and the data load scripts at the following location in your Promotion Intelligence and Promotion Planning and Optimization installation directory:

```
<Promote_Installation>/modules/pce/sample/
```

To load the sample data:

1. Navigate to the following location in the Promotion Intelligence and Promotion Planning and Optimization installation directory:

```
<Promote_Installation>/modules/pce/sample/
```

2. Run the following script, with a relevant syntax:

```
bash deploy.sh
```

You can use one of the following syntax:

- `bash deploy.sh all` – For the Promotion Planning and Optimization application. Use this syntax to load the data, templates, users, computed statistics, and so on.
- `bash deploy.sh pce_all` – For the Promotion Intelligence application. Use this syntax to load the data, computed statistics, and so on (does not include users, templates, and images).

About Deploy.sh Script

The `deploy.sh` script enables you to load sample data, and has the following features:

- It works without any dependencies on the environment variables and the PATH

- It can load promotion templates, users, roles, Adobe Flex serial number, and so on.

Start the RMI Engine

Once you load the sample data, you can run start the Java Remote Method Invocation (RMI) engine.

To start the RMI engine:

1. Navigate to the following path in the installation folder:

```
<Promote_Install>/modules/pce/bin
```

2. Run the following script:

```
bash rmiServer.sh
```

Note: You can incorporate this script into your system startup procedure. The script assumes that the Java interpreter is set in the PATH variable.

Verify the Promote URL

In a Web browser, type the following link to verify the Promote application installation:

```
http://host:port/promote/
```

Integrating with MicroStrategy

If you are using MicroStrategy, you must configure it to map to the RDM database and the Merchant Desktop user interface. This chapter explains how to configure mapping between the two applications. This chapter contains the following sections:

- [Getting Started](#)
- [Using the MicroStrategy Configuration Wizard](#)
- [Migrating the Metadata](#)
- [Migrating to the MicroStrategy 8 Platform](#)
- [Configuring MicroStrategy to Access the RDM Database](#)
- [Mapping RDM and MicroStrategy Summarization Levels](#)
- [Mapping the Display of Hierarchy Levels](#)
- [Configuring the User Link](#)

Getting Started

Tip: Before you begin, ensure that users *have not* been added to the RDM user management tables—it will save you time later.

This section explains what you need to install in order to get started integrating Promotion Intelligence and Promotion Planning and Optimization with MicroStrategy.

- [Installing Your MicroStrategy Applications](#)
- [Creating Your Merchant Desktop Data Source](#)

Installing Your MicroStrategy Applications

Install the following components, using MicroStrategy documentation for assistance as needed:

- MicroStrategy Intelligence Server
- MicroStrategy OLAP Services
- MicroStrategy Desktop

Next, create the Merchant Desktop Data Source.

Creating Your Merchant Desktop Data Source

Before you start setting up the MicroStrategy components, you must set up the data source for the *Access Metadata* project source.

To set up the data source:

1. Navigate to the following location in the installation CD, and copy the relevant metadata ZIP file to a temporary location on your system.:
`<install-dir>/modules/pce/reporting/PromoteReportsMetaData.zip`
2. Extract the **MDMetadata.mdb**, included in this ZIP file, on your system.
3. On the **Start** menu, navigate to **Settings**, and then click **Control Panel**.
4. On the **Control Panel**, double-click **Administrative Tools**, and then double-click **Data Sources (ODBC)**.

The **ODBC Data Source Administrator** utility appears.

5. On the **System DSN** tab, click **Add**.
6. Select **Microsoft Access Driver (*.mdb)** and click **Finish**.

The **ODBC Microsoft Access Setup** window appears.

7. In the **Database** section, click **Select**, and navigate to your ODBC datasource (for example, `C:\temp\MDMetadata.mdb`), and then click **OK**.

The data source is now available.

Now you can use the MicroStrategy Configuration Wizard to begin setting up MicroStrategy.

Using the MicroStrategy Configuration Wizard

Use the MicroStrategy Configuration Wizard as described in the following sections:

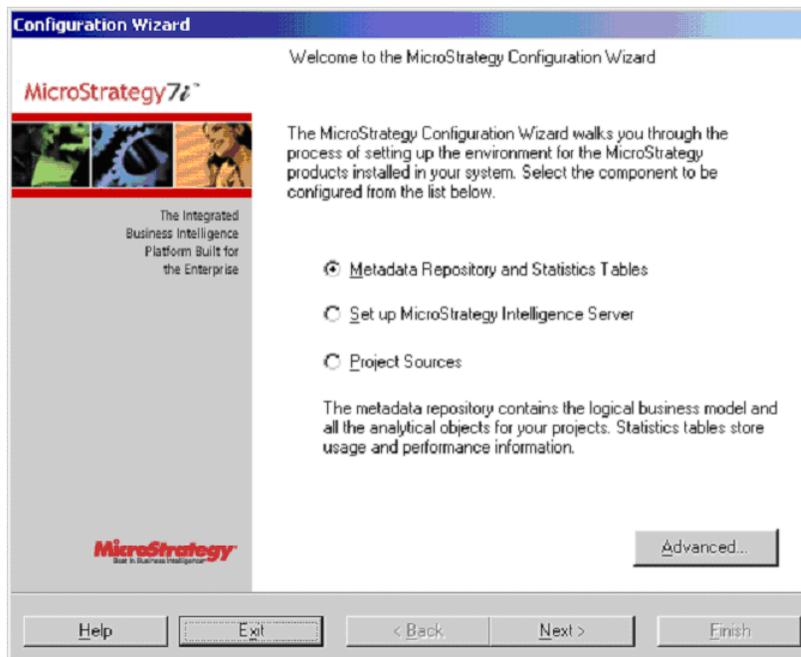
- [Creating the Metadata Repository and Statistics Tables](#)
- [Configuring MicroStrategy Intelligence Server](#)
- [Configuring Project Sources](#)

Creating the Metadata Repository and Statistics Tables

To create the metadata repository and statistics tables:

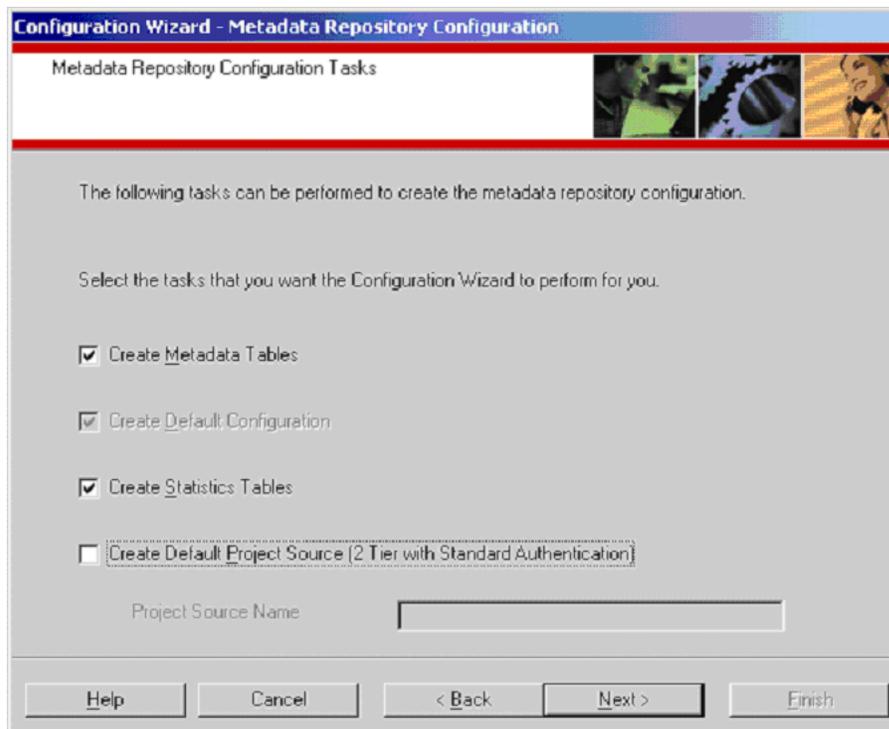
1. Launch the MicroStrategy Configuration Wizard.
The **Welcome** screen displays.

Figure 6–1 Welcome Screen



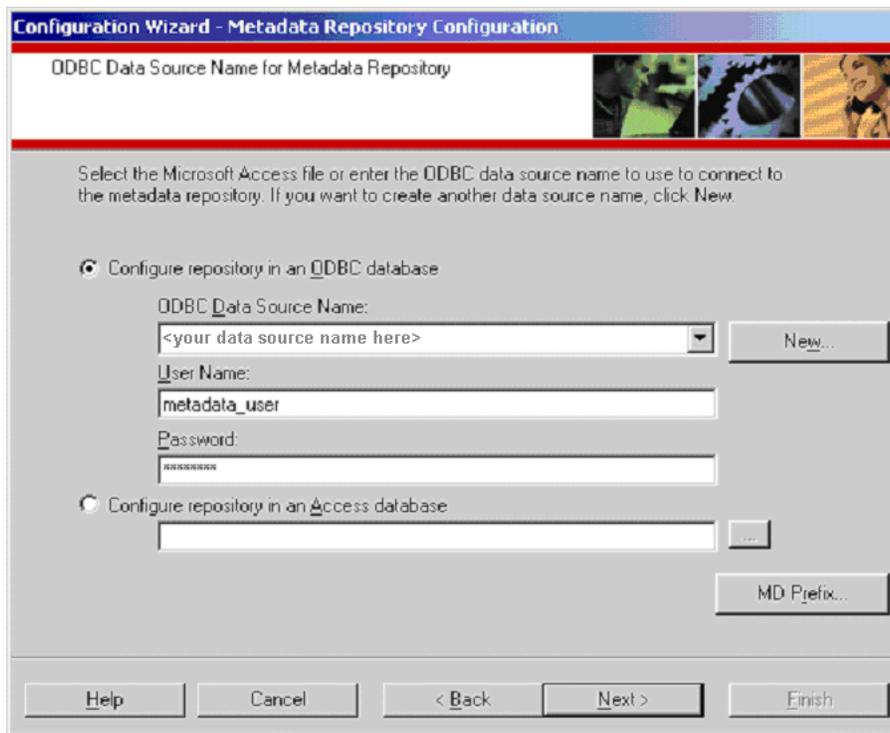
2. Select **Metadata Repository and Statistics Tables** and click **Next**.
The **Configuration Tasks** screen displays.

Figure 6–2 Configuration Tasks Screen



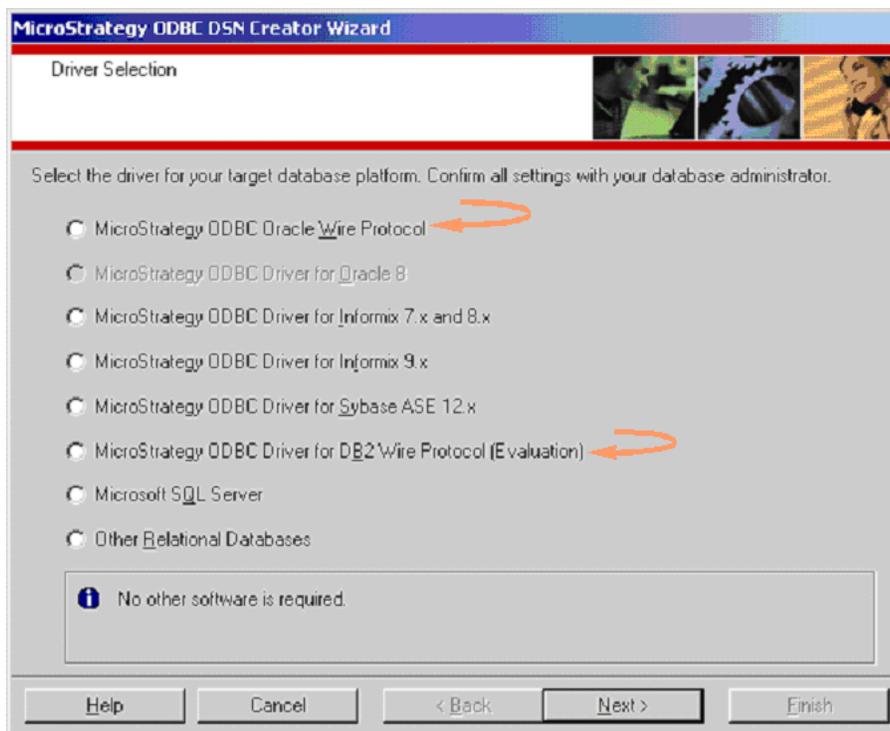
3. Select **Create Metadata Tables** and **Create Statistics Tables**, and click **Next**.
The **ODBC Data Source Name** screen displays.

Figure 6–3 ODBC Data Source Name Screen



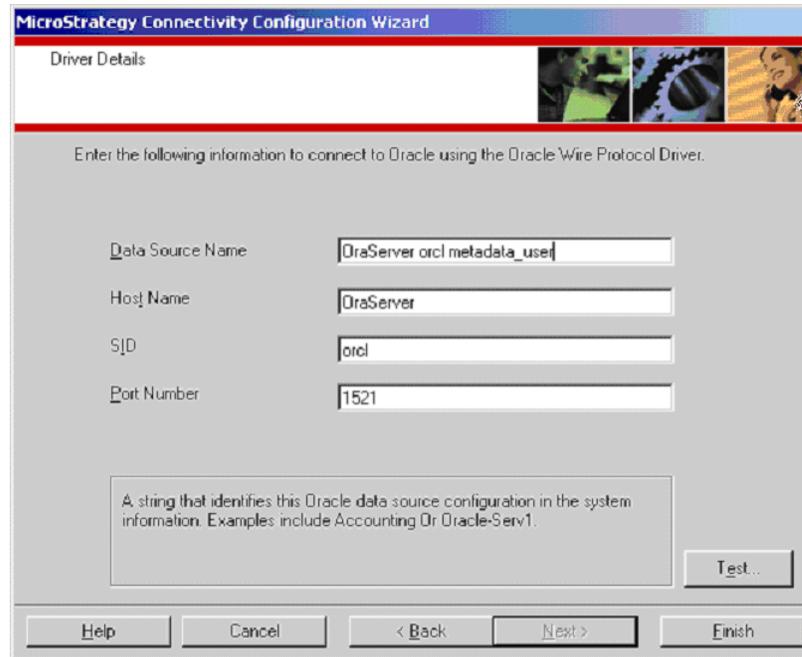
4. Select **Configure repository in an ODBC database**. Enter the **ODBC Data Source Name**, the **User Name** as metadata_user, the **Password**, and click **Next**.
The **Driver Selection** screen displays.

Figure 6–4 Driver Selection Screen



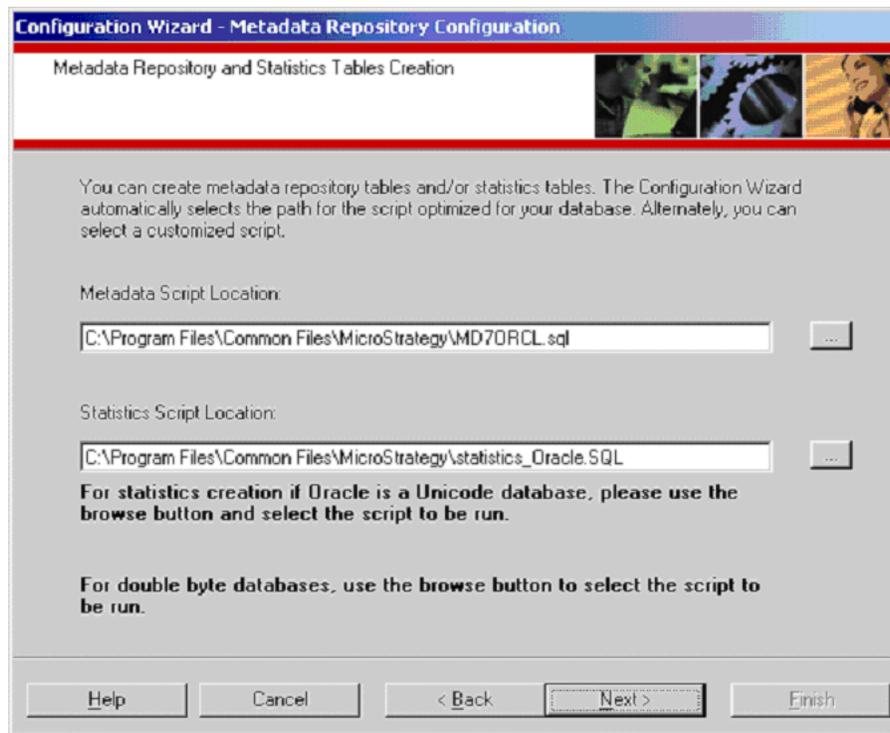
5. Select the **MicroStrategy ODBC Oracle Wire Protocol** driver and click **Next**.
The **Driver Details** screen displays.

Figure 6–5 Oracle Driver Details Screen



The screenshot shows the 'Driver Details' screen of the 'MicroStrategy Connectivity Configuration Wizard'. The title bar reads 'MicroStrategy Connectivity Configuration Wizard'. Below the title bar, the text 'Driver Details' is displayed. To the right of this text are three small icons: a green landscape, a gear, and a person. Below the icons, the instruction reads: 'Enter the following information to connect to Oracle using the Oracle Wire Protocol Driver.' There are four input fields: 'Data Source Name' with the value 'OraServer orcl metadata_user', 'Host Name' with 'OraServer', 'SID' with 'orcl', and 'Port Number' with '1521'. Below these fields is a text box containing the text: 'A string that identifies this Oracle data source configuration in the system information. Examples include Accounting Or Oracle-Serv1.' To the right of this text box is a 'Test...' button. At the bottom of the window are five buttons: 'Help', 'Cancel', '< Back', 'Next >', and 'Finish'.

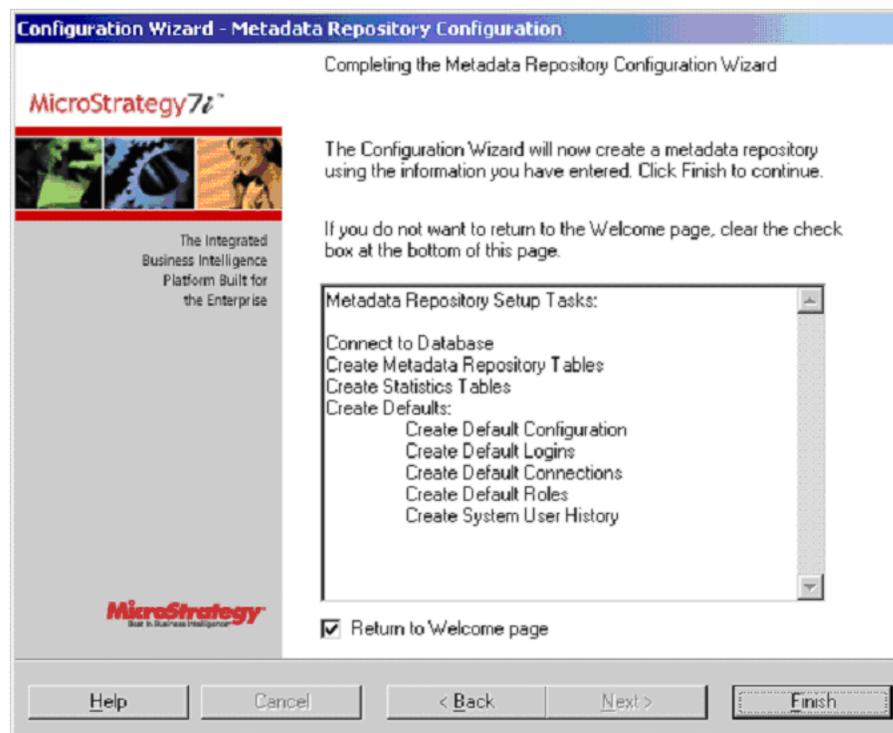
6. Enter your **Data Source Name** as `OraServer orcl metadata_user`, **Host Name** as `OraServer`, **SID** as `orcl`, **Port Number** as `1521`, and click **Next**.
7. The **Metadata Repository and Statistics Tables Creation** screen displays.

Figure 6–6 Metadata Repository and Statistics Tables Creation Screen

8. Browse to your **Metadata Script Location** and select it, browse to your **Statistics Script Location** and select it, and click **Next**.

Note: For UTF-8 encoded data, select the **Metadata Script Location** /MicroStrategy/md7orcutf8.sql.

The **Completing the Metadata Repository Configuration Wizard** screen displays.

Figure 6–7 Completing the Metadata Repository Configuration Wizard Screen

9. Verify that the setup tasks are correct, select **Return to Welcome page**, and click **Finish**.

The **Welcome** screen displays.

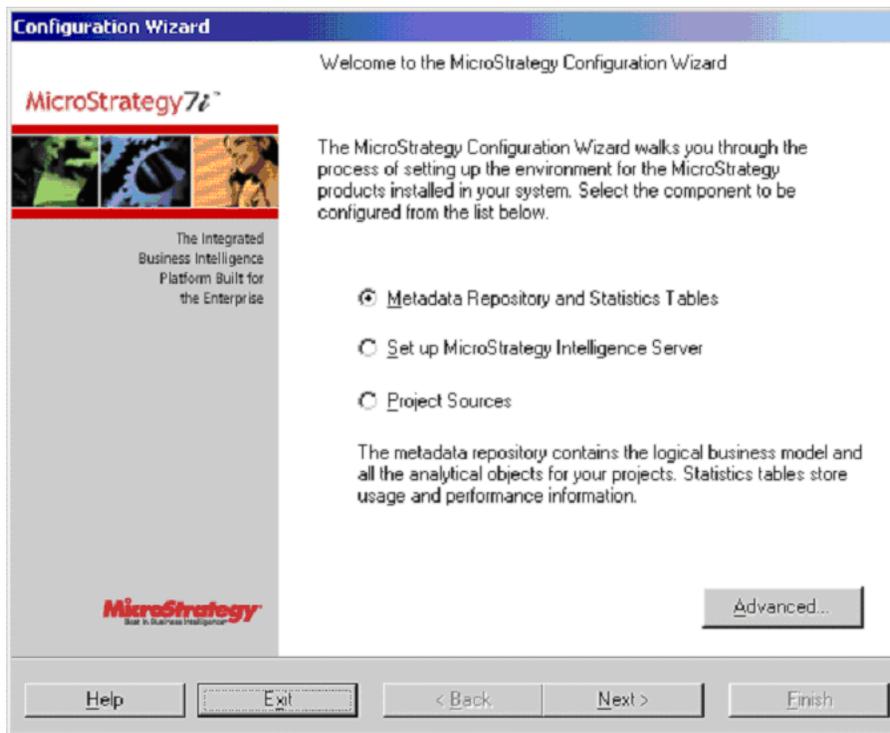
Now you can configure the MicroStrategy Intelligence Server.

Configuring MicroStrategy Intelligence Server

This section describes how to configure your MicroStrategy Intelligence Server.

1. Start from the MicroStrategy Configuration Wizard **Welcome** screen.

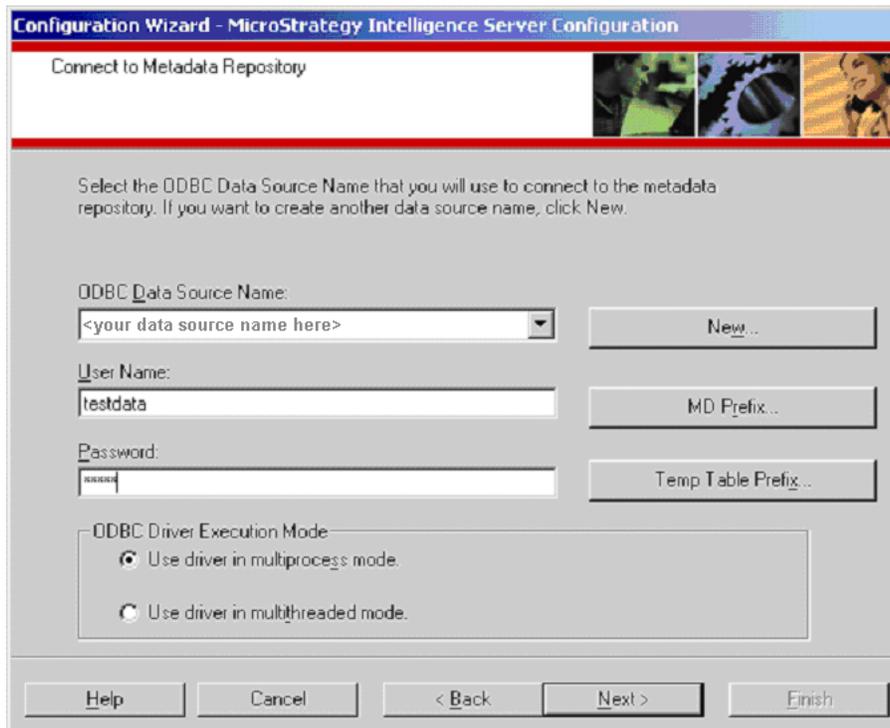
Figure 6–8 Welcome Screen



2. Select **Set up MicroStrategy Intelligence Server** and click **Next**.

The **Connect to Metadata Repository** screen displays.

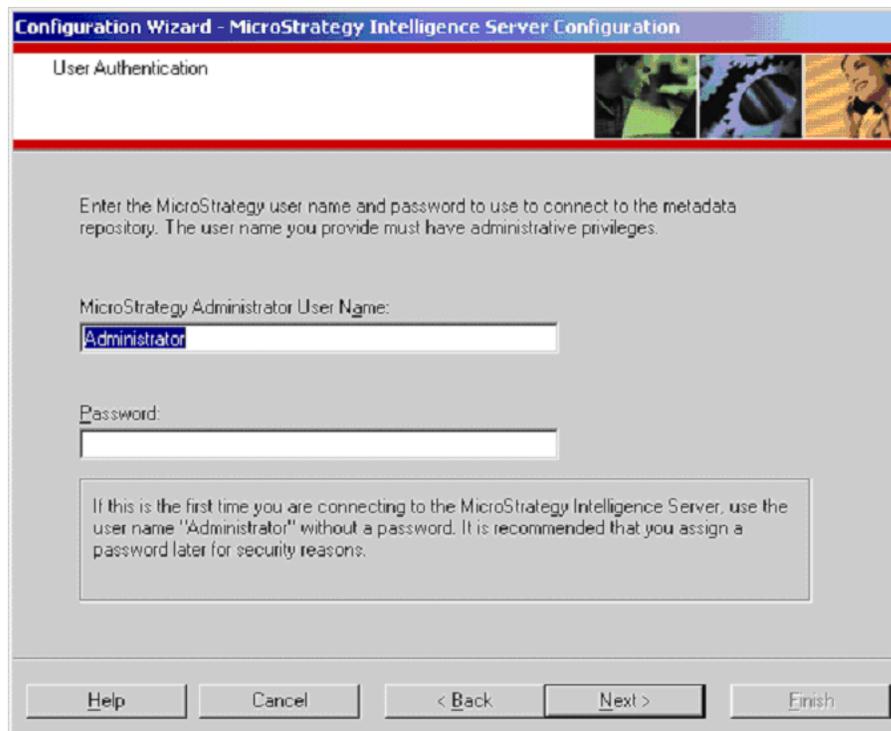
Figure 6–9 Connect to Metadata Repository Screen



3. Enter the **ODBC Data Source Name**, **User Name**, and **Password**; select **Use driver in multiprocess mode**; and click **Next**.

The **User Authentication** screen displays.

Figure 6–10 User Authentication Screen



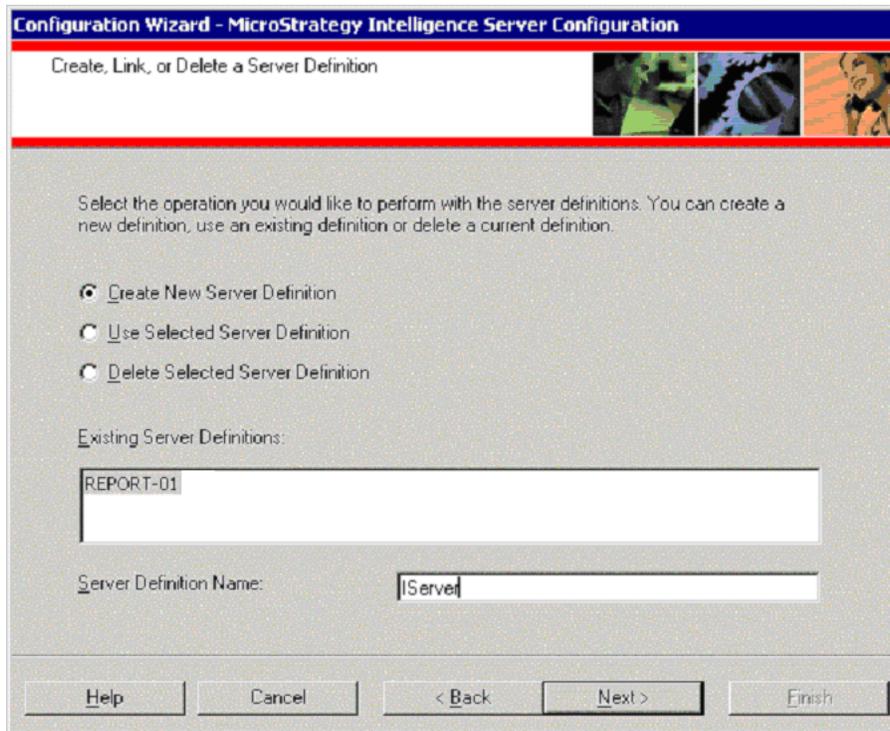
The screenshot shows the 'User Authentication' screen of the 'Configuration Wizard - MicroStrategy Intelligence Server Configuration'. The title bar includes the wizard name and a 'User Authentication' label. Below the title bar, there are three small images: a person, a gear, and a person's face. The main area contains the following text: 'Enter the MicroStrategy user name and password to use to connect to the metadata repository. The user name you provide must have administrative privileges.' Below this text are two input fields: 'MicroStrategy Administrator User Name:' with the value 'Administrator' entered, and 'Password:' which is empty. A text box below the fields contains the instruction: 'If this is the first time you are connecting to the MicroStrategy Intelligence Server, use the user name "Administrator" without a password. It is recommended that you assign a password later for security reasons.' At the bottom, there are five buttons: 'Help', 'Cancel', '< Back', 'Next >', and 'Finish'.

4. Enter the **MicroStrategy Administrator User Name** and **Password** to use to connect to the metadata repository, and click **Next**.

The **Create, Link, or Delete a Server Definition** screen displays.

Note: The Administrator user name and password combination will also be required later, in the usermanagement.properties file, as described in [Configuring the User Link](#) on page 6-31.

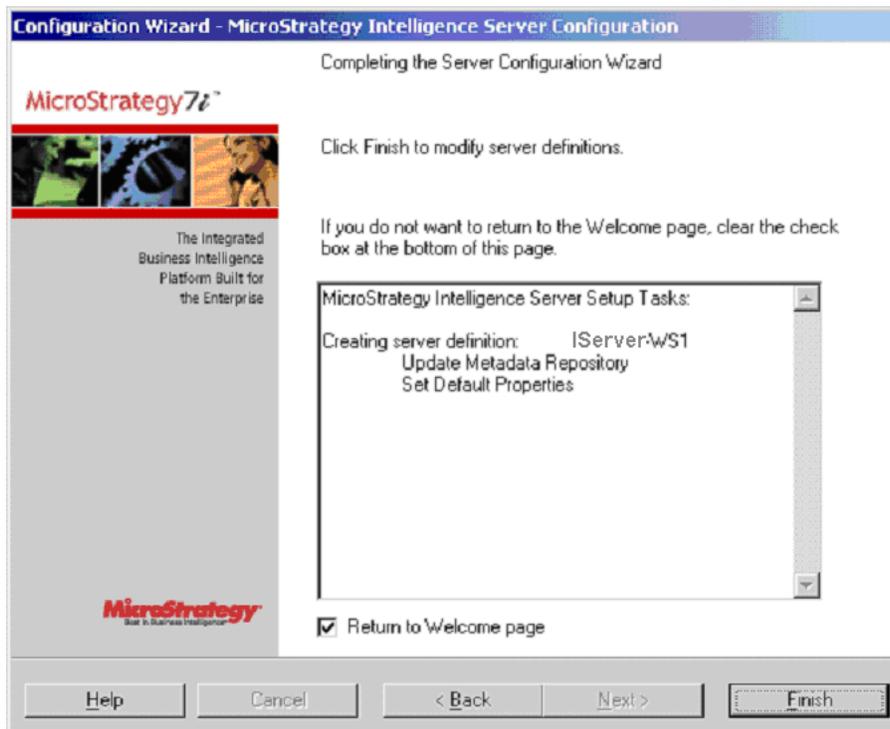
Figure 6–11 Create, Link, or Delete a Server Definition Screen



5. Select **Create New Server Definition**, select your **Existing Server Definitions**, enter **Server Definition Name** as **IServer**, and click **Next**.

The **Completing the Server Configuration Wizard** screen displays.

Figure 6–12 Completing the Server Configuration Wizard Screen



6. Verify that the setup tasks are correct, select **Return to Welcome page**, and click **Finish**.

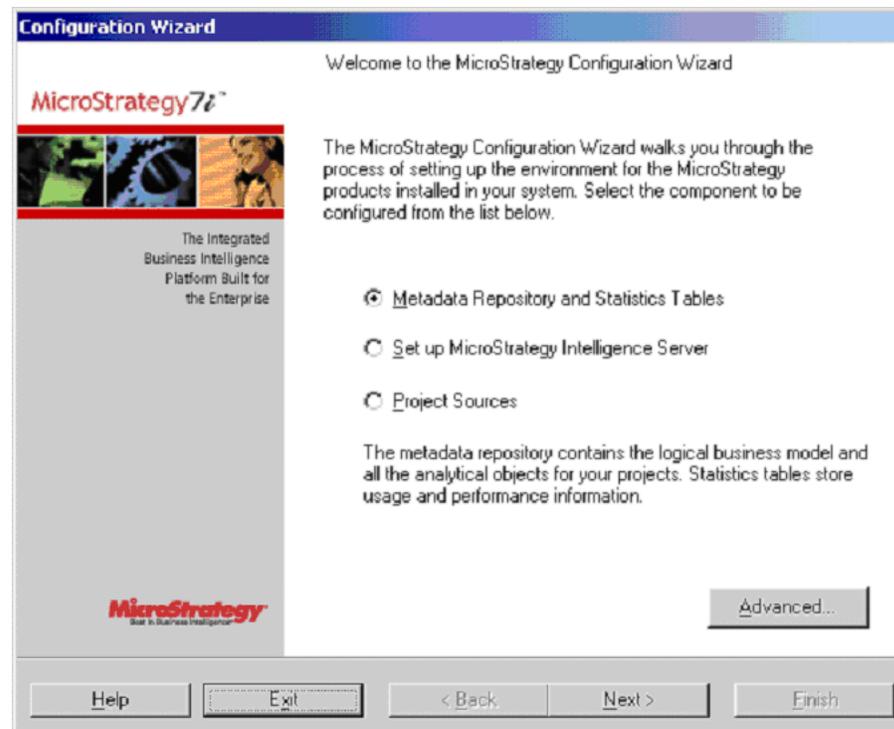
The **Welcome** screen displays.

Now you can configure the Project Sources.

Configuring Project Sources

Start from the MicroStrategy Configuration Wizard **Welcome** screen.

Figure 6–13 Welcome Screen



Select **Project Sources**, click **Next**, and complete the **Project Sources** wizard.

After you finish, migrate your metadata.

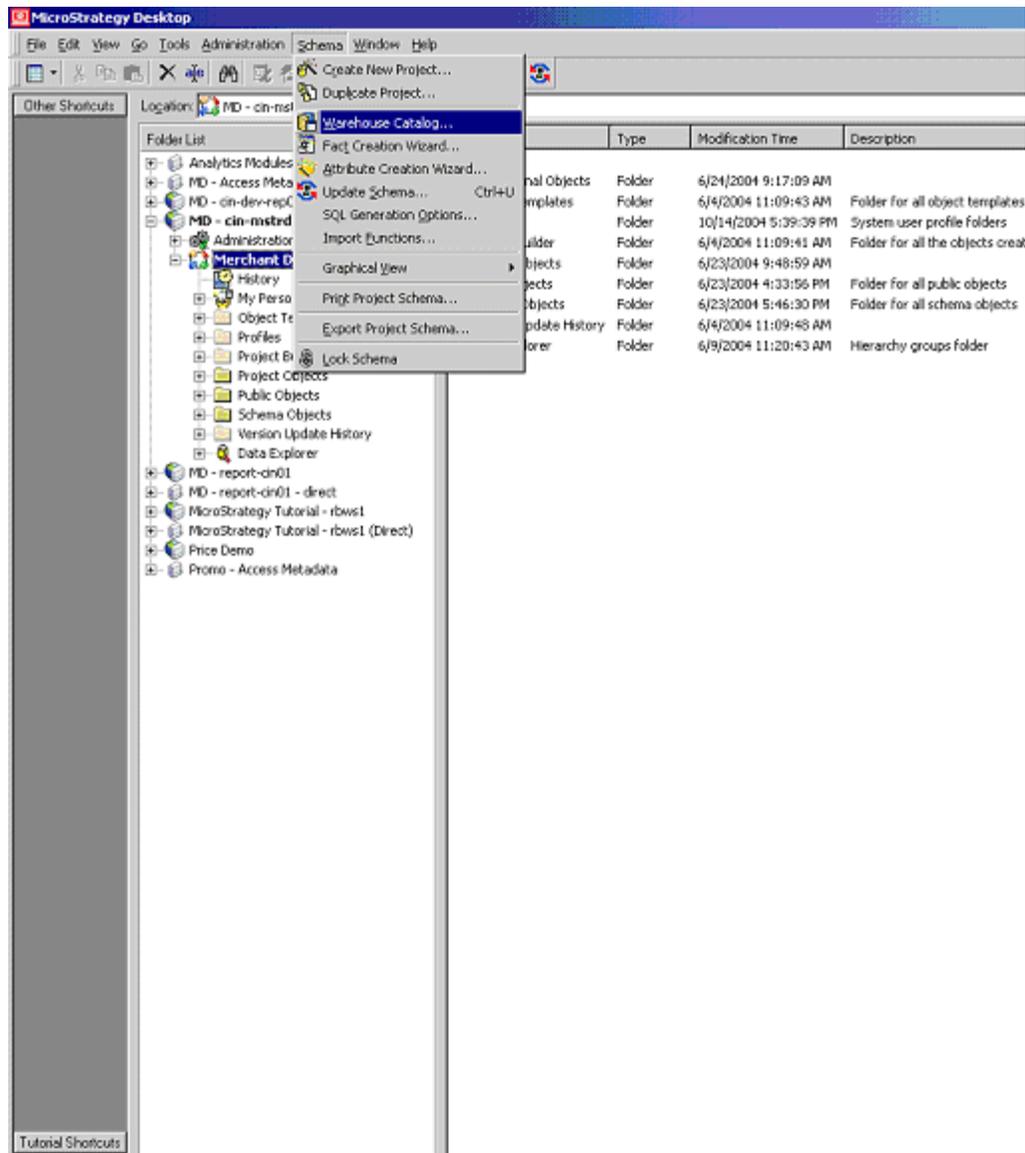
Migrating the Metadata

Use MicroStrategy Desktop to create a project source that points to the correct Intelligence Server as follows:

To create a project source:

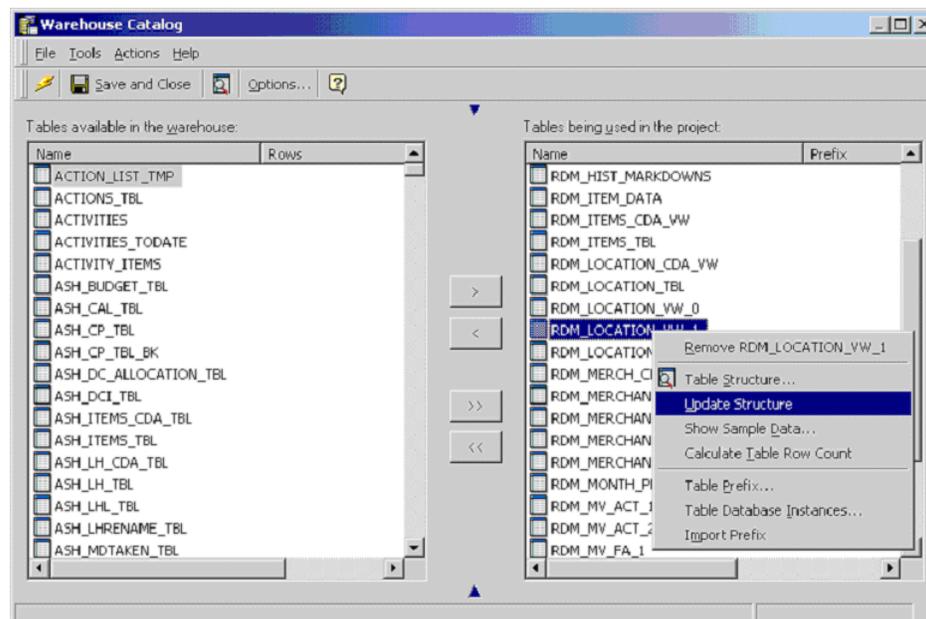
1. Start from the MicroStrategy Desktop user interface and update warehouse catalog schema as follows.

Figure 6–14 Updating Warehouse Catalog Schema



From the **MicroStrategy Desktop** menu, select **Schema > Warehouse Catalog**.
The **Warehouse Catalog** screen displays.

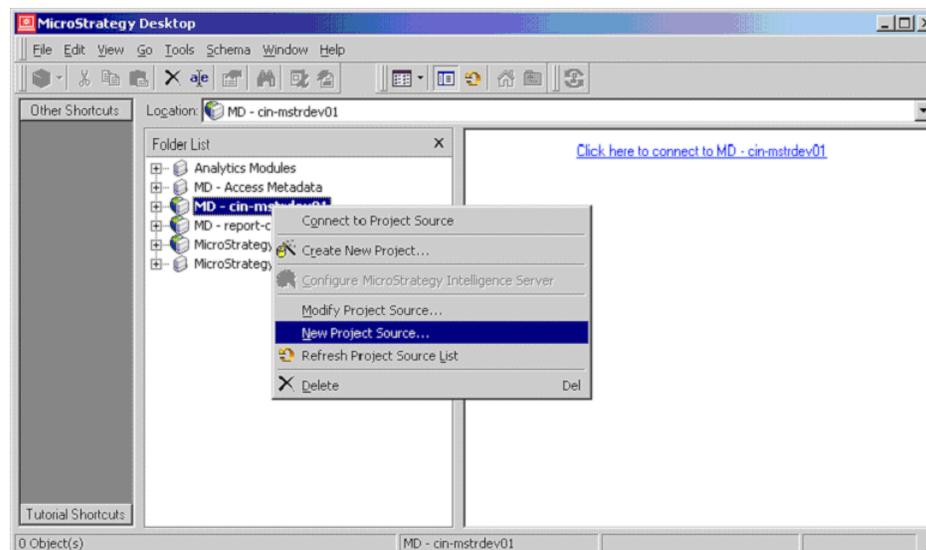
Figure 6–15 Warehouse Catalog Screen



In the **Tables being used in the project** box, right-click each table, and select **Update Structure**.

2. Use the MicroStrategy Desktop to create a project source.

Figure 6–16 Creating a Project Source for the Intelligence Server



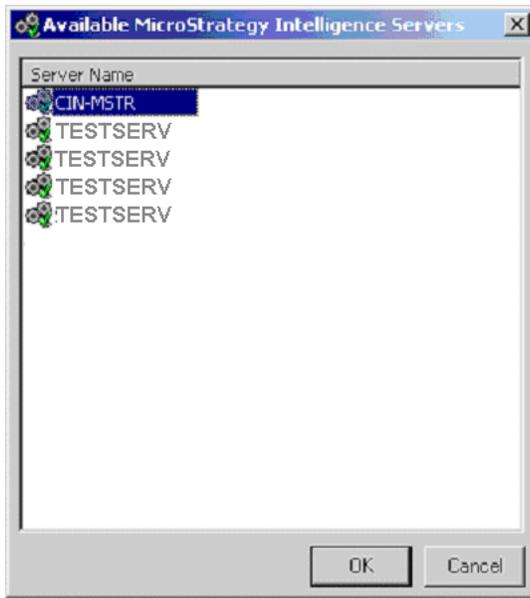
From the **Folder List** pane, right-click **MD - cin** and select **New Project Source**.

The **Project Source Manager** screen displays.

Enter a name for the **Project Source** and click **Active Servers**.

The **Available MicroStrategy Intelligence Servers** screen displays.

Figure 6–17 Available MicroStrategy Intelligence Servers



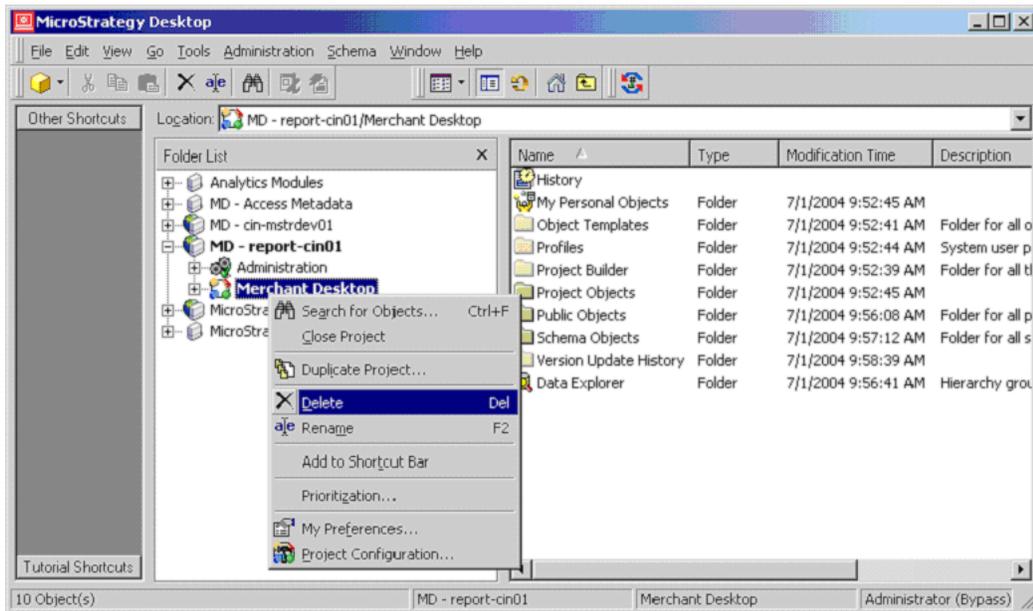
Select your Intelligence Server and click **OK**.

In the **Create Project Source** box, click **OK**.

The **MicroStrategy Desktop** screen displays.

3. If any old Merchant Desktop projects exist, delete them as follows:

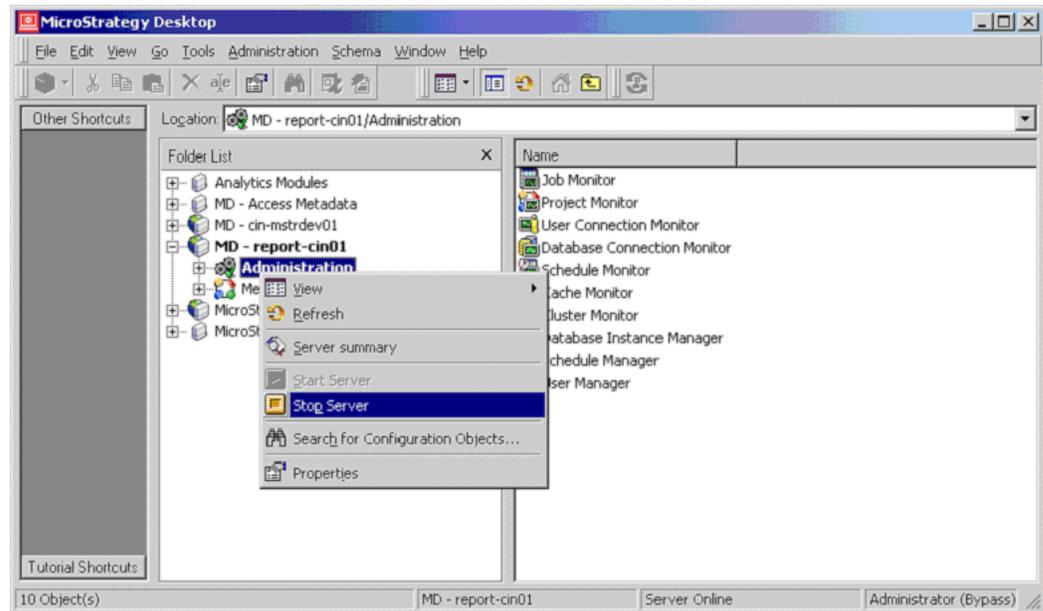
Figure 6–18 Deleting Old Merchant Desktop Projects



From the **Folder List**, right-click **Merchant Desktop** and click **Delete**.

4. Stop and restart the Intelligence Server as follows:

Figure 6–19 Stopping and Restarting the Intelligence Server

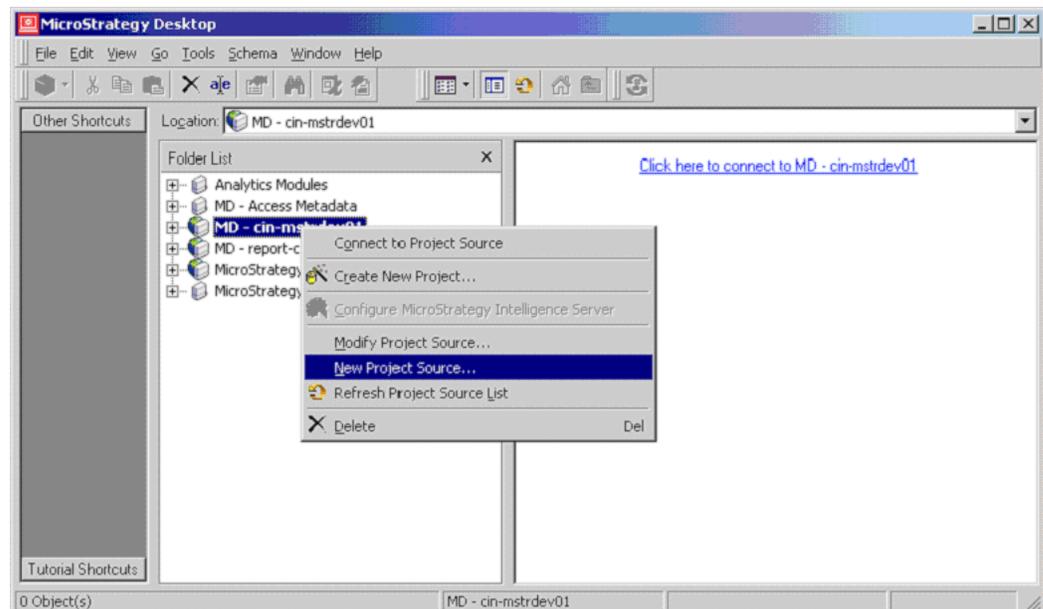


From the **Folder List** pane, right-click **Administration** and select **Stop Server**.

Next, right click **Administration** and select **Start Server**.

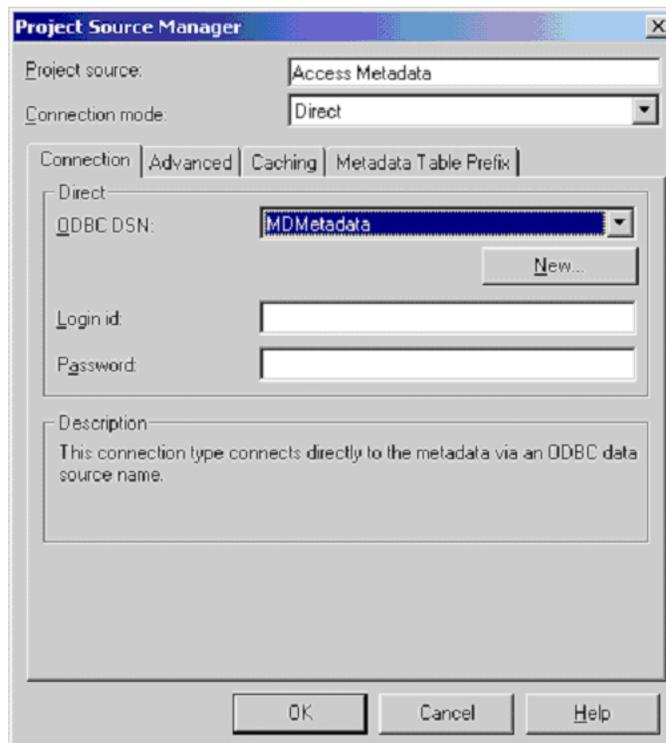
5. Create a new project source as follows:

Figure 6–20 Creating a New Project Source



From the **Folder List** pane, right-click on a project source and select **New Project Source**.

The **Project Source Manager** screen displays.

Figure 6–21 Project Source Manager Screen

- a. In the **Project source** field, enter **Access Metadata**; in the **Connection Mode** dropdown, select **Direct**; on the **Connection** tab, use the **ODBC DSN** drop-down to select the **MDMetadata** database; enter your **Login ID** and **Password**; and click **OK**.
- b. From the MicroStrategy Desktop menu, select **Schema > Duplicate Project**. The **Project Duplication - Source Project Location** screen displays.

Figure 6–22 Project Duplication - Source Project Location Screen

- c. From the **Available Project Sources** drop-down menu, select **MD - Access Metadata** and click **Next**.

The **Project Duplication - Source Project Selection** screen displays.

Figure 6–23 Project Duplication - Source Project Selection Screen

- d. In the **Available Projects** field, select **Merchant Desktop** and click **Next**.

The **Project Duplication - Duplicate Project Location** screen displays.

Figure 6–24 *Project Duplication - Duplicate Project Location Screen*

Project Duplication - Duplicate Project Location

Please select a destination project source for the duplicated version 7.X project.

Available Project Sources:

MD - report-01 [New...]

Authentication:

How should MicroStrategy Desktop verify the authenticity of your login? Please note that you must have administrator privileges in order to proceed.

Use Windows authentication

With the login id and password provided below:

Login id: Administrator

Password:

Help Cancel < Back Next > Finish

- e. In the **Available Project Sources** drop-down menu, select **MD - report-01**, and click **Next**.

The **Project Duplication - Duplicate Project Creation** screen displays.

Figure 6–25 Project Duplication - Duplicate Project Creation Screen

Project Duplication - Duplicate Project Creation

Enter the name and description for the duplicated destination project:

Destination project name:
Merchant Desktop

Destination project description (optional):
Merchant Desktop

Help Cancel < Back Next > Finish

- f. Enter the **Destination project name** as Merchant Desktop and click **Next**. The **Project Duplication - Select Objects to Duplicate** screen displays.

Figure 6–26 Project Duplication - Select Objects to Duplicate Screen

Project Duplication - Select objects to duplicate

Please select the objects to duplicate during the process

Objects to duplicate

Select which objects to copy

- Project objects
- All objects
- Schema objects only
- Configuration objects
 - All objects
 - Project-related objects only
- Users and user groups
 - All users and user groups
 - Project-related users and groups only
 - Include all groups even if not project related (preserve grou...
 - Selected users and groups...

Select users...

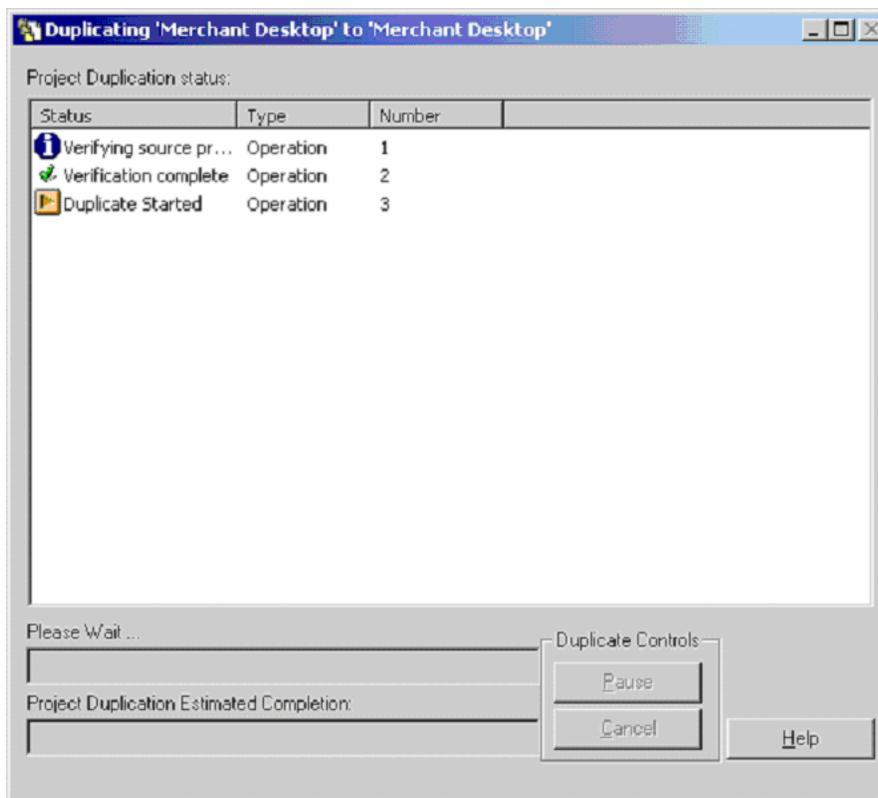
Help Cancel < Back Next > Finish

Select the Project objects you want to duplicate and click **Finish**.

When prompted to overwrite the event log, click **Yes to All**.

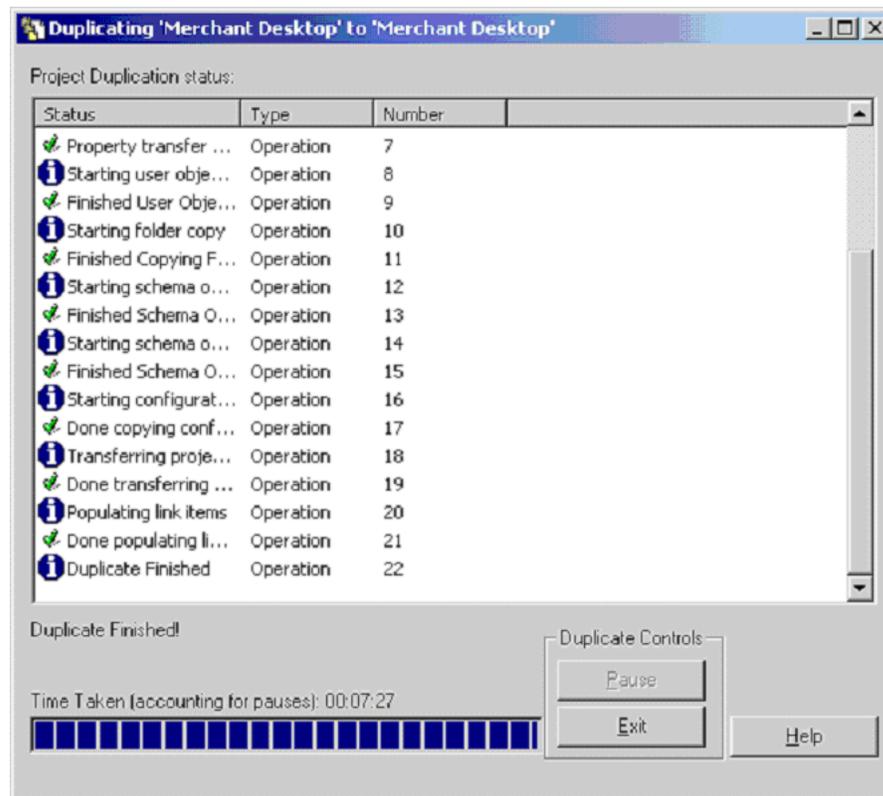
The **Project Duplication Status** screen displays.

Figure 6–27 Project Duplication Status Screen (In Process)



The duplication process takes approximately 15 minutes.

- g.** When the **Duplicating Finished** notification displays, click **OK**.
The **Project Duplication Status** screen now displays an **Exit** button.

Figure 6–28 Project Duplication Status Screen (Completed)

- h. When the process finishes, click **Exit**.

Now the Merchant Desktop metadata has been migrated to the new server.

Now you can configure MicroStrategy to access the RDM database.

Configuring MicroStrategy to Access the RDM Database

This section describes how to configure MicroStrategy to point to the correct RDM database. This section contains the following topics:

- [Creating the Database Connection](#)
- [Mapping MicroStrategy Desktop to the RDM](#)

Creating the Database Connection

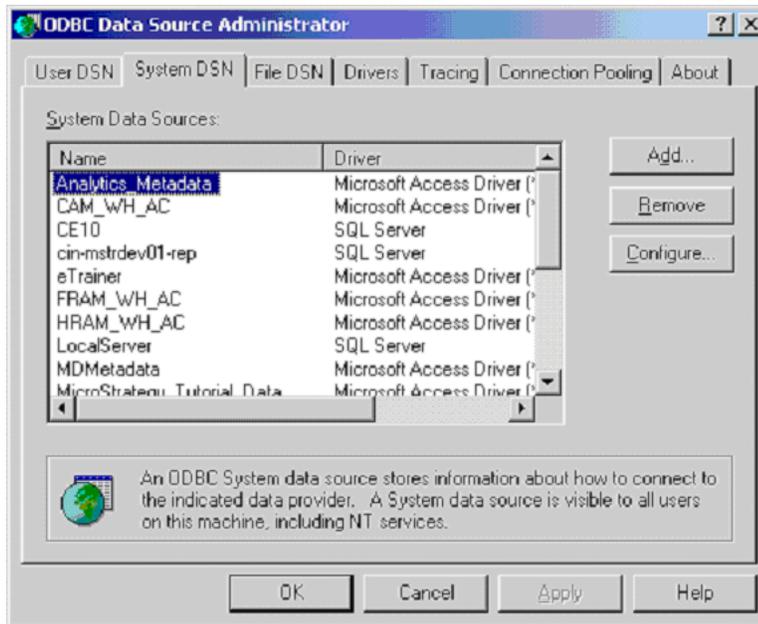
This section explains how to create an ODBC System DSN connection to the RDM database.

To connect the ODBC to the RDM database:

1. From Microsoft Windows, navigate to **Start > Settings > Control Panel > Administrative Tools > Data Sources (ODBC)**.

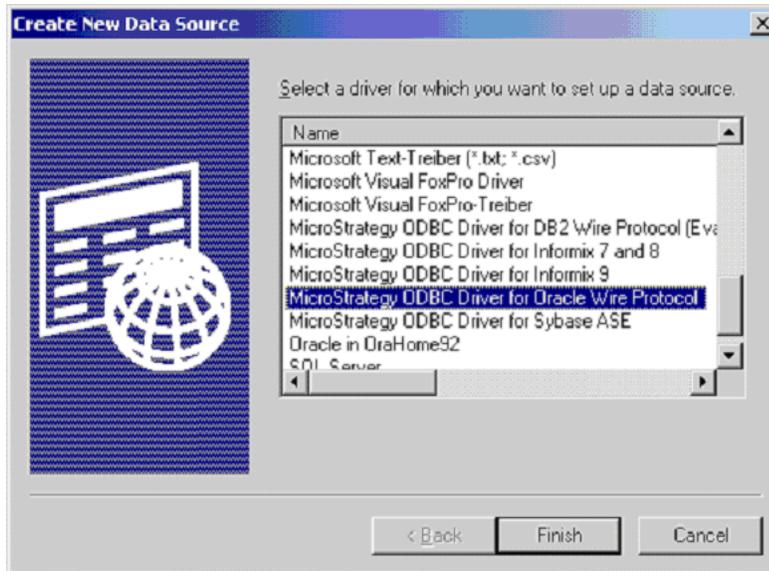
The **ODBC Data Source Administrator Screen** displays.

Figure 6–29 ODBC Data Source Administrator Screen

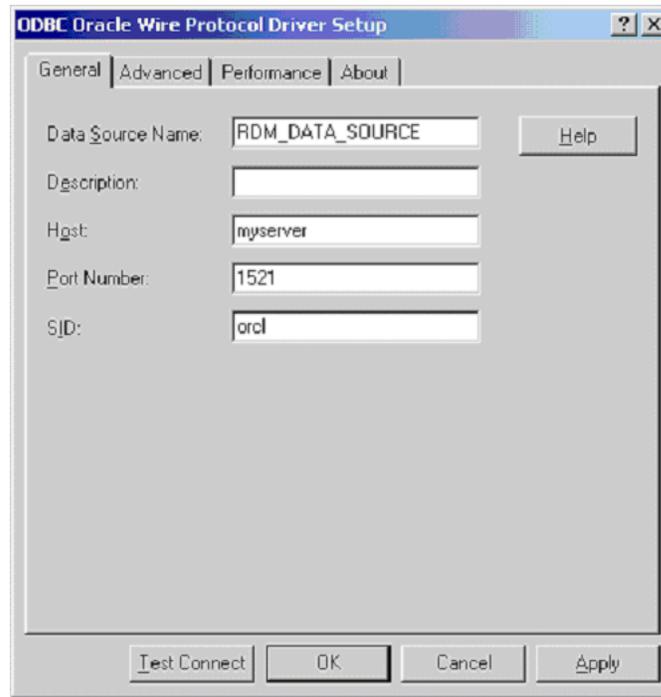


2. Click the **System DSN** tab, and click **Add**.
The **Create New Data Source** screen displays.

Figure 6–30 Create New Data Source Screen



- Select **MicroStrategy ODBC Driver for Oracle Wire Protocol** and click **Finish**.
The **ODBC Oracle Wire Protocol Driver Setup** screen displays.

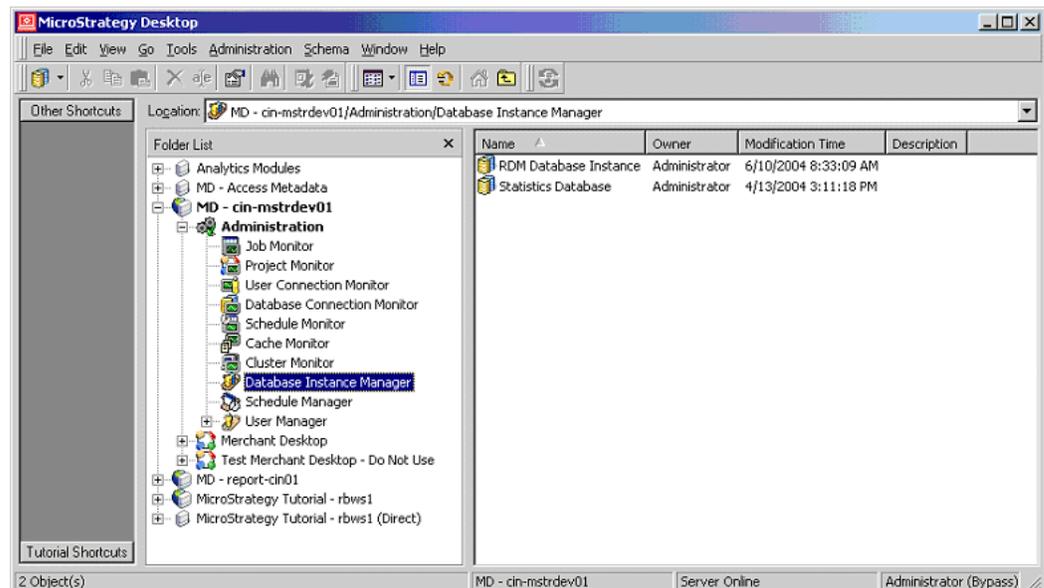
Figure 6–31 ODBC Oracle Wire Protocol Driver Setup Screen

For **Data Source Name** enter RDM_DATA_SOURCE, for **Port Number** enter 1521, for **SID** enter orcl, and click **OK**.

Mapping MicroStrategy Desktop to the RDM

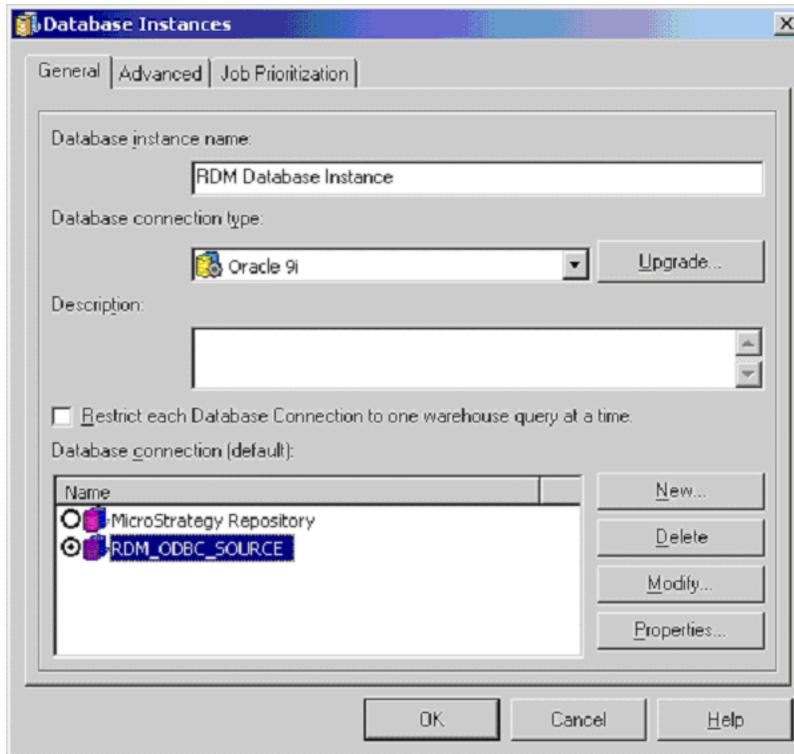
To map MicroStrategy Desktop to the RDM database:

1. Using MicroStrategy Desktop, map the MicroStrategy configuration to the RDM database instance as follows:

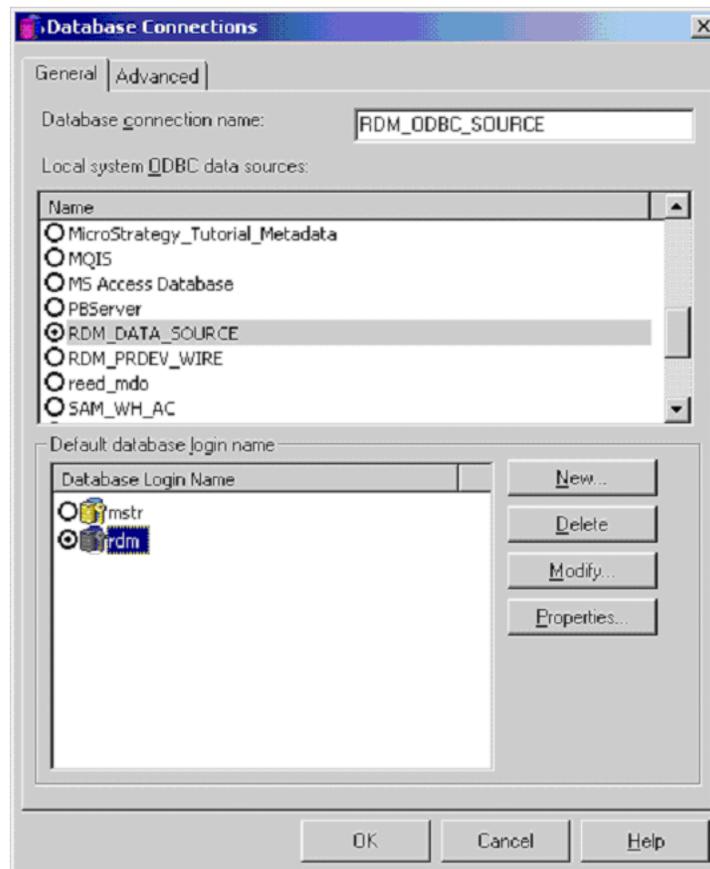
Figure 6–32 Mapping MicroStrategy to RDM Database Instance

- From the **Folder List** panel, select **Project Source > Database Instance Manager**.
The **Database Instances** screen displays.

Figure 6–33 Database Instances Screen



- Enter **Database instance name** as RDM Database Instance, select **RDM_ODBC_SOURCE**, and click **OK**.
The **Database Connections** screen displays.

Figure 6–34 Database Connections Screen

From the **Database connection name** drop-down menu, select **RDM_DATA_SOURCE**; in the **Local system ODBC data sources** field, select **RDM_DATA_SOURCE**; and in the **Database Login Name**, select **rdm**.

If your login does not already exist, click **New** and create your login ID.

Click **OK**.

4. The **Database Login** screen displays.

Figure 6–35 Database Login Screen

Enter the **Database Login**, **Login ID**, and **Password** for the database where the RDM is installed, and click **OK**.

Your data sources are now mapped to each other.

Mapping RDM and MicroStrategy Summarization Levels

This section contains the following topics:

- [Understanding the Summarization Mapping](#)
- [Using MicroStrategy Desktop to Map Merchant Desktop Attributes](#)

Understanding the Summarization Mapping

For information about summarization level mapping, see the following table.

Table 6–1 Mapping the Summarization Levels

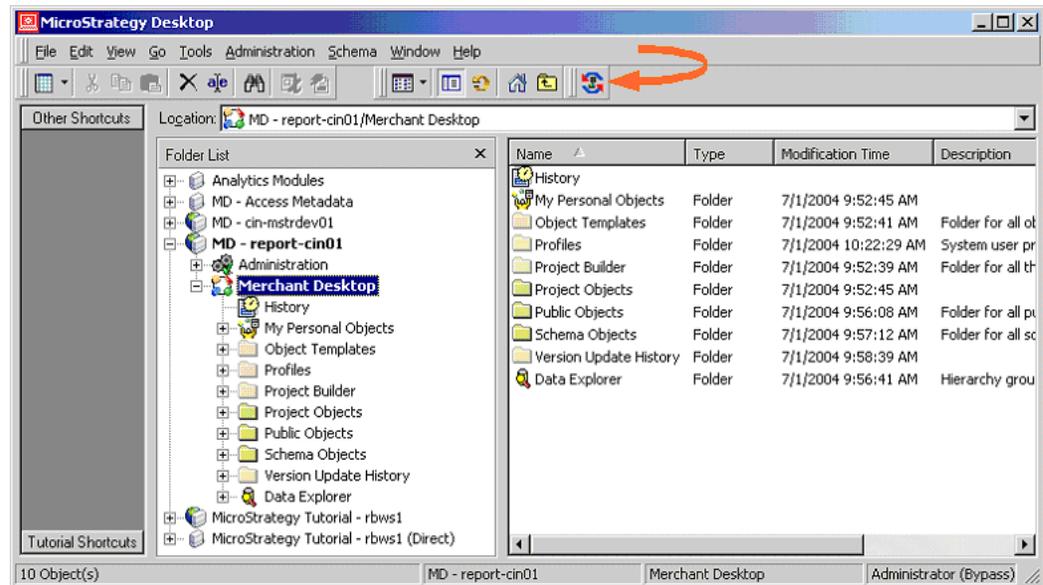
Hierarchy	Summarization Level
<i>Location Hierarchies</i>	
Location Hierarchy 1	<i>At summary levels: 0, 1 and 2 Between summary levels: B Optimization levels: test</i>
Location Hierarchy 2	<i>At summary levels: 0, 1 and 2 Between summary levels: B Optimization levels: test</i>
Location Hierarchy 3	<i>At summary levels: 0, 1 and 2 Between summary levels: B Optimization levels: test</i>
Location Hierarchy 4	<i>At summary levels: 0 and 1 Between summary levels: B Optimization levels: test</i>
<i>Merchandise Hierarchies</i>	
Product Hierarchy 1	<i>At summary levels: 0, 1, and 2 Between summary levels: B Optimization levels: test</i>
Product Hierarchy 2	<i>At summary levels: 0, 1 and 2 Between summary levels: B Optimization levels: test</i>
Product Hierarchy 3	<i>At summary levels: 0, 1 and 2 Between summary levels: B Optimization levels: test</i>
Product Hierarchy 4	<i>At summary levels: 0, 1 and 2 Between summary levels: B Optimization levels: test</i>
Product Hierarchy 5	<i>At summary levels: 0 and 1 Between summary levels: B Optimization levels: test</i>
Product Hierarchy 6	<i>At summary levels: 0 Between summary levels: B Optimization levels: test</i>
Product Hierarchy 7	<i>At summary levels: 0 Between summary levels: B Optimization levels: test</i>
Product Hierarchy 8	<i>At summary levels: 0 Between summary levels: B Optimization levels: test</i>

Using MicroStrategy Desktop to Map Merchant Desktop Attributes

If the new summary levels for either hierarchy are below the appropriate levels, use MicroStrategy Desktop to update the schema as follows. Refer to [Configuring RDM and MicroStrategy Summarization Levels](#) for information.

1. Launch MicroStrategy Desktop and update the Merchant Desktop schema as follows:

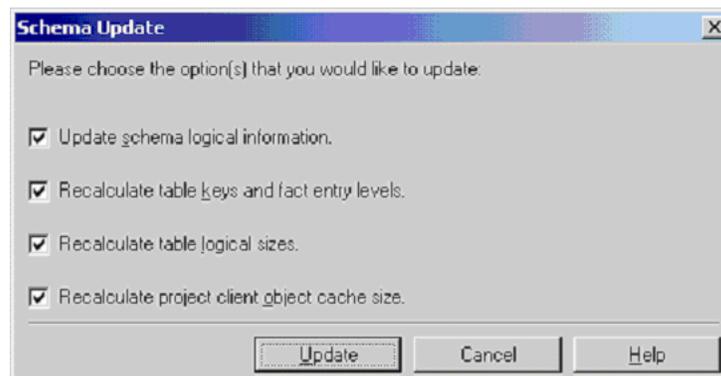
Figure 6–36 Updating the Merchant Desktop Schema



From the MicroStrategy Desktop menu, select **Schema > Update Schema** (or click the Schema Update button).

The **Schema Update** screen displays.

Figure 6–37 Schema Update Screen



2. Ensure that all options are selected and click **Update**.

This updates the schema. The MicroStrategy Desktop displays.

3. Specify attribute mapping as follows:

Modify each **Attribute** screen as shown in [Table 6–2, Price Attribute Screen Summary Table Values](#).

Table 6–2 Price Attribute Screen Summary Table Values

Attribute	Form Expression	Source Tables
<i>Location Attributes</i>		
Location Hierarchy2	HIERARCHY2_LID	RDM_LOCATION_VW_0 RDM_LOCATION_VW_1 RDM_LOCATION_VW_2
Location Hierarchy3	HIERARCHY3_LID	RDM_LOCATION_VW_0 RDM_LOCATION_VW_1 RDM_LOCATION_VW_2 RDM_MV_ACT_2 RDM_MV_FA_2
Location Hierarchy4	LOCATION_ID	RDM_ACTIVITIES RDM_BUDGETS RDM_FORECAST_ACTIVITIES RDM_HIST_MARKDOWNS RDM_ITEM_DATA RDM_ITEMS_TBL
Location Hierarchy4	RDM_LOCATION_VW_0 RDM_LOCATION_VW_1 RDM_MV_ACT_2 RDM_MV_FA_2	HIERARCHY4_LID
<i>Product Attributes</i>		
Product Hierarchy 1	HIERARCHY1_PID	RDM_MERCHANDISE_VW_0
Product Hierarchy5	HIERARCHY5_PID	RDM_MERCHANDISE_VW_1 RDM_MV_ACT_1 RDM_MV_FA_1
Product Hierarchy4	HIERARCHY4_PID	RDM_MERCHANDISE_VW_0 RDM_MERCHANDISE_VW_1 RDM_MERCHANDISE_VW_2 RDM_MV_ACT_2 RDM_MV_FA_2
Product Hierarchy5	HIERARCHY5_PID	RDM_MERCHANDISE_VW_0 RDM_MERCHANDISE_VW_1 RDM_MV_ACT_1 RDM_MV_FA_1
Product Hierarchy6	HIERARCHY_6_PID	RDM_MERCHANDISE_VW_0
Product Hierarchy8 PI_ID	PI_ID	RDM_ACTIVITIES RDM_FORECAST_ACTIVITIES RDM_HIST_MARKDOWNS RDM_ITEM_DATA RDM_ITEMS_TBL
Product Hierarchy8 Hierarchy {N}_PID	HIERARCHY8_PID	RDM_MERCHANDISE_VW_0

Modify each **Attribute** screen as shown in the following tables.

- [Table 6–3, "Location Hierarchy Attributes"](#)
- [Table 6–4, "Product Hierarchy Attributes"](#)

Note: Promotion Intelligence and Promotion Planning and Optimization has views but no materialized views.

Location Hierarchy Attributes. For each *location* hierarchy level, the attribute is configured to be available for the hierarchyN_lid for hierarchy, where N is the level of the hierarchy.

Table 6–3 Location Hierarchy Attributes

Attribute	Form Expression	Source Table
Location Hierarchy 1	HIERARCHY1_LID	RDM_LOCATION_2 ~12
	LOCATION_ID	RDM_LOCATION_1 RDM_LOCATION_CDA_1 RDM_PLAN_COMPANY_BUDGETS
Location Hierarchy 2	HIERARCHY2_LID	RDM_LOCATION_3 ~12
	LOCATION_ID	RDM_LOCATION_2 RDM_LOCATION_CDA_2 RDM_ACTUAL_HISTORY_2 RDM_ACTUAL_HISTORY_3 RDM_OPT_HISTORY_2 RDM_OPT_HISTORY_3
Location Hierarchy 3	HIERARCHY3_LID	RDM_LOCATION_4 ~12
	LOCATION_ID	RDM_LOCATION_3 RDM_LOCATION_CDA_3
Location Hierarchy 4	HIERARCHY4_LID	RDM_LOCATION_5 ~12
	LOCATION_ID	RDM_LOCATION_4 RDM_LOCATION_CDA_4
Location Hierarchy 5	HIERARCHY5_LID	RDM_LOCATION_6 ~12
	LOCATION_ID	RDM_LOCATION_5 RDM_LOCATION_CDA_5 RDM_ACTUAL_HISTORY_0 RDM_ACTUAL_HISTORY_1 RDM_OPT_HISTORY_0 RDM_OPT_HISTORY_1 RDM_PLANNED_PACK_OPT RDM_PLAN_COMPANY_BUDGETS RDM_PLAN_SEGMENT_1_DATA_0 RDM_PLAN_SEGMENT_1_DATA_1 RDM_PLAN_SEGMENT_2_DATA_0 RDM_PLAN_SEGMENT_2_DATA_1 RDM_PLAN_STORE_BUDGETS RDM_PLAN_VOLUME_GROUPS

Product Hierarchy Attributes. For each *product* hierarchy level, each attribute is configured to be available for the following form expressions:

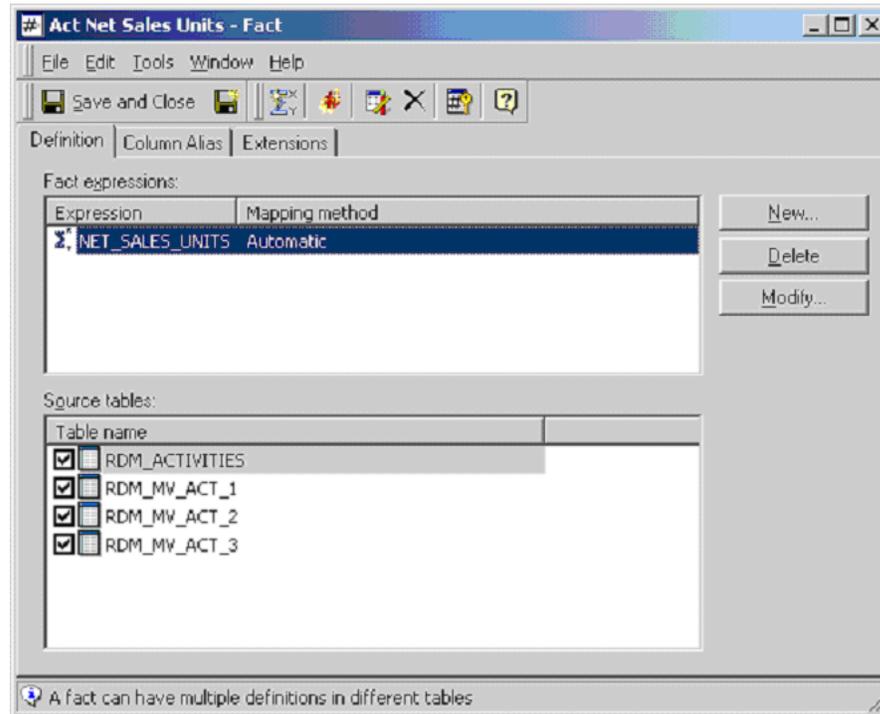
- primary key join
- hierarchyN_pi_id, where N is the level of the hierarchy.

Table 6–4 Product Hierarchy Attributes

Attribute	Form Expression	Source Table
Product Hierarchy 1	HIERARCHY1_PI_ID	RDM_MERCHANDISE_2-15
	PI_ID	RDM_MERCHANDISE_1 RDM_MERCH_CDA_1
Product Hierarchy 2	HIERARCHY2_PI_ID	RDM_LOCATION_3-15
	PI_ID	RDM_MERCHANDISE_2 RDM_MERCHANDISE_CDA_2
Product Hierarchy 3	HIERARCHY3_PI_ID	RDM_MERCHANDISE_4-15
	PI_ID	RDM_MERCHANDISE_3 RDM_MERCHANDISE_CDA_3
Product Hierarchy 4	HIERARCHY4_PI_ID	RDM_MERCHANDISE_5-15
	PI_ID	RDM_MERCHANDISE_4 RDM_MERCHANDISE_CDA_4 RDM_PLAN_COMPANY_BUDGETS
Product Hierarchy 5	HIERARCHY5_PI_ID	RDM_MERCHANDISE_6-15
	PI_ID	RDM_MERCHANDISE_5 RDM_MERCH_CDA_5 RDM_ACTUAL_HISTORY_3 RDM_OPT_HISTORY_3
Product Hierarchy 6	HIERARCHY6_PI_ID	RDM_MERCHANDISE_7-15
	PI_ID	RDM_MERCHANDISE_6 RDM_MERCH_CDA_6
Product Hierarchy 7	HIERARCHY7_PI_ID	RDM_MERCHANDISE_8-15
	PI_ID	RDM_MERCHANDISE_7 RDM_MERCH_CDA_7
Product Hierarchy 8	HIERARCHY8_PI_ID	RDM_MERCHANDISE_9-15
	PI_ID	RDM_MERCHANDISE_8 RDM_MERCH_CDA_8 RDM_PLANNED_ITEMS_1 RDM_PLAN_SEGMENT_1_DATA_1 RDM_PLAN_SEGMENT_2_DATA_1
Product Hierarchy 9	HIERARCHY9_PI_ID	RDM_MERCHANDISE_10-15
	PI_ID	RDM_MERCHANDISE_9 RDM_MERCH_9 RDM_ACTUAL_HISTORY_1 RDM_ACTUAL_HISTORY_2 RDM_OPT_HISTORY_1 RDM_OPT_HISTORY_2 RDM_PLANNED_ITEMS_0 RDM_PLAN_COMPANY_BUDGETS RDM_PLAN_SEGMENT_1_DATA_0 RDM_PLAN_SEGMENT_2_DATA_0
Product Hierarchy 10	HIERARCHY10_PI_ID	RDM_MERCHANDISE_11-15
	PI_ID	RDM_MERCHANDISE_10 RDM_MERCH_CDA_10 RDM_OPT_HISTORY_0 RDM_ACTUAL_HISTORY_0 RDM_PLANNED_PACK_OPT

4. After you have created, added, or changed any summary levels, use MicroStrategy Desktop to modify the following folders to include the new summary levels:
 - ../schema object/facts/actuals
 - ../schema object/facts/forecasts

Figure 6–38 Act Net Sales Units - Fact Screen



5. Change the lookup on all of the forms, not just the ID form.
Now you can map the display of hierarchies to display correctly.

Mapping the Display of Hierarchy Levels

Now you need to enable the correct display of hierarchy level descriptions for the user interface.

To enable the correct display of hierarchy level descriptions:

1. Start MicroStrategy Desktop.
2. From the **Folder List** pane, select **Merchant Desktop > Schema Objects > Attributes**.
3. In the **Attributes** folder, right-click each mapped attribute, select **Rename**, and enter the description for each level based on your location and merchandise hierarchy levels.

Configuring the User Link

Configuring the user link is the last step in integrating with MicroStrategy. This step automatically migrates user configuration data into MicroStrategy, eliminating the need to enter the same user management information into both Merchant Desktop and MicroStrategy.

After you have completed these steps, all MicroStrategy reporting will use the same security settings as specified for Promotion Intelligence and Promotion Planning and Optimization/Merchant Desktop users.

1. From the Windows server where MicroStrategy is installed, run the following command:

```
<CD>/MicrostrategyServerSetup/CDImage/install.cmd
```

The Oracle Installer **Welcome** screen displays.

2. Respond to prompts on the Oracle Installer screens as follows:

- a. **Welcome** screen - Click **Next**.
- b. **Application Server** screen - Select **None** and click **Next**.
- c. **Database** screen - Select a database.

Note: Although this setting is not used by the MicroStrategy User Integration Server and will have no effect on its installation, a current limitation of the Oracle Installer does not allow the **None** selection.

- d. **Select Components** screen - Select **RMI/Jacob Server**, and make sure the destination directories point to the appropriate directory. Click **Next**.
- e. **Summary** screen - Click **Install**.

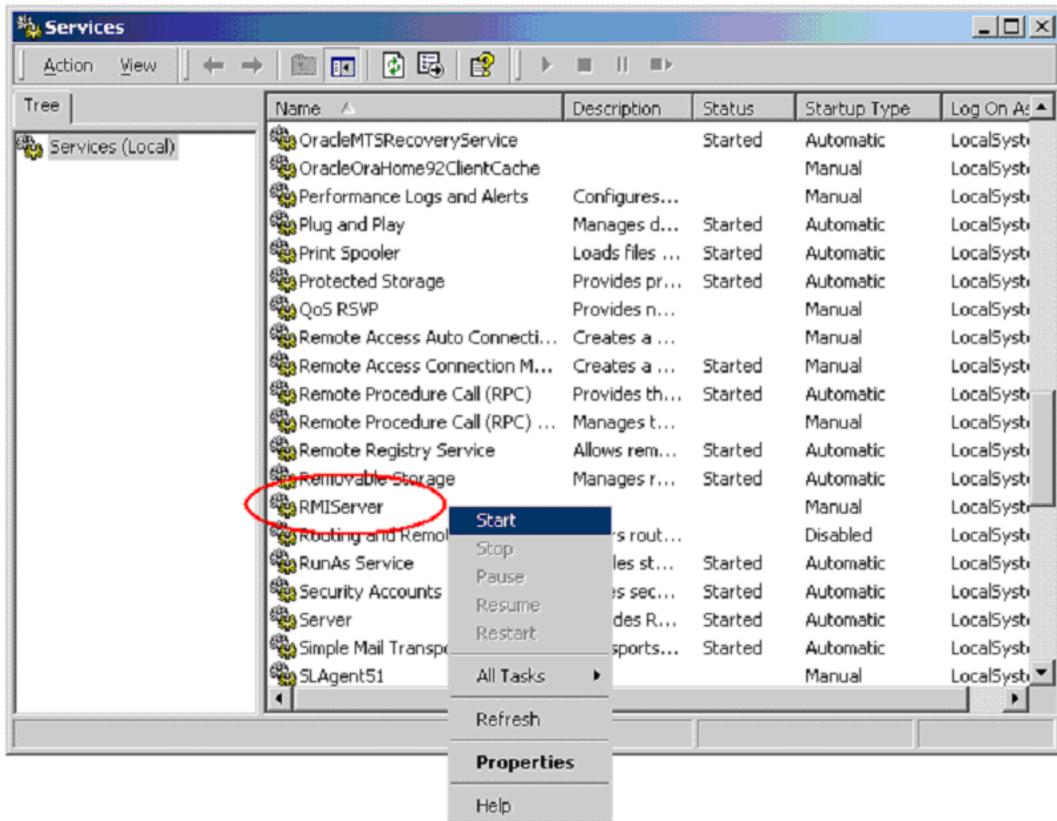
Now, the MicroStrategy User Integration Server is installed.

Next, start this service manually, as follows.

3. From Microsoft Windows, navigate to **Start > Settings > Control Panel > Administrative Tools > Services**.

The **Services** dialog box displays.

Figure 6–39 Services Dialog Box



4. Right click **RMIserver** and select **Start**.

A progress bar displays, and the status changes to **Started**.

Note: You can set the RMIserver service to run automatically by selecting **Properties** and on the **RMIserver Properties** dialog box, select **Automatic** for **Startup Type**.

5. Edit the <PROMOTE_HOME>/config/usermanagement.properties file as follows:

Note: You can skip to step 6, if the install.properties settings were configured correctly when installing the application.

```
# Replace the value with your RMI host.
rmiHost=report-01.<host name>.com

# Specify your rmiHost and reportServer. In most cases they are the same.
rmiPort=44499
reportServer=<host name or ip address>

# Specify the administrator username and password for MicroStrategy.
administratorName=administrator
administratorPassword=<password specified when you set up the Project Source>

## Specify the number of MicroStrategy licenses you have purchased.
microstrategy.users.max=<number of microstrategy licenses purchased>
```

Now you can test the user mapping.

6. Shut down your application server and restart it.
7. Enter the URL for Promotion Intelligence and Promotion Planning and Optimization, login as root, and create some Merchant Desktop/Promotion Intelligence and Promotion Planning and Optimization users.
8. When you have successfully created a user account with a Merchant Desktop and Promotion Intelligence and Promotion Planning and Optimization role, enter the URL for Merchant Desktop and log on as an administrator.

Troubleshooting

This section lists the errors (related to user management), that you may encounter when configuring the user links. The following table describes these errors:

Table 6–5 Troubleshooting User Link Configuration Errors

Message	Resolution
Error: Unable to update the MicroStrategy Users table: Licenses exceeded.	Edit the usermanagement.properties file as described in Step 5 and specify the correct number of MicroStrategy licenses. Then shut down and restart your application server.
Error: MicroStrategy Integration: General failure connecting to the remote registry.	Start the RMI service as described in Step 4.
Error when trying to add a role.	The role you are trying to create already exists in the MicroStrategy users database. Remove the user instance from the MicroStrategy users database, and then try to add the Merchant Desktop role again.