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**HYPERION® DATA RELATIONSHIP MANAGEMENT**  
*RELEASE 9.3.2*

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**NTIER INSTALLATION GUIDE**

**ORACLE®** | Hyperion®

P/N: DM90193200

Data Relationship Management NTier Installation Guide, 9.3.2

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# 1

# System Architecture and Requirements

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## Data Relationship Management N-Tier Architecture

The Oracle's Hyperion® Data Relationship Management N-Tier product is based on an application server (N-Tier) architecture. The N-Tier architecture enables the bulk of system processing to be performed on a centralized server and simplifies the client requirements for each end user.

Figure 1 gives a top-level overview of the Data Relationship Management N-Tier architecture. The Data Relationship Management client is a Windows application that runs on the user's local computer. The client connects to the Data Relationship Management application server which can support multiple, simultaneous users. You can run multiple Data Relationship Management engines on one server or distributed across multiple servers. The Data Relationship Management database can be hosted on the application server computer or elsewhere.

Figure 1 Data Relationship Management N-Tier Architecture

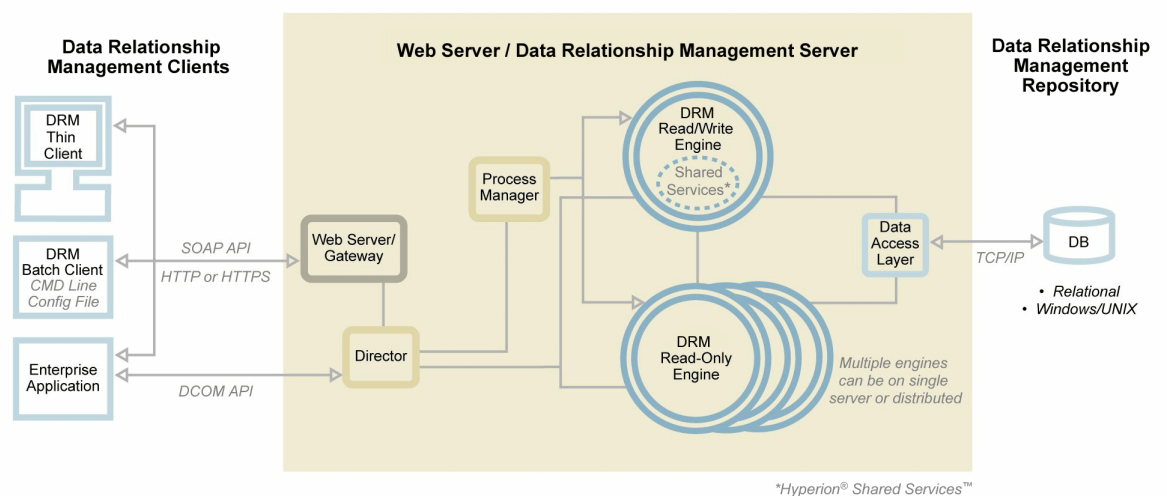
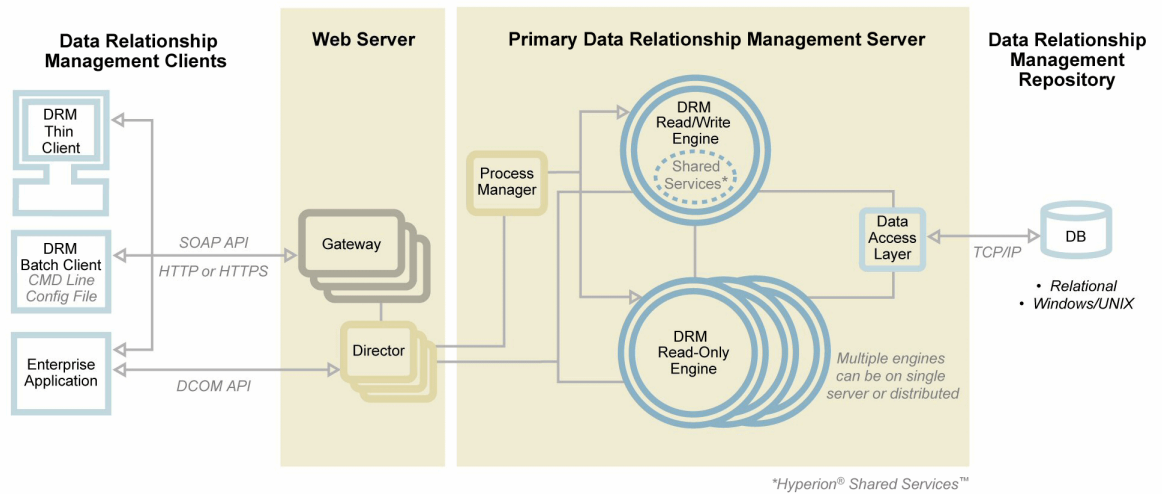


Figure 1 illustrates the simplest N-Tier configuration where the Web server and application server functions are on one computer.

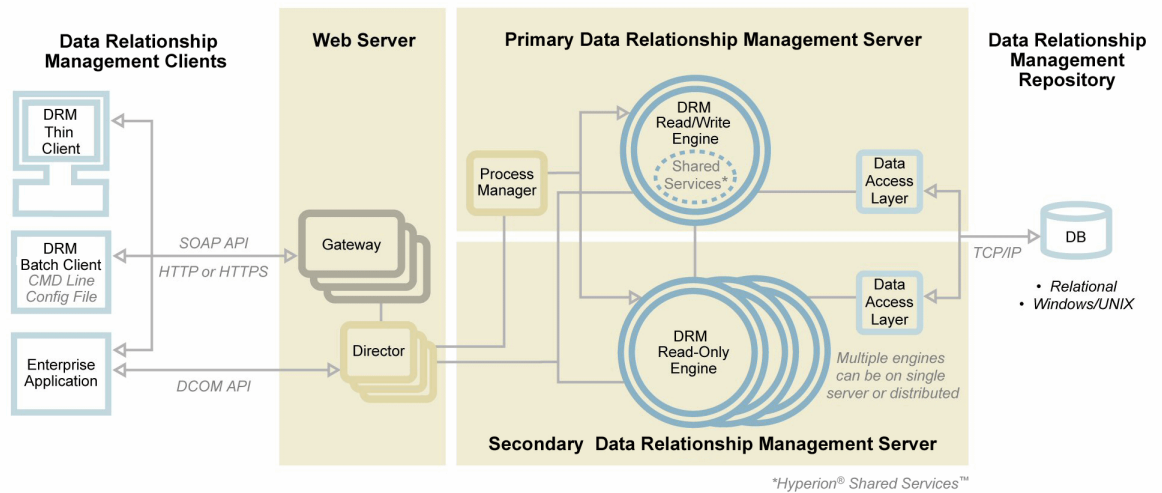
It is also possible to separate the Web server tier from the application server.

Figure 2 Separate Web and Application Server Configuration



For maximum scalability, you can distribute the Data Relationship Management engines across multiple application servers.

Figure 3 Multiple Application Server Configuration



Other configurations are also possible such as using multiple Web servers to provide increased throughput and redundancy. In that configuration, each Web server hosts identical components.

The majority of the installation steps described in this document apply to all N-Tier configurations. Steps for certain configurations are noted.

# System Requirements

The following system requirements are intended as a general guideline and may not completely address all the technical needs necessary to accommodate the application when added to an existing environment.

## Client

**Table 1** Client Requirements

Component	Requirement
Processor	1 GHz minimum
RAM	1 GB minimum
Disk Space	20 MB minimum, 20 MB preferred
Operating System	One of the following: <ul style="list-style-type: none"><li>● Windows Vista</li><li>● Windows XP Professional SP2</li><li>● Windows 2003 SP1</li><li>● Windows 2000 Professional SP4</li><li>● Windows 2000 Server SP4</li></ul>
Application Software	<ul style="list-style-type: none"><li>● Microsoft .NET Framework 2.0*</li><li>● Hyperion Data Relationship Management client application</li></ul>

\*Only required for the Data Relationship Management Batch Client security credentials utility.

### Note:

All Data Relationship Management client users must have write access to the Windows/Temp directory.

## Database Server

**Table 2** Database Server Requirements

Component	Requirement
Processor	Dual 900 MHz minimum, Dual 2.0+ GHz preferred
RAM	2 GB minimum
Disk Space	10 GB minimum
Operating System	Determined by database platform
Application Software	One of the following:

Component	Requirement
	<ul style="list-style-type: none"> <li>● Microsoft SQL Server 2005 SP1</li> <li>● Microsoft SQL Server 2000 SP3a</li> <li>● Oracle* <ul style="list-style-type: none"> <li>○ Oracle 11g</li> <li>○ Oracle 10g Release 2</li> <li>○ Oracle 10g</li> <li>○ Oracle 9i</li> </ul> </li> </ul> <p><b>Note:</b> Run SQL Server in mixed authentication mode, not Windows-only mode.</p>

\*For all supported versions of Oracle: 1) Includes Support for Real Application Cluster (RAC) and ASM. Includes support for SE, SE1, and EE. The Oracle OLE provider and Oracle database server must be the same version.

## Application Server

The Data Relationship Management N-tier system consists of the following components:

- Database Server
- Primary Application Server
- Secondary Application Server
- Web Server

For small implementations, the components can be configured on a single server. For scalability, the components can be split out to multiple servers.

**Table 3** Application Server Requirements

Component	Requirement
Processor	Dual 2.0+ GHz minimum
RAM	4 GB minimum
Disk Space	100 MB minimum
Operating System	Microsoft Windows 2000 Server SP4, Windows Server 2003 SP1
Application Software	<ul style="list-style-type: none"> <li>● Client drivers (DLLs) for one of the following databases: <ul style="list-style-type: none"> <li>○ Microsoft SQL Server 2005 SP1</li> <li>○ Microsoft SQL Server 2000 SP3a</li> <li>○ Oracle 11g</li> <li>○ Oracle 10g Release 2</li> <li>○ Oracle 10g</li> <li>○ Oracle 9i</li> </ul> </li> </ul> <p>If using a SQL Server database, the client software is not required as long as Microsoft Data Access Components (MDAC) 2.7 or later is installed. If MDAC 2.7 is currently installed on the application server, the installation program automatically updates it to the latest</p>



Component	Requirement
	<p>version. If MDAC is not installed or if the installed version is older than 2.7, you must manually install MDAC.</p> <p><b>Note:</b> Additional client software, such as Oracle SQL*Plus for Oracle, Query Analyzer for SQL Server, is optional. These provide tools to verify connectivity and can help with troubleshooting. ODBC can also be used to do troubleshooting.</p> <ul style="list-style-type: none"> <li>● Data Relationship Management N-Tier application</li> <li>● Internet Information Services (IIS) 5.0 or later</li> <li>● Microsoft .NET Framework 2.0</li> </ul>

## Using External Authentication

Data Relationship Management provides the option to authenticate users internally within Data Relationship Management or externally via an authentication repository. For external authentication, the information is maintained in a central authentication directory, such as Lightweight Directory Access Protocol (LDAP) Directory, Microsoft Active Directory, or Windows NT LAN Manager.

An *authentication directory* is a centralized store of user information such as login names and passwords, and perhaps other corporate information. The repository functions like a telephone directory. The authentication directory probably contains much more than user names and passwords; for example, it may include e-mail addresses, employee IDs, job titles, access rights, and telephone numbers. It may also contain objects other than users; for example, it may contain information about corporate locations or other entities. To use external authentication for Hyperion applications, your organization must have an authentication directory that contains corporate user information. Additionally, you must modify the configuration of your product to specify correct information pertaining to your corporate authentication directory. The following authentication repositories are supported:

- Windows NT LAN Manager (NTLM) on NT 4.0 or higher, Windows 2000, and Windows 2003
- Lightweight Directory Access Protocol (LDAP) version 3 or higher
- Microsoft Active Directory server (MSAD), Windows 2000 sp3 or higher

Data Relationship Management performs external authentication by interacting with the Common Security Services (CSS) component of Oracle's Hyperion® Shared Services.

The method for authenticating Data Relationship Management users at login is configured by selecting one of the following options during installation:

- Authenticate users using internal Hyperion Data Relationship Management tables only – users are authenticated based solely on the information stored in the Data Relationship Management database.
- Authenticate users using Active Directory, LDAP or NTLM only – users are authenticated based on information stored in an external authentication directory.

- Authenticate some users using internal Hyperion Data Relationship Management tables and authenticate other users using Active Directory, LDAP or NTLM – users can be specified to authenticate by either internal or CSS (external) authentication.

**Note:**

The authentication mode can be selected during installation of Data Relationship Management server and can also be changed later using the Data Relationship Management Console.

When running Data Relationship Management in the Internal authentication mode, it is not necessary to have access to CSS.

When running in CSS or Mixed mode, access to CSS must be configured properly or the Data Relationship Management server will not start. In Mixed mode, the default engine user (`mdm_system`) may be an internal or external user. However, in CSS mode, the engine user must be an external user and exist in Shared Services. You can either provision `mdm_system` as a user in Shared Services and ensure that `mdm_system` is marked as an external user in Data Relationship Management; or change the engine user in Data Relationship Management Console from `mdm_system` to an admin user that exists in Shared Services.

When using Data Relationship Management with external authentication (CSS or Mixed mode) it is necessary for Data Relationship Management to have direct access to certain CSS components. The easiest way to achieve this is to first install Shared Services on the server where the Data Relationship Management application server will be installed. This is required to provide components needed for interoperability. Even if Shared Services will be hosted on another server, you must still run the installer on the Data Relationship Management server. It is not necessary to actually start Shared Services on the Data Relationship Management server.

Before attempting to start the Data Relationship Management server with external authentication (CSS or Mixed mode), ensure the following on the Common Security Services tab of the Data Relationship Management Console:

- The hostname and port number (default is 58080) are set correctly for the server where Shared Services is actually running.
- The file paths listed under System Path and Class Path are correct for the Data Relationship Management server. Note that `#root` represents the directory pointed to by the `%HYPERION_HOME%` environment variable and `#local` represents the directory where Data Relationship Management is installed (default is `C:\Hyperion\Master Data Management`).

**Note:**

The default Data Relationship Management configuration includes file paths that are specific to the current release of Shared Services. If the Data Relationship Management release and CSS release being used are the same (for example, Data Relationship Management 9.3.1 and CSS 9.3.1) then no updates are required. However, when running Data Relationship Management with a previous release of CSS, it is necessary to update the file paths with the correct version number.

For example, if the Data Relationship Management configuration currently shows this file path:

- #root/common/CSS/9.3.1/bin

but an earlier version of CSS is being used and the actual path on the server is:

- #root/common/CSS/9.3.0/bin

then the paths in the configuration must be updated. In this example, all occurrences of 9.3.1 in the file paths must be replaced with 9.3.0. These updates can be done on the Common Security Services page of the Data Relationship Management Console. Remember to save the changes after completing the updates.

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**Caution!**

If you change the classpath or systempath, you must reboot the computer.

---

## Troubleshooting Tips

If the Data Relationship Management server fails to start when using either CSS or mixed authentication mode, try the following steps:

- If you change the classpath or systempath you must reboot the computer.
- Change the authentication mode to Internal and try starting the Data Relationship Management server again. If it starts successfully, then this confirms that the issue is related to CSS.
- Check the Event Log for error messages.
- For errors such as “Invalid classpath root,” rebooting the server typically resolves the issue.
- For errors such as “Unable to create a JVM...,” this indicates that CSS was not fully enabled during installation. Click Enable CSS on the Common Security Services page of the Data Relationship Management Console to resolve this issue and restart the service.
- For errors such as “Cannot configure the system. Please check the configuration,” ensure that the hostname field on the Common Security Services page of the Data Relationship Management Console contains the correct name of the server where CSS is actually running.

## Compatibility with Microsoft Data Execution Prevention

A conflict has been identified between Data Relationship Management and Microsoft's Data Execution Prevention (DEP) feature. On certain processors, the DEP feature may prevent the Data Relationship Management service from starting. On those processors, it may be necessary to reconfigure DEP to allow Data Relationship Management operation.

Further details on DEP can be found at: <http://support.microsoft.com/kb/875352>.

If Data Relationship Management is running on a processor that supports hardware-based DEP, take one of these actions:

- **Option 1:** Enable DEP only for essential Windows programs and services:
  - 1 Click **Start > Settings > Control Panel > System**.
  - 2 On the **Advanced** tab, under Performance, click **Settings**.
  - 3 Select **Data Execution Prevention** and select **Turn on DEP for essential Windows programs and services only**.
  - 4 Click **OK**.
  
- **Option 2:** Enable DEP for all programs and add Data Relationship Management to the exception list:
  - 1 Click **Start > Settings > Control Panel > System**.
  - 2 On the **Advanced** tab, under Performance, click **Settings**.
  - 3 Select **Data Execution Prevention** and select **Turn on DEP for all programs**.
  - 4 On the Data Relationship Management server, add **mdm\_ntier\_rio.exe** to the exception list (displays in list as NTier Event Publisher).
  - 5 On Data Relationship Management client machines, add **mdm\_ntier\_client\_http.exe** to the exception list (displays in list as NTier HTTP Client).
  - 6 Click **OK**.

# 2

## Installing Data Relationship Management

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## Upgrading Data Relationship Management

Data Relationship Management supports upgrades from any previous 9.x release.

- To upgrade a database only (without affecting server components), do the following:
  - 1 Run `mdm_server_setup.exe` on a computer where the application server components are not installed such as the database server.
  - 2 If the installer has been previously run on this machine, you must first run `mdm_server_setup.exe` and select the Remove option. This does not affect the existing database.
  - 3 Run the installer again and select the Custom option. Select only the database and specify credentials for the database to be upgraded.

## Installation Prerequisites

Items to check:

- Intended host computers meet or exceed the minimum system requirements defined in “System Requirements” on page 7.
- Database server is installed and running on the database computer.
- Internet Information Services (IIS) is installed and operational on the Web server.
- Latest Data Relationship Management N-Tier release package is available.
- User accounts that can perform these actions are available on the application server:
  - Edit registry settings
  - Read and write to the local file system

- Launch processes
- Run as a service
- When using Data Relationship Management with external authentication, you must first install Shared Services on the server where the Data Relationship Management application server will be installed. This is required to provide components needed for interoperability. Even if Shared Services is hosted on another server, you must still run the installer on the Data Relationship Management server. It is not necessary to actually start Shared Services on the Data Relationship Management server.
- When you manually execute the database scripts, the MDM\_DB user is created in the RDBMS (if it does not already exist). For all database systems, you can use the Data Relationship Management Console to change the default user from MDM\_DB to a different user.

## SQL Server Database Prerequisites

- If you are using a SQL Server Cluster database system, you must create the database with the appropriate RDBMS software prior to installation.
- If MDM\_DB is created manually prior to the installation, it is important to make this user database owner of the Data Relationship Management database.

## Oracle Database Prerequisites

- If you are using an Oracle RAC database system, you must create the tablespaces with the appropriate RDBMS software prior to installation.
- When you manually execute the database scripts, the MDM\_DB user is created in the RDBMS (if it does not already exist). This user must have access rights to the following items:
  - Default tablespace (usually MDM\_Data)
  - UNLIMITED TABLESPACE
  - CONNECT
  - CREATE ANY SEQUENCE
  - CREATE USER
  - ALTER USER
- When you manually execute the database scripts, the MDM\_Admin user is created as the schema owner. This user must have access rights to the following items:
  - Default tablespace (usually MDM\_Data) — this can be done after the install if the tablespaces were not created.
  - UNLIMITED TABLESPACE
  - DBA
  - CONNECT
  - CREATE ANY SEQUENCE

- CREATE USER
- ALTER USER

**Note:**

You can change the schema owner name during the installation process.

- If you are using tablespaces with names different from MDM\_Data and MDM\_Index, you must use the manual option for running the database scripts and edit the scripts to change the tablespace names.

## Installing Server Components

The server installation program allows you to install Data Relationship Management database server, application server, and Web server components.

► To install Data Relationship Management server components:

- 1 **Navigate to the directory where you downloaded the installation program and double-click `mdm_server_setup.exe`.**
- 2 **On the **Welcome** dialog box, click **Next**.**
- 3 **On the **License Agreement** dialog box, read the license agreement, select **I Agree**, and click **Next**.**
- 4 **Click **Next** to accept the default installation path for the Hyperion Home folder, or click **Change** and navigate to a destination directory other than the default, and click **Next**.**

**Note:**

When multiple Hyperion products are installed on one computer, common internal and third-party components used by the products are installed to a central location, called Hyperion Home. The Hyperion Home directory name cannot contain spaces. If the installation program detects an existing Hyperion Home directory, the Directory Name field and Browse button are not selectable.

- 5 **On the **Setup Type** dialog box, select the type of installation to perform and click **Next**:**
  - **Complete** — installs the database server, application server, and Web server components.
  - **Custom** — allows you to select the server components to install

**Note:**

The Custom installation provides you with a subset of the following screens depending on the components that you choose to install. For the basic configuration as shown in [Figure 1 on page 5](#), select Complete.

- 6 **Do one of the following:**
  - If you selected **Complete** in step 5, skip to the next step.
  - If you selected **Custom** in step 5, select the components to install and click **Next**.

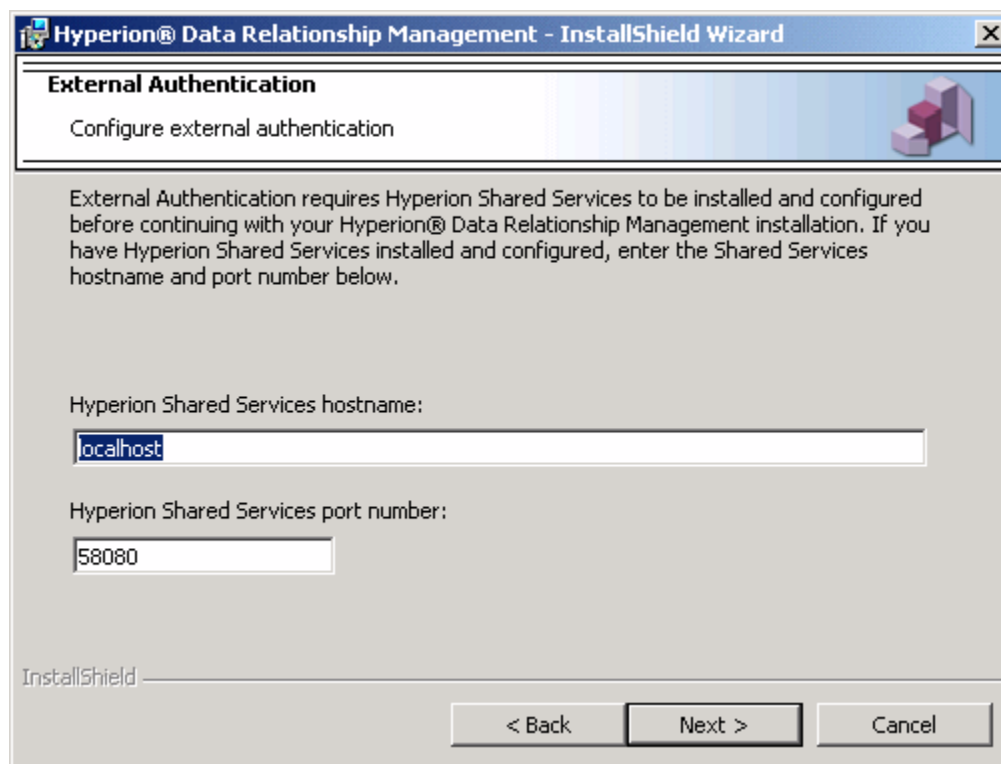
- 7 On the **User Authentication Method** dialog box, select the method by which Data Relationship Management will authenticate users and click **Next**.

**Note:**

For information on authentication methods, see [“Using External Authentication”](#) on page 9.

- 8 Do one of the following:

- If you selected **Authenticate users using internal Hyperion Data Relationship Management tables only** in step 7, skip to the next step.
- If you did not select internal tables in step 7, on the **External Authentication** dialog box enter the name of the computer running Shared Services and the Shared Services port number 58080 unless directed to a different port by the Oracle's Hyperion® Shared Services Administrator and click **Next**.



The screenshot shows a Windows-style dialog box titled "Hyperion® Data Relationship Management - InstallShield Wizard". The main heading is "External Authentication" with a sub-heading "Configure external authentication". Below this, there is a paragraph of text: "External Authentication requires Hyperion Shared Services to be installed and configured before continuing with your Hyperion® Data Relationship Management installation. If you have Hyperion Shared Services installed and configured, enter the Shared Services hostname and port number below." There are two input fields: "Hyperion Shared Services hostname:" with the text "localhost" entered, and "Hyperion Shared Services port number:" with the text "58080" entered. At the bottom, there are three buttons: "< Back", "Next >", and "Cancel". The "InstallShield" logo is visible in the bottom left corner of the dialog box.

- 9 On the **Database Creation** dialog box, select whether to create the database automatically or to save the database scripts to run manually, and click **Next**.

**Note:**

If the default installation location is used, database scripts are saved to: C:\Hyperion\Master Data Management\Database

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**Caution!**

If using a clustered database environment, you need to select the Save database scripts to disk option. This allows the database to be created appropriately in the clustered environment and



then populated by running the Data Relationship Management scripts manually. When installing the Data Relationship Management database, the installer attempts to create a new Data Relationship Management database if the one specified does not exist. When creating the database, the installer creates the data files using an explicit file path. Since this is not compatible with how data files are managed in clustered database environments (such as Oracle Real Application Clusters), only the Save database scripts to disk option should be used.

---

For information on manually running database scripts, see [“Manually Running Database Scripts” on page 24](#).

**10** On the **Database Type** dialog box, select the type of database to use and click **Next**.

**11** Do one of the following:

- If you selected Microsoft SQL Server, go to [“Installing on Microsoft SQL Server” on page 17](#) to continue the installation.
- If you selected Oracle, go to [“Installing on Oracle” on page 20](#) to continue the installation.

## Installing on Microsoft SQL Server

► To install Data Relationship Management server components on Microsoft SQL Server:

**1** From the Database Server drop-down list, select the database server on which to install the database component, or click **Browse** to select an available server.

The screenshot shows a Windows-style dialog box titled "Hyperion® Data Relationship Management - InstallShield Wizard". The main heading is "Database Server" with the instruction "Select database server and authentication method". Below this, there is a paragraph of text: "Select the database server to install to from the list below or click Browse to see a list of all database servers. You can also specify the way to authenticate your login using your current credentials or a SQL Login ID and Password. In either case, the login you use must have full system administrator permissions." The "Database Server:" label is followed by a dropdown menu showing "(Local)" and a "Browse..." button. Under "Connect using:", there are two radio buttons: "Windows authentication credentials of current user" (which is selected) and "Server authentication using the Login ID and password below". Below these are two text input fields labeled "Login ID:" and "Password:". At the bottom of the dialog, there are three buttons: "< Back", "Next >", and "Cancel".

**2** Select the connection method to use and click **Next**.

**Note:**

If you select server authentication, you must enter the login ID and password for a system administrator on the SQL server.

**3 Enter a name for the Data Relationship Management database and click Next.**

This step creates the mdm\_db user with the default password of “Welcome!”.

**Note:**

If you are upgrading from a previous version, enter the database to upgrade.

**4 Do one of the following:**

- If you are upgrading an existing database, skip to the next step.
- If you are creating a database, enter the path and name of the database file, the path and name of the log file, the starting size for the SQL log file, and a starting size for the SQL database file.

**Note:**

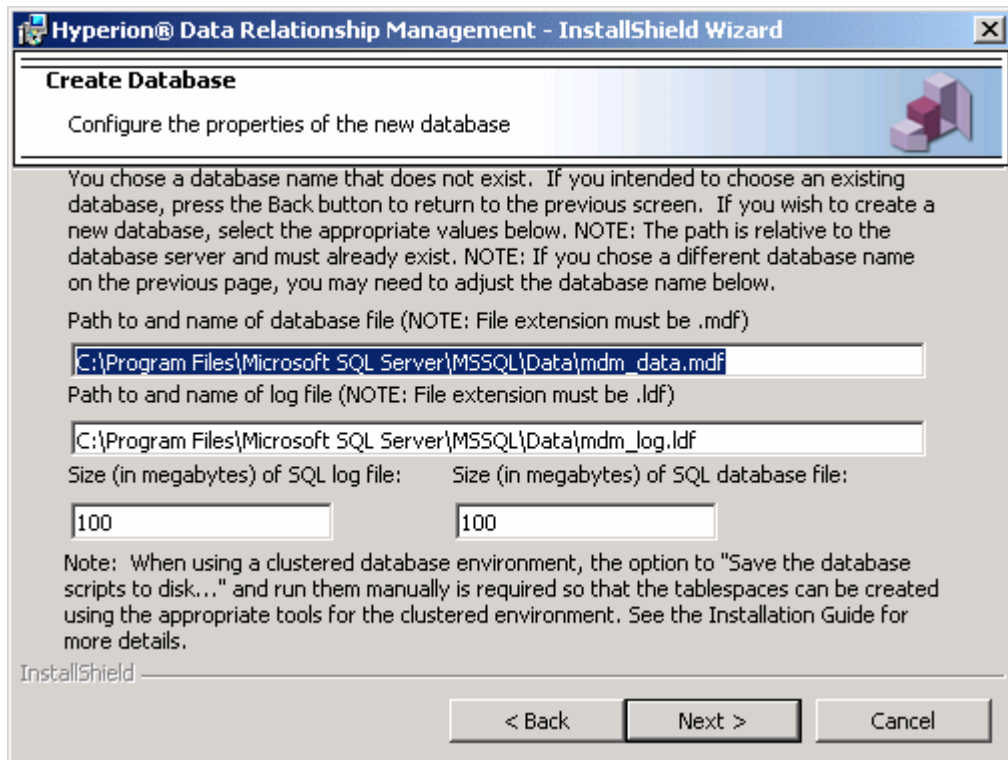
The paths for the database and the log files are relative to the database server and not to the machine on which you are running the installer. The paths must exist or the directories are not created.

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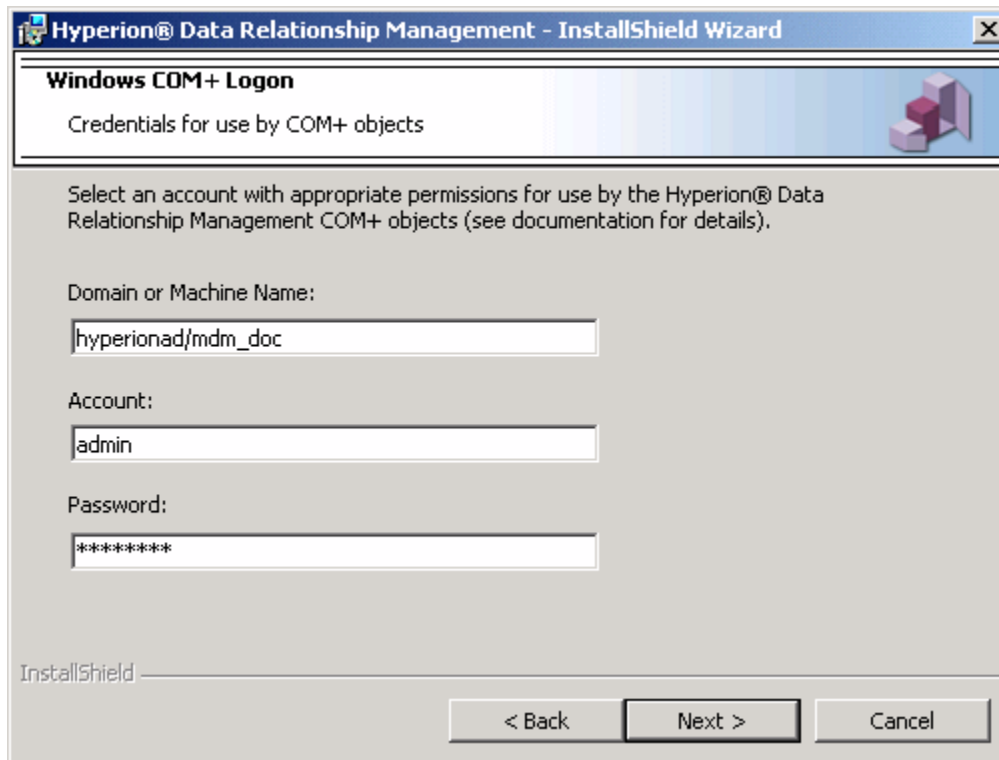
**Caution!**

If using a clustered database environment, you need to save the database scripts to disk and manually install them. For more information, see [step 9 on page 16](#).

---



- 5 On the **Windows COM+ Logon** dialog box, enter the domain or machine name and user (for example, hyperionad\msmith) and the account name and password for a user who has rights to perform the following actions:
- Edit registry settings
  - Read and write to the local file system
  - Launch processes
  - Run as a service



- 6 Click **Next**.
- 7 Click **Next** to accept the default installation directory for Web components, or click **Change** to select an installation directory other than the default and then click **Next**.
- 8 Click **Install**.

**Note:**

You can launch the Data Relationship Management Console after the install completes.

## Installing on Oracle

- To install Data Relationship Management server components on Oracle:
  - 1 On the Database Server dialog box, enter the service name (SID) hosting the database you want to use, and enter the username and password for a user with SYSTEM-level permissions.

**Hyperion® Data Relationship Management - InstallShield Wizard**

**Database Server**  
Select database service and SYSDBA credentials

Enter the service name (SID) to install to, then enter the user name and password of a user with full SYSDBA permissions.

Service Name (SID):

User Name (SYSDBA):

Password:

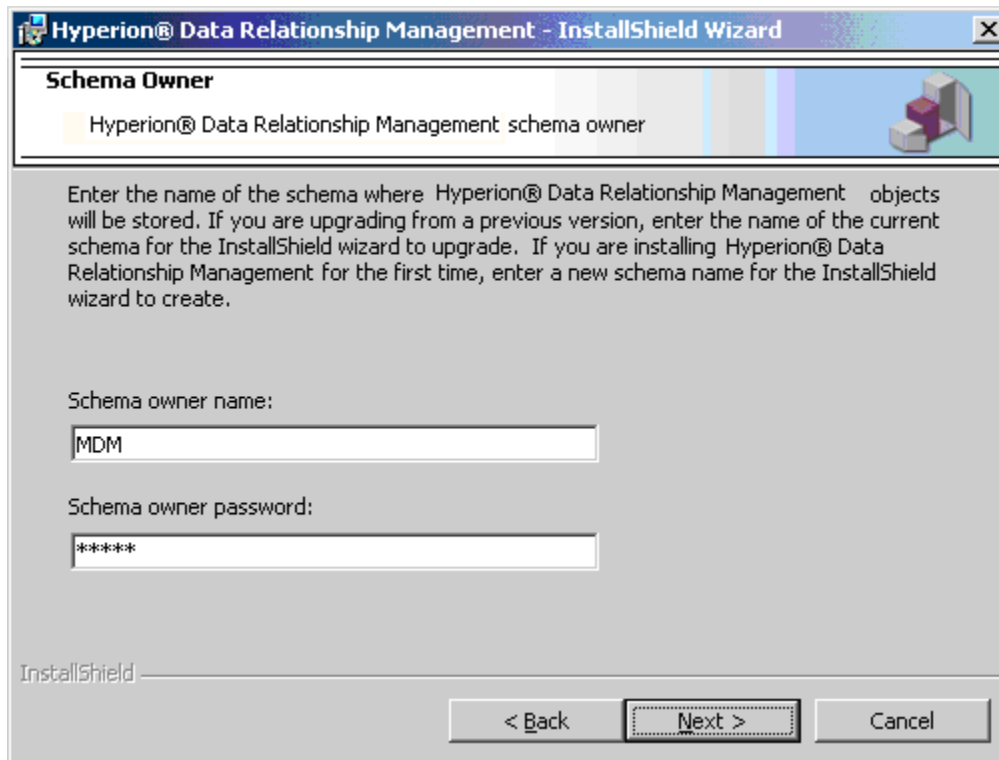
InstallShield

< Back    Next >    Cancel

- 2 Click **Next**.
- 3 Enter the name for the Data Relationship Management schema and a password.

**Note:**

If you are upgrading from a previous version, you can enter the schema name to upgrade.



- 4 Click **Next**.
- 5 If you are creating a schema, enter the path to the MDM\_DATA.ORA and MDM\_INDEX.ORA tablespace files.

**Note:**

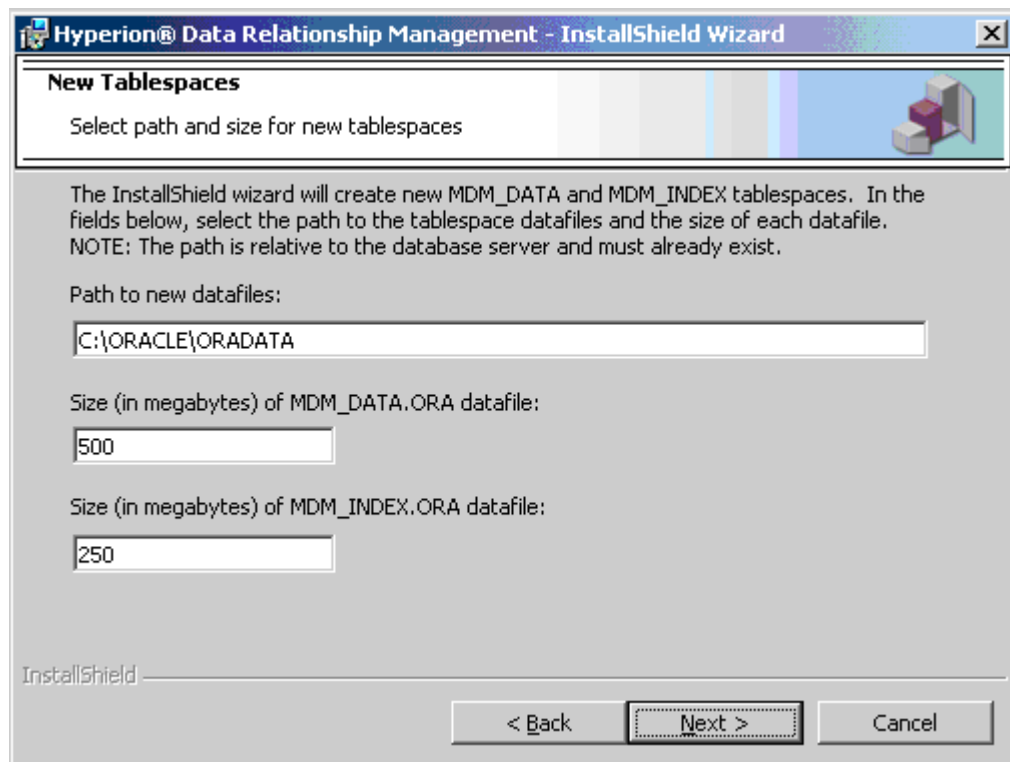
The path is relative to the database server and must exist. Enter the size in megabytes for the data and index tablespaces.

---

**Caution!**

For Oracle 10g, set the tablespace path to *Drive:\oracle\product\10.1.0\oradata\orcl*

---



6 Click **Next**.

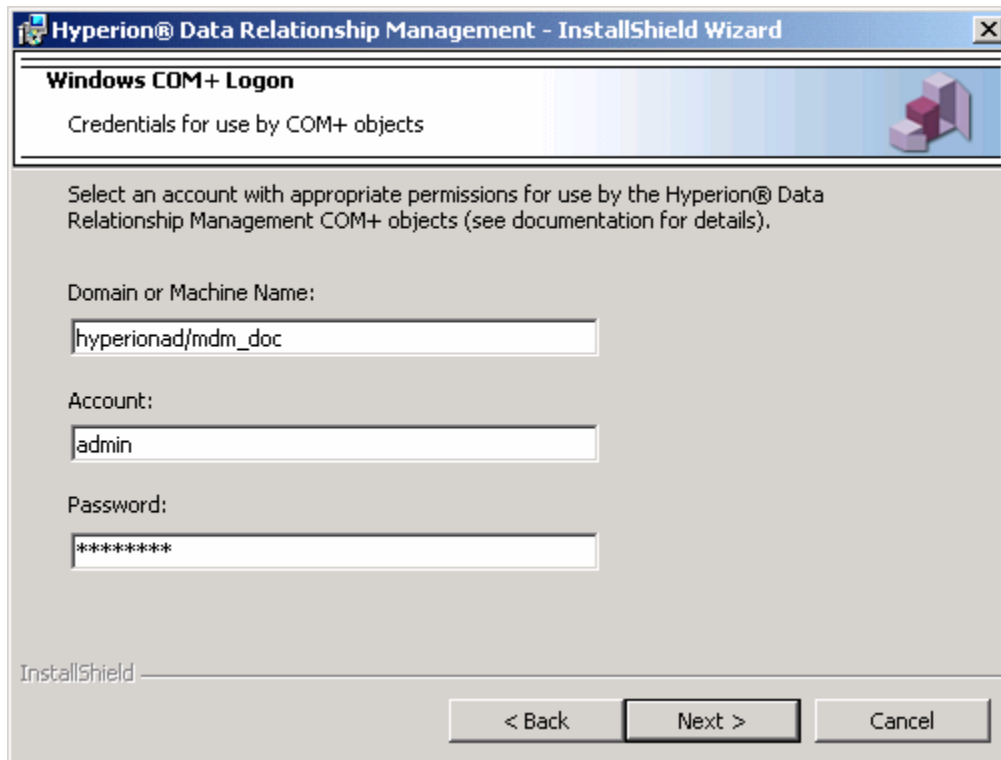
7 On the **Primary Application Server** dialog box, enter the server name and click **Next**.

**Note:**

This dialog box displays only for Custom installations.

8 On the **Windows COM+ Logon** dialog box, enter the domain or machine name and user (for example, hyperionad\msmith) and the account name and password for a user who has rights to perform the following actions:

- Edit registry settings
- Read and write to the local file system
- Launch processes
- Run as a service



- 9 Click **Next**.
- 10 Click **Next** to accept the default directory for Web components, or click **Change** to select an installation directory other than the default, and click **Next**.
- 11 Click **Install**.

**Note:**

You can launch the Data Relationship Management Console after the install completes.

## Manually Running Database Scripts

Based on your local security procedures, creating a new database may require a level of access that is not available to the user installing Data Relationship Management. Thus, during the installation, there is an option to save the database scripts to disk rather than running them automatically. The scripts can then be run separately by the appropriate database administrator.

When the installer runs the database scripts automatically, the user is prompted for database connection information. The installer connects to the database server using the supplied credentials and determines whether an existing database needs to be upgraded or a new database created.

Alternatively, when you save the database scripts to disk, no connection information is needed. In this case, the installer does not attempt to verify whether the database already exists and saves both the upgrade scripts and the scripts for creating a new database. The installer does prompt for information relevant to upgrading and creating the database. However, this information is only used to populate the scripts before they are saved.



## Manually Running SQL Server Scripts

- To create a new Data Relationship Management database using SQL Server:

- 1 Locate the database creation scripts in the Data Relationship Management installation directory.**

The default location is `C:\Hyperion\Master Data Management\Database`

- 2 Log into the database server with database administrator rights.**

- 3 Edit the script `SQL Server Create Database.sql`, update the directory paths for the database files if desired, then execute the script.**

- 4 Execute the script `SQL Server Init.sql`.**

**Note:**

The `SQL Server Init.sql` script attempts to create a database user named `MDM_DB` with password "Welcome!". This step may fail if the password policy in the current environment requires longer or more complex passwords. If this step fails, either edit the script and change the password appropriately or update the password requirements on the local system.

- 5 Log into the database server as the newly created user `mdm_db` (default password "Welcome!") and execute the following scripts in this order:**

- `SQL Server Build.sql`
- `SQL Server Build Stored Procs.sql`
- `SQL Server MDM Role Setup.sql`
- `SQL Server MDM Init.sql`
- `SQL Server Import Table Section Init.sql`
- `SQL Server Set AuthMethod.sql`

After all scripts have been successfully run, open the Data Relationship Management Console and select the Database Settings link. Enter the appropriate value in the database Server Name field and save the changes.

This completes the manual creation of the Data Relationship Management database.

- To upgrade an existing Data Relationship Management database from a previous release using SQL Server:

- 1 Locate the database upgrade scripts in the Data Relationship Management installation directory.**

The default location is `C:\Hyperion\Master Data Management\Database\SQL Server Update Scripts`.

- 2 Log into the database server as the `mdm_db` user.**

- 3 Execute each script to upgrade from the previously installed Data Relationship Management release to the current release.**

For example, if release 9.2 was previously installed, then the following scripts should be run in this order:

- updatesV9.3.sql
- updatesV9.3.1.sql
- updatesV9.3.2.sql

Also, if the Data Relationship Management authentication method was changed since the previous installation, the script `SQL Server Set AuthMethod.sql` can be run to update the database accordingly. Alternatively, this configuration change can be made via the Data Relationship Management Console by changing the option on the System Preferences tab.

This completes the manual update of the Data Relationship Management database.

## Manually Running Oracle Scripts

► To create a new Data Relationship Management database using Oracle:

**1 Locate the database creation scripts in the Data Relationship Management installation directory.**

The default location is `C:\Hyperion\Master Data Management\Database`.

**2 Log into the database server as SYSTEM.**

**3 Edit the script `Oracle Build Tablespaces.sql` and replace the string `[SCHEMA_OWNER_PW]` with the actual schema owner password.**

### Note:

If tablespaces already exist or are going to be created manually by a DBA, skip to step 5.

### Note:

If the tablespaces are going to be named different from `MDM_Data` and `MDM_Index`, then the `Oracle Build.sql` must be edited to reflect the different names.

**4 Execute this script.**

**5 Log into the database server as the newly created schema owner.**

**6 Run the following scripts in this order:**

- `Oracle Build.sql`
- `Oracle Build Global Temp Tables.sql`
- `Oracle Build Sequences.sql`
- `Oracle Build Stored Procs.sql`
- `Oracle MDM Role Setup.sql`
- `Oracle MDM Init.sql`
- `Oracle Import Table Section Init.sql`
- `Oracle Demote Schema Owner.sql`
- `Oracle Set AuthMethod.sql`

After all scripts have been successfully run, open the Data Relationship Management Console and select the Database Settings link. Enter the appropriate value in the Service Name field and save the changes.

This completes the manual creation of the Data Relationship Management database.

- To upgrade an existing Data Relationship Management database from a previous release using Oracle:

- 1 Locate the database upgrade scripts in the Data Relationship Management installation directory.**

The default location is `C:\Hyperion\Master Data Management\Database\Oracle Update Scripts`.

- 2 Log into the database server as the schema owner.**

- 3 Execute each script to upgrade from the previously installed Data Relationship Management release to the current release.**

Also, if the Data Relationship Management authentication method was changed since the previous installation, the script `Oracle Set AuthMethod.sql` can be run to update the database accordingly. Alternatively, this configuration change can be made via the Data Relationship Management Console by choosing the desired option on the System Preferences tab.

This completes the manual update of the Data Relationship Management database.

## Installing Client Components

The Data Relationship Management client installation installs the client application, the Data Relationship Management Batch Client command-line utility used to run processes in batch mode, and the documentation. See the *Hyperion Data Relationship Management User's Guide*.

- To install the Data Relationship Management client components:

- 1 Navigate to the directory where you downloaded the installation program and double-click `mdm_client_setup.exe`.**

- 2 On the **Welcome** dialog box, click **Next**.**

- 3 On the **License Agreement** dialog box, read the license agreement, select **I Agree**, and click **Next**.**

- 4 Click **Next** to accept the default installation directory for Data Relationship Management files, or click **Change** to select an installation directory other than the default and then click **Next**.**

- 5 On the **Setup Type** dialog box, select the type of installation to perform and click **Next**:**

- **Complete**— installs the database server, application server, and Web server components
- **Custom**— allows you to select the server components to install

**Note:**

Client components include the client application, Data Relationship Management Batch Client application, and the documentation.

**6 Do one of the following:**

- If you selected **Complete**, skip to the next step.
- If you selected **Custom**, on the **Custom Setup** dialog box select the features to install and click **Next**.

**7 Click **Install**.**

**8 Click **Finish**.**

**Note:**

You can select to launch the Data Relationship Management client after the install completes.

# 3

## Configuring Data Relationship Management

### In This Chapter

Starting the Data Relationship Management Console.....	29
Monitoring Servers.....	30
Configuring Database Settings.....	34
Configuring Common Security Services.....	36
Configuring Server Setup.....	38
Starting the Service.....	38
Importing Registry Settings.....	39

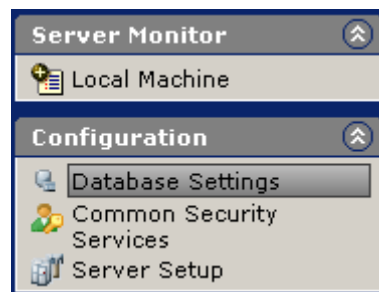
The Data Relationship Management Console is an application server configuration and monitoring tool.

When you install the Data Relationship Management application server component, the Data Relationship Management Console is installed to the server. You can launch the console at the end of the installation program.

### Starting the Data Relationship Management Console

- ▶ To open the Data Relationship Management Console, select **Start > Programs > Hyperion > Data Relationship Management > Data Relationship Management Console**.

The Data Relationship Management Console includes navigation controls in the left side of the user interface.



In the Server Monitor section, you can perform the following actions for the servers listed:

- Start, stop, and view Data Relationship Management Service status

- View server information including operating system, COM+ components, and out of process application information
- View engine status including user sessions, versions, and event queues
- View the event log for Data Relationship Management events

In the Configuration section, you can configure servers, database settings, and Common Security Services (CSS) and import registry settings

**Note:**

Import Registry Settings is only available if you are upgrading from a version of Data Relationship Management prior to 9.0.

## Monitoring Servers

The Server Monitor panel is accessed by selecting a server from the list in the left side of the user interface. The Server Monitor has three tabs:

- System Status
- Activity
- Event Log
- Web Server

### System Status Tab

The System Status tab provides information on the operating system, including total working set memory, Data Relationship Management COM+ applications with version and status, as well as the out of process Data Relationship Management applications with version and working set memory.

**Note:**

Some information is not available unless the service is running.

Operating System

```

operating system : Microsoft(R) Windows(R) Server 2003, Enterprise Edition
service pack : Service Pack 1
computer name : MDMVMKFDSK1
description : MDMVMKFDSK1
current time : 7/23/2007 4:53:42 PM
last bootup time : 7/18/2007 1:40:27 AM
physical memory (K bytes) : 70,564 / 523,724 (free/total)
virtual memory (K bytes) : 556,816 / 1,087,520 (free/total)
processes : 57 / 4,294,967,295 (current/maximum)
max process memory size : 2,097,024
number of users : 5

```

COM+ Applications

Application	Version	Started
MDM Process Manager	9.3.2.32	Yes
MDM Director	9.3.2.32	Yes
MDM Event Manager	9.3.2.32	Yes

Out-of-Process Applications

Process	Version	Working Set ...	Virtual Memc
Hyperion® Data Relationship Management Event Publisher	9.3.2.32	6,676,480	31,055,872
Hyperion® Data Relationship Management Application Server Engin	9.3.2.32	14,602,240	89,059,328
Hyperion® Data Relationship Management Application Server Engin	9.3.2.32	14,209,024	89,120,768

System Status   Activity   Event Log   Web Server

**Note:**

The COM+ applications are started and stopped as needed, so it is not unusual for the Started status to display No.

## Activity Tab

The Activity tab provides information on:

- User sessions
- Engines, including engine type, working set memory used, and process ID
- Loaded versions and items in the event queue for the selected engine

Sessions

User	Logged In Since
MDM_SYSTEM	2/26/2007 1:42:55 PM
MDM_SYSTEM	2/26/2007 3:49:08 PM

2 Session(s)

---

Engines

Machine	Engine type	Working Set Memory	Process ID
local	ReadWrite	167,522,304	4080
local	SRO	121,073,664	4452
local	LRO	61,054,976	4444

Version: 9.3.2.32

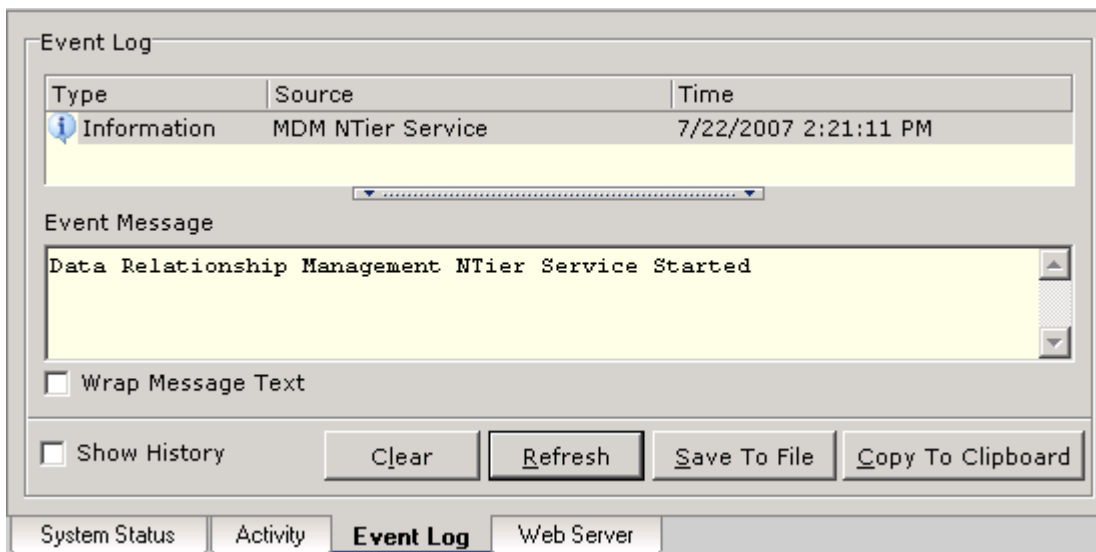
Versions	Events
Carlson Consolidated Master Data Oracle Import Test4	

System Status   **Activity**   Event Log   Web Server

## Event Log Tab

The Event Log tab provides a filtered version of the application event log which includes Data Relationship Management events only. The top section shows the events in a grid format with type, source, and time. The bottom window shows the details for the selected event. You can save or copy the details for each event.





Events that occur after the console is started are displayed by default.

- To reset the starting time to the current time, click **Clear**.
- To view events from the past seven days, select **Show History**.

**Note:**

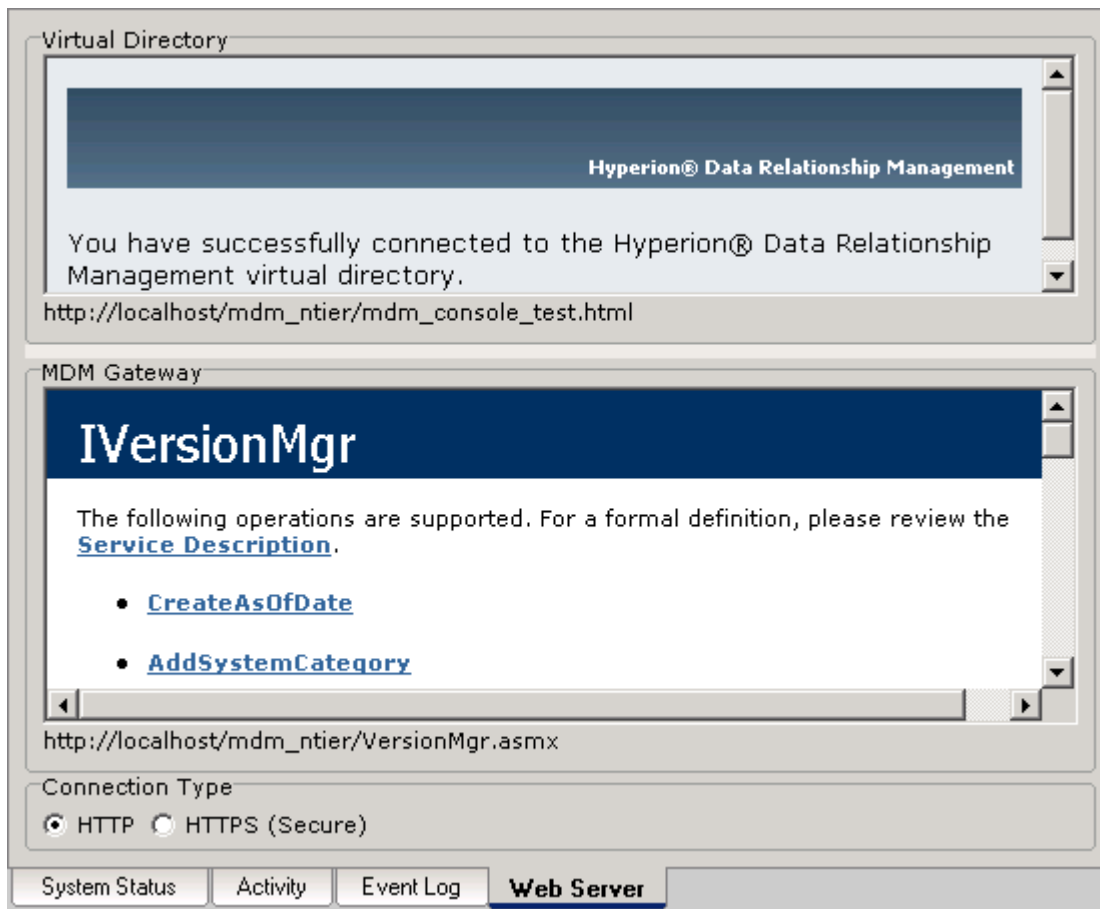
For events from more than seven days ago, use the Windows event viewer.

## Web Server Tab

If the Web server exists on the computer with the application server, a Web Server tab is also displayed. The Web Server tab can be used to troubleshoot connection problems.

- To test the N-Tier virtual directory, it attempts to connect to the following URL:  
`http://localhost/mdm_ntier/mdm_console_test.html`
- To test the access to the Data Relationship Management NTier Gateway Web services, it attempts to connect to the following URL:  
`http://localhost/mdm_ntier/VersionMgr.asmx`

where *localhost* is the Web server name.



## Configuring Database Settings

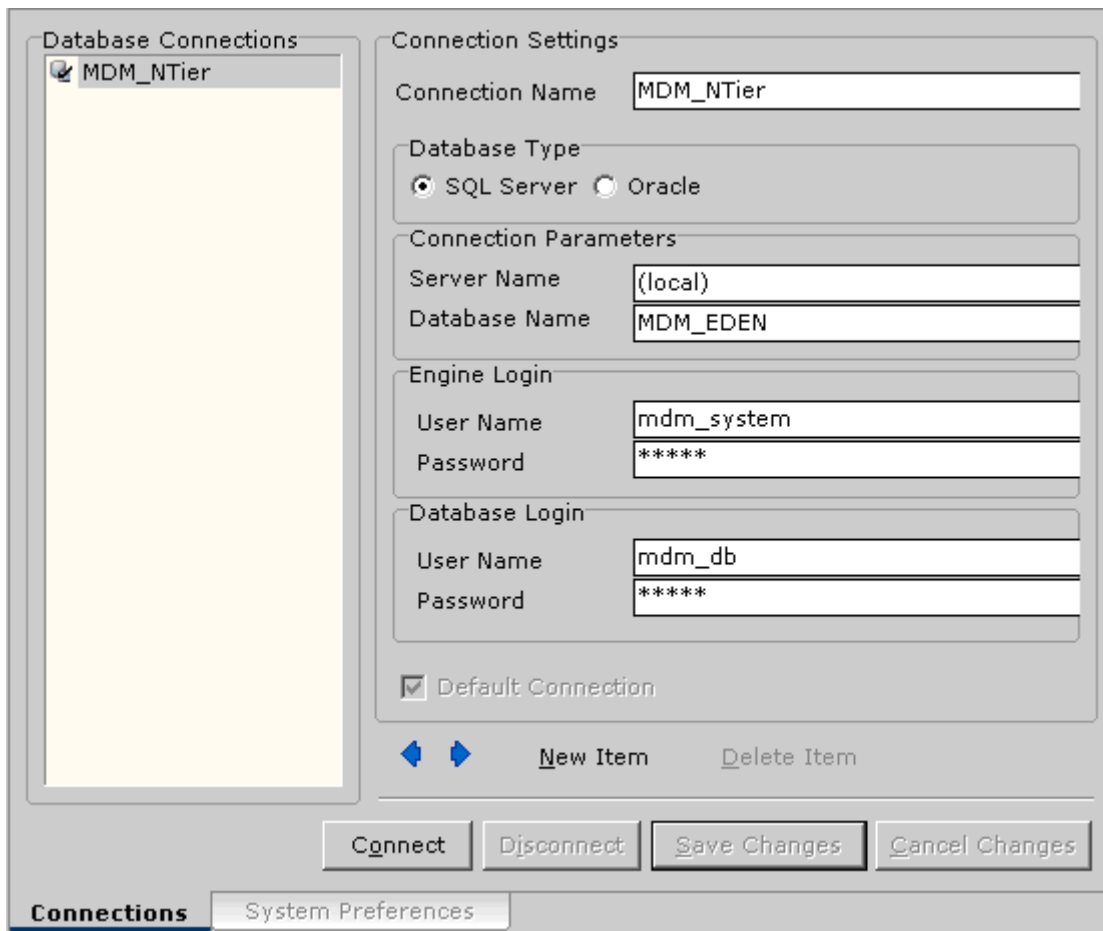
The Database Settings section allows you to configure the information that defines the connection to the database and the logins needed for startup.

Multiple connections can be defined but only the one marked Default Connection is used. This allows you to have multiple connections for testing and easily switch between them by updating the default designation.

After a connection is defined, you can use it to connect to a database. After connecting, the System Preferences tab is available. This tab allows you to edit some system preferences before starting the server. This allows the user to complete the configuration before starting the service.

## Connections Tab

From the Connections tab you can create, edit, and delete connections.



Connection information includes connection name, database type, connection parameters, engine login, database login, and default connection. The database type determines the connection parameters.

The Engine Login is a Data Relationship Management user that is used for the process manager connections. It is also used in the Process Manager tab of the Engine Monitor to gather process level information.

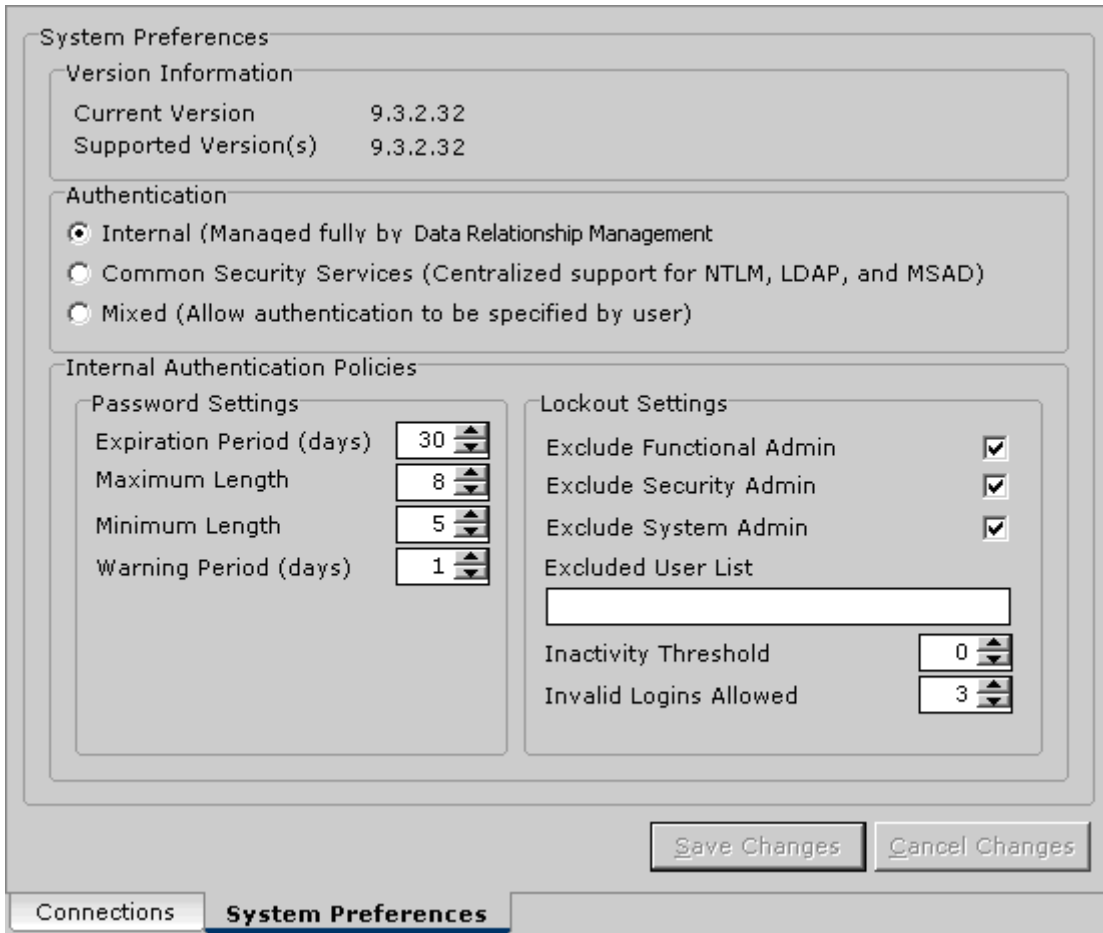
The database login specifies the credentials used to access the Data Relationship Management database. The user must also exist in the Username table of the Data Relationship Management database. You can change the default login (MDM\_DB) in the Data Relationship Management Console. However, the Username table must also be manually updated to reflect the new user.

## System Preferences Tab

The System Preferences tab provides access to some system preferences so you can configure them before starting the service.

In the system preferences panel, you can select the authentication type, modify internal authentication policies and set lockout parameters for users.

- To open the system preferences panel:
  - 1 From the **Connections** tab, select a database connection and click **Connect**.
  - 2 Enter the password for the specified database user.
  - 3 Select the **System Preferences** tab.



## Configuring Common Security Services

The main parameters to be configured in the Common Security Services are the host name and the port for Hyperion Shared Services which contains the Common Security Services to be used for external authentication.

**Note:**

See [“Using External Authentication” on page 9](#) for more information.

You can use the Alternate URL and Use Alternate option to point to a backup CSS server.

The Classpath Root, System Path, and Class Path sections should not be modified without a full understanding of the impact.

---

**Caution!**

If you change the classpath or systempath, you must reboot the computer.

---

**Note:**

After installing Data Relationship Management and attempting to start the service with Common Security Services enabled, you may get an error message in the Event Log such as “unable to create a JVM...”. This indicates that CSS was not fully enabled during installation. Click the Enable CSS button to resolve this issue and restart the service.

Common Security Services

Warning: Changing any of these settings may result in disabling security services. DO NOT EDIT these settings unless instructed to do so by Hyperion Support.

Shared Services

Host Name:  Port:

Alternate URL:

Classpath Root:

Use Alternate

System Path

```
#root\common\CSS\9.3.1\bin
#root\common\JRE\Sun\1.5.0\bin
#root\common\JRE\Sun\1.5.0\bin\client
```

Class Path

```
#local\cssvalidator.jar"
#root\common\CSS\9.3.1\lib\css-9_3_1.jar
#root\common\CSS\9.3.1\lib\ldapbp.jar
#root\SharedServices\9.3.1\client\lib\commons-httpclient-3.0.jar
#root\SharedServices\9.3.1\client\lib\commons-logging.jar
#root\common\XML\JAXM\1.1.1\dom4j.jar
#root\common\XML\JAXP\1.2.2\dom.jar
#root\SharedServices\9.3.1\client\lib\interop-common.jar
#root\SharedServices\9.3.1\client\lib\interop-sdk.jar
#root\SharedServices\9.3.1\client\lib\jakarta-slide-webdavlib.jar
#root\SharedServices\9.3.1\client\lib\commons-codec-1.3.jar
#root\common\XML\JAXM\1.1.1\jaxm-api.jar
#root\common\XML\JAXM\1.1.1\jaxm-runtime.jar
#root\common\XML\JDOM\0.8.0\jdom.jar
#root\common\loggers\Log4j\1.2.14\lib\log4j-1.2.14.jar
#root\common\XML\JAXM\1.1.1\saaj-api.jar
#root\common\XML\JAXM\1.1.1\saaj-ri.jar
```

Enable CSS Save Changes Cancel Changes

## Configuring Server Setup

In the Server Setup panel, you can configure the number of short read-only engines, the servers running additional Data Relationship Management engines, and the servers running Web interfaces to Data Relationship Management.

The default value for the short read-only engines is one and should not be changed unless otherwise directed by Hyperion Support.

In the Engine Servers section, you can configure the number of engine servers to use, the number of instances on each engine server, and the username and password to use to monitor the server.

In the Web Servers section, you can configure the number of Web servers to use and the username and password to use to monitor the server.

The screenshot displays the 'General Settings' configuration window. At the top, 'Total Short Read Only Engines' is set to 1. Below this are two main sections: 'Engine Servers' and 'Web Servers'. Each section has a list of servers on the left and a 'Server Settings' panel on the right. The 'Engine Servers' section shows a single server named 'local' with a 'Maximum Instances' of 5. The 'Web Servers' section shows a single server named 'localhost'. Both 'Server Settings' panels include fields for 'Machine Name', 'Monitor Login' (with 'User Name' and 'Password' sub-fields), and 'Maximum Instances' (set to 5). Navigation buttons for 'New Item' and 'Delete Item' are present below each list. At the bottom of the window are 'Save Changes' and 'Cancel Changes' buttons.


## Starting the Service

You can use the controls at the top of the console to start and stop the service.

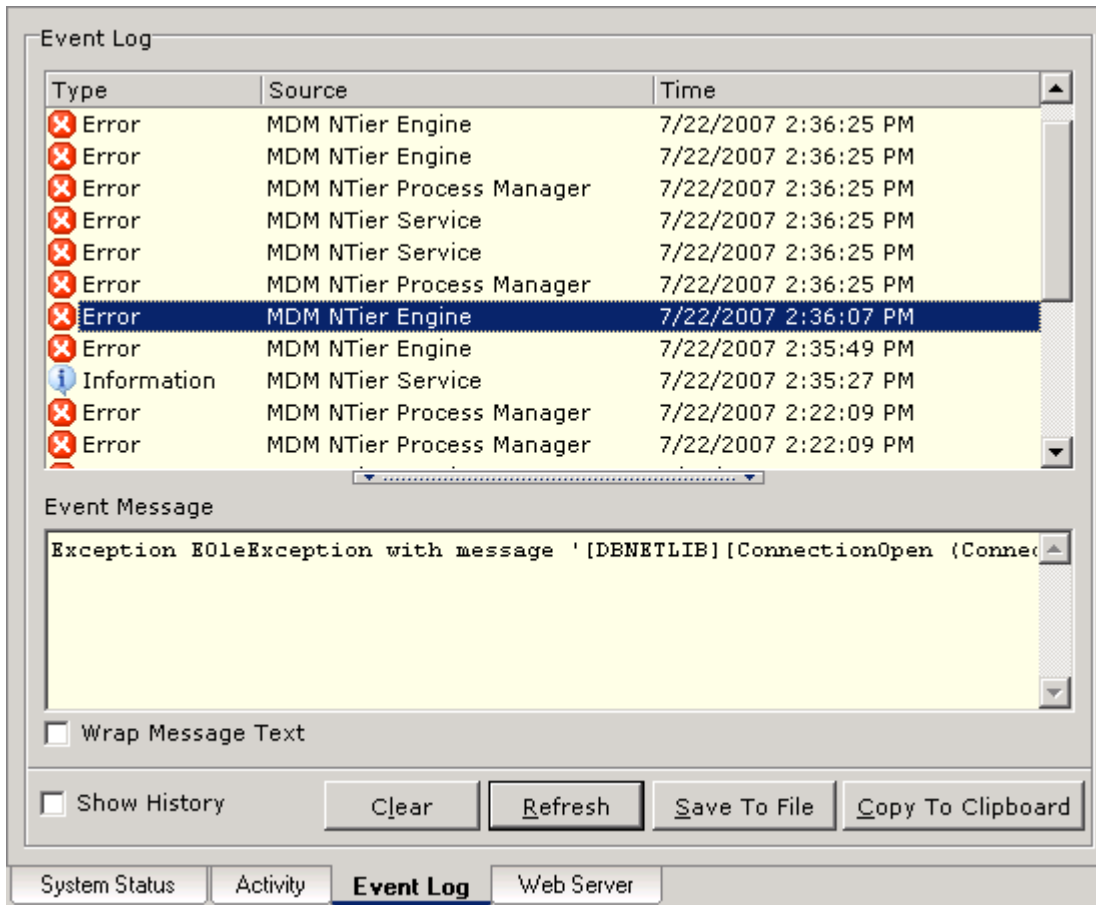


The buttons from left to right are:

- Start service
- Stop service
- Stop and restart the system using the latest configuration
- Stop the service and force all processes to shut down

► To start the service, from the **System Status** tab, click .

If the system does not start, select the **Event Log** tab to determine the cause.



## Importing Registry Settings

You can import information from the registry for prior Data Relationship Management versions and convert it into the format needed for version 9.0 and later. This function should only be used to import the information on the initial upgrade from a version before 9.0.

### Note:

The import registry settings item only displays in the Configuration section if you are upgrading from a version of Data Relationship Management prior to 9.0.





# 4

## Installing Data Relationship Management Web Publishing

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Web Publishing Module Overview .....	41
System Requirements .....	42
System Components.....	43
Installation Process.....	44
Preinstallation Tasks.....	44
Installing Data Relationship Management Web Publishing.....	46

### Web Publishing Module Overview

The Data Relationship Management Web Publishing module provides an auxiliary means of accessing Data Relationship Management system functionality. This application provides the following capabilities through a Web browser interface:

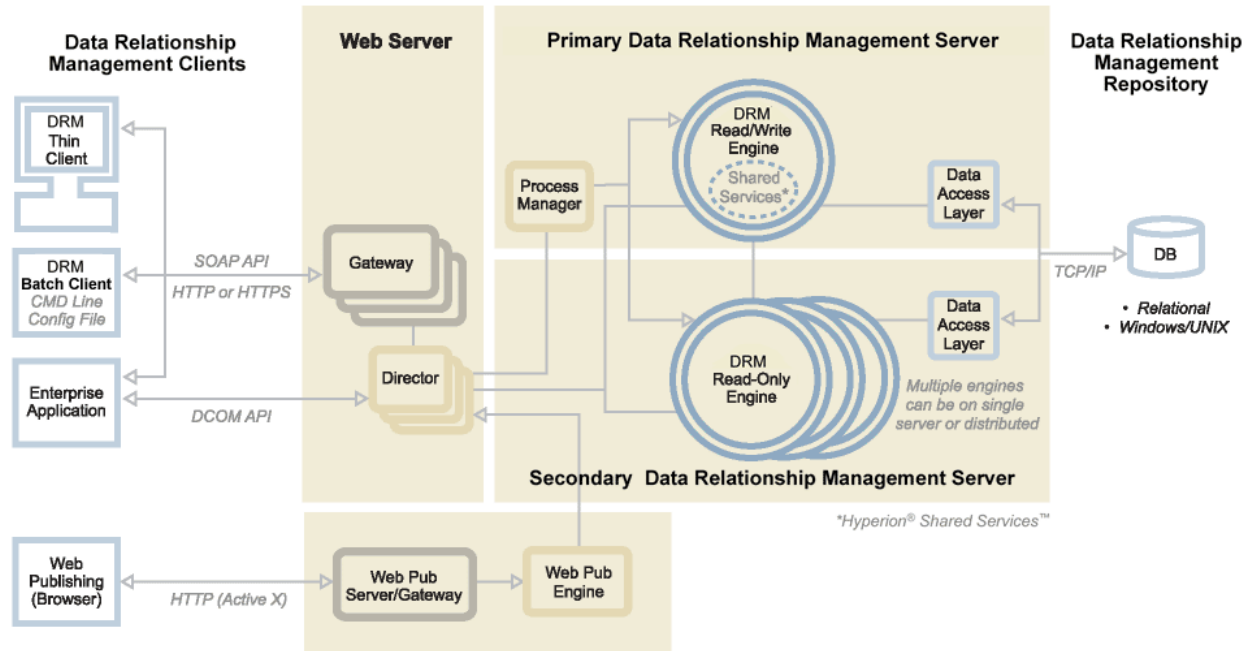
- Viewing hierarchies and node properties
- Running exports
- Printing hierarchy trees
- Searching for nodes in a given hierarchy

Data Relationship Management Web Publishing connects to the Data Relationship Management application server, but operates in a read-only mode. Various requests can be made using HTTP to either retrieve information or execute a command such as running exports or reloading from the database.

[Figure 4](#) provides a top-level view of Data Relationship Management Web Publishing in relation to the Data Relationship Management architecture.

Web Publishing can be run on its own server or hosted on the Data Relationship Management multi-tier Web Server or the primary application server.

Figure 4 Data Relationship Management Web Publishing Architecture



## System Requirements

The following topics describe the Data Relationship Management Web Publishing system requirements for the Web server and the client computers.

### Web Server Requirements

- Windows 2000 Server or Windows Server 2003
- Internet Information Services (IIS) version 5 or later
- Microsoft Data Access Components (MDAC) 2.7 or later (required only for MS SQL.)

#### Note:

Currently Web Publishing does not support SSL.

### Client Computer Requirements

- Windows 2000 or later (ME, 2000, XP, Server 2003)
- Internet Explorer version 5 or later

#### Note:

Data Relationship Management Web Publishing uses an ActiveX control which can only run on the Windows operating systems. While Internet Explorer (IE) can be run on a

Macintosh computer, the Mac cannot run ActiveX controls. Though some versions of Netscape (on Windows) claim ActiveX support, using Data Relationship Management Web Publishing in a Netscape configuration is unsupported at this time.

## System Components

Data Relationship Management Web Publishing consists of the following sets of components.

**Table 4** System Components

File Name	Description
mdm_web_pub_engine.exe	DCOM Web Publishing engine
mdm_web_pub_services_console.exe	Web Publishing console application
mdm_web_publishing.exe	Web Publishing NT service executable
web-pub-config.xml	Web Publishing configuration file

**Note:**

A COM+ application is like an NT service in that it runs behind the scenes with no visible user interface. However, unlike a service, a COM+ application has a public automation interface that allows other applications to communicate with it. There are many configuration options (some of which are outlined later in this document) including the ability to specify a user id/password with which the COM+ application logs in. This provides an extra level of security in that a different set of permissions can be granted to the application id than are available to users who are interactively logged in.

The client components are listed below.

**Table 5** Web Server Components

File Name	Description
default.asp	Web Page housing the Web Publishing ActiveX control
mdm_web_pub_client.ocx	Web Publishing ActiveX control
mdm_web_pub_gateway.dll	ISAPI application that translates the HTTP requests to the Web Publishing Engine.
mdm_web_pub_console_test.html	Test HTML file used by the console to validate connectivity to the Data Relationship Management virtual directory.
Graphics Files	<ul style="list-style-type: none"><li>● hyp_sig_hg_rgb_wht.gif</li><li>● logo.gif</li><li>● logo_sep.gif</li><li>● masthead_top.jpg</li></ul>

File Name	Description
	<ul style="list-style-type: none"> <li>• spacer.gif</li> </ul>

**Table 6** Command Components

File	Description
RegisterWebPubEngine.cmd	Command file to register Web Publishing engine
UnRegisterWebPubEngine.cmd	Command file to unregister Web Publishing engine
RegisterWebPubService.cmd	Command file to register Web Publishing service
UnRegisterWebPubService.cmd	Command file to unregister Web Publishing service

## Installation Process

Installing Data Relationship Management Web Publishing for the first time involves the following tasks:

1. Verify prerequisites
2. Run the installation program
3. Configure Data Relationship Management user for Web Publishing
4. Run the Web Publishing Console to configure and start Web Publishing

## Preinstallation Tasks

---

### Caution!

You must upgrade your installation of Data Relationship Management Server before upgrading the Web Publishing installation.

---

The following topics describe tasks that must be performed before you can install and use Data Relationship Management Web Publishing.

## System Administrator Tasks

Your Data Relationship Management system administrator must complete the following tasks before you can install and use Data Relationship Management Web Publishing:

- Ensure that the Data Relationship Management system Release 9.3 is currently installed and operational.

- Create a new Data Relationship Management user name specifically for accessing Data Relationship Management Web Publishing (for example: `mdm_Web`). Assign the desired access rights to the user.

**Note:**

All Data Relationship Management Web Publishing users access the system through this same user name.

- Since the engine needs access to all paths that might be used for exports, provide a list of these paths to the network administrator. The system preference `WebExDir` controls the directory root for file storage location on the Web Publishing server.
- Configure the appropriate Data Relationship Management system preferences related to Data Relationship Management Web Publishing.

## Network Administrator Tasks

Your network administrator must complete the following tasks before you can install and use Data Relationship Management Web Publishing:

- Create a new network user/application id that the engine can use to log in to the system. This id should have full access rights (including file creation) to any network shares that are designated for Data Relationship Management exports.
- Verify that IE browser policies allow for the use of digitally-signed ActiveX controls. While most Data Relationship Management Web Publishing implementations provide for browser access, some may be used strictly for automating exports. Configuring the browser can be skipped if interactive access is not desired.

## General Tasks

In addition to system administrator and network administrator tasks described in the preceding topics, the following tasks must be performed before you can install and use Data Relationship Management Web Publishing:

- You must manually uninstall prior versions of Data Relationship Management Web Publishing before installing this release of Data Relationship Management Web Publishing.

**Note:**

Refer to the documentation for the prior version for instructions on uninstalling.

- Ensure that the intended host machine(s) meet or exceed the minimum system requirements defined in this document.
- Ensure that the user performing the installation has administrative rights to the Web server machine.
- Ensure that the Data Relationship Management Web Publishing release package is available.

# Installing Data Relationship Management Web Publishing

---

**Caution!**

You must upgrade your installation of Data Relationship Management Server before upgrading the Web Publishing installation.

---

- To install Data Relationship Management Web Publishing:
- 1 Navigate to the directory where you downloaded the installation program and double-click `mdm_web_pub_server_setup.exe`.
  - 2 Review the Welcome box and click **Next**.
  - 3 Read the license agreement, select **I AGREE** and click **Next**.
  - 4 From **Web Publishing Installation Options**, do one of the following:
    - Click **Next** if the computer where you are installing Data Relationship Management Web Publishing is also a Data Relationship Management Web server.
    - Select **Director** if Data Relationship Management Web Publishing is being added to a computer that is not a Data Relationship Management Web server or if it is a standalone server, and click **Next**.

**Note:**

Director uses COM communication to the primary application server.

- 5 Click **Next** to accept the default installation directory, or click **Change** to select another directory and then click **Next**.
- 6 Do one of the following:
  - If you are not installing Director, skip to the next step.
  - If you are installing Director, enter the machine name or IP address of the Data Relationship Management primary application server and click **Next**.
- 7 From **Windows COM+ Logon**, enter a user name and password for a user who has rights to perform the following actions and click **Next**:
  - Edit registry settings
  - Read and write to the local file system
  - Launch processes
  - Run as a service
- 8 Click **Install**.
- 9 **Optional:** After installation completes, you can select **Launch Data Relationship Management Web Publishing Console**.
- 10 Click **Finish**.

# 5

## Configuring Data Relationship Management Web Publishing

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Manually Configuring Data Relationship Management Web Publishing .....	47
Using the Data Relationship Management Web Publishing Console.....	51
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## Manually Configuring Data Relationship Management Web Publishing

Configuration must be completed for the following:

- Data Relationship Management Web Publishing Service
- IIS Virtual Directory/Pool Configuration
- Data Relationship Management Web Publishing Engine
- When installing on a stand-alone server: COM+ Director and Process Manager Proxy Components

### Configuring Data Relationship Management Web Publishing Service

► To configure the service:

- 1 Select **Start > Programs > Administrative Tools > Services**.
- 2 Select the **Hyperion Data Relationship Management Web Publishing** service.
- 3 Right-click the service and select **Properties**.
- 4 On the **General** tab, ensure that **Startup Type** is set to **Automatic**.
- 5 On the **Log On** tab, select **This Account**.
- 6 Enter a username and password for a Windows administrative user.
- 7 Click **OK**.
- 8 Close the **Services** dialog box.

## Configuring Internet Information Services

Depending on the version of IIS that you are using, follow one of these procedures.

► For IIS 5.0:

- 1 Select **Start > Programs > Administrative Tools > Internet Services Manager (or Internet Information Services (IIS) Manager)**.
- 2 Expand to the default Web site.
- 3 Select the `mdm_web` virtual directory.
- 4 Right-click and select **Properties**.
- 5 On the **Virtual Directory** tab, verify the following:
  - a. The **Local Path** is pointing to the Data Relationship Management Web directory.
  - b. The **Read** option is selected.
  - c. **Execute Permissions** is set to **Scripts and Executables**.
  - d. The **Application Protection** is set to **High (Isolated)**.

Selecting this option enables you to unload the `mdm_web` application without restarting IIS.
- 6 On the **Directory Security** tab, enable and configure anonymous access.
- 7 Click **OK**.
- 8 Click **OK**.
- 9 Close the IIS Manager.

► For IIS 6.0 or later:

- 1 Select **Start > Programs > Administrative Tools > Internet Services Manager (or Internet Information Services (IIS) Manager)**.
- 2 Expand to the default Web site.
- 3 Select the `mdm_web` virtual directory.
- 4 Right-click and select **Properties**.
- 5 On the **Virtual Directory** tab, verify the following:
  - a. The **Local Path** is pointing to the Data Relationship Management Web directory.
  - b. The **Read** option is selected.
  - c. **Execute Permissions** is set to **Scripts and Executables**.
  - d. **Application Pool** is **WebPool**.

This setting enables you to unload the `mdm_web` application without restarting IIS.
- 6 Click **OK**.
- 7 Select the **Web Service Extensions** node and select **Active Server Pages** from the list of Web Service Extensions on the right.



- 8 Verify that the **Status** column displays the status **Allowed**.
- 9 Create a new Web service extension named `mdm_web_pub_gateway` that points to `mdm_web_pub_gateway.dll` and is set to **Allowed**.

**Note:**

The default location for `mdm_web_pub_gateway.dll` is: `C:\Inetpub\wwwroot\mdm_web`.

- 10 Close the IIS Manager.

## Verifying System Access

► To verify system access:

- 1 Using your Web browser, go to the following URL:

`http://webservername/mdm_web`

where *webservername* is the Web server computer name.

- 2 At the prompt, select to install the `mdm_web_client` ActiveX control.

**Note:**

This digitally signed control is safe to install. If you are not prompted to install the component, then it may be necessary to adjust the current browser settings to allow download and installation of ActiveX controls.

- 3 Click **OK**.

The Data Relationship Management Web Client page is displayed. No data (versions or hierarchies) is displayed until the service is started at the end of the installation/configuration/startup process.

## Configuring Data Relationship Management Web Publishing Engine

**Note:**

For Windows 2003, start at step 1. For Windows 2000, start at step 4.

► To configure the Web Publishing Engine:

- 1 Select **Start > Administrative Tools > Component Services**.
- 2 Expand the Component Services node to the **DCOM Config** folder.
- 3 In the **DCOM Config** folder, select the `mdm_Web_Pub_Engine` object, right-click and select **Properties**.

- 4 **For Windows 2000 only:** From a command line prompt, type: `dcomcnfg`.
  - a. In the list of applications, select the `mdm_Web_Pub_Engine` object and click **Properties**.
  - b. On the **General** tab, set **Authentication Level** to **None**.
- 5 On the **Identity** tab, select **This User** and enter the same user and password that were configured for the Data Relationship Management Web Publishing Service.
- 6 On the **Security** tab, under **Launch and Activation Permissions**, select **Customize** and click **Edit**.
- 7 Add the user that is configured for IIS anonymous access to the `mdm_web` virtual directory.

**Note:**

This is typically `IUSR_servername`, where `servername` is the host machine name.

- 8 Allow **Local Activation** for this user.
- 9 Repeat this process for the **Access Permissions** section, by selecting **Customize > Edit**, and adding the same user and enabling the **Local Access** permission.
- 10 Click **OK** to close the **Properties** dialog box.

## Configuring Director

If you install on a stand-alone server where Director does not already exist, you must configure the COM+ Director component.


- To configure the COM+ Director component:
- 1 Select **Start > Programs > Administrative Tools > Component Services**.
  - 2 Drill down and select the **Director** component.
  - 3 Right-click and select **Properties**.
  - 4 On the **Security** tab, verify that **Enforce Access Checks for this Application** is not selected.
  - 5 On the **Identity** tab, verify that the appropriate user is setup and then close the **Properties** dialog box.
  - 6 Drill down to the **Components** folder of Director.
  - 7 Select all components by pressing **CTRL-A**, then right-click and select **Properties**.
  - 8 Verify that **Enable Object Pooling** is selected on the **Activation** tab and then close the **Properties** dialog box.
  - 9 Close the **Component Services** window.

## Configuring Process Manager

If you install on a stand-alone server where Process Manager does not already exist, you must configure the COM+ Process Manager Proxy component.

- ▶ To configure the COM+ Process Manager Proxy component:
  - 1 Select **Start > Programs > Administrative Tools > Component Services**.
  - 2 Drill down and select the **Process Manager** component.
  - 3 Right-click the component and select **Properties**.
  - 4 On the **Activation** tab, verify that the remote server is correct.
  - 5 Close the **Component Services** window.

## Starting the Data Relationship Management Web Publishing Service

- ▶ To start the Data Relationship Management Web Publishing Service:
  - 1 In the Data Relationship Management Web Publishing Console, click .
  - 2 Verify that the Data Relationship Management Web Publishing Engine component appears in the bottom panel of the console and that the status is Running in the upper right corner.

### Note:

For more information, see [“Using the Data Relationship Management Web Publishing Console” on page 51](#).

## Using the Data Relationship Management Web Publishing Console

The Data Relationship Management Web Publishing Console is designed to allow configuration, control and monitoring of the Web Publishing system. The Server Monitor Page allows the Web Publishing Service to be controlled (Start, Stop, Restart, Force Shutdown) and displays the current status of the service.

In addition there are three tabs for further information:

- System Status
- Event Log
- Web Server

The System Status tab shows basic operating system information as well as information on COM+ and DCOM (Out of Process) applications. Currently Web Publishing does not use any COM+ so this section is blank.

The Event Log tab filters the application event log to show events for the Web Publishing module. Clicking on an event in the top panel shows the detail for the event in the lower panel. Events shown are filtered to include only events after the console was started. To see historical events

you can check the Show History and click Refresh. Clear resets the filter time to the current date and time.

The Web Server tab provides two browser views to validate access to the Web Server system. The first panel displays the test HTML in the `mdm_web` virtual directory and validates access to the virtual directory for Web Publishing.

The second view tests the Web Publishing Gateway to perform the List Versions command. If the system is up and running, the list of versions available for Web Publishing is displayed.

**Note:**

When stopping and starting services such as IIS, you may need to refresh these views. To refresh, right-click on the view and select Refresh.

You can set the Data Relationship Management username and password for the Web Publishing module on the Configuration page. This user is the Data Relationship Management user that the Web Publishing engine uses to retrieve the data for display on the Web client. Limiting access to this user allows the Web Publishing to be restricted.

**Note:**

It is important that the user specified for Web Publishing be exempt from session timeout. Thus, the system preference `IdleTimeExcludeUsers` should be set to include the name of the user for Web Publishing. If this user is not excluded from session timeout, then the Web Publishing service needs to be restarted each time the user session expires.

## Configuring Data Relationship Management Web Client

Data Relationship Management Web provides a specific set of frequently-used Data Relationship Management functionality in a Web browser. This document assumes that the user is already familiar with the overall Data Relationship Management system, including its terminology and feature set. For more detailed information on any of the features described, please refer to the Data Relationship Management user documentation.

The appearance and behavior of Data Relationship Management Web Publishing can be configured using both System Preferences and embedded parameters.

## System Preferences

The Data Relationship Management system preferences listed below apply to Data Relationship Management Web Publishing usage. These can be configured by a System Administrator within the Data Relationship Management system.

**Table 7 System Preferences**

<b>System Preference</b>	<b>Type</b>	<b>Description</b>
ExcludeFromWebProp	String	Points to a boolean property [Property Abbrev] used to exclude specific nodes from the Web client. If the boolean property is True, then that node does not appear on the Web client. This property needs to be a local inherited property
WebBook	String	Book to indicate what exports are available on the Web client. The specified book must be visible to the Web user.  For standard books, be sure to include the Std: prefix. If no value is supplied or an invalid book name is entered or a book that is not visible to the Web user is entered, then all exports visible to the Web user are available on the Web client.  <b>Note:</b> Do not put a space between the Std: prefix and book name, otherwise it is considered an invalid book as described above.
WebExcludeNodeProps (Web Node Props to Exclude)	String	Comma-separated list of node properties to exclude from the Web client.
WebExDir (Web Export Dir)	String	Default export output directory on Web server.  <b>Note:</b> To specify a directory, it must already exist. If blank, then exports write to C:\.
WebExportFailure TriggerFile	String	* File name that is created if the Web export fails. File is created in the same directory as the export output.
WebExportTrigger	String	* File name that is created upon successful completion of the Web export. File is created in the same directory as the export output.
WebFindFunction	String	Determines the type of Find function to use on the Web client [Basic or Enhanced]. Default is Enhanced.
WebLoadTrigger	String	* Complete file path to trigger file that is created once the Web server refresh is complete.
WebVers (Web App Versions)	Integer	The number of versions to load. Default is 2.
WebVersionList	String	Comma-delimited list of versions to load. This defaults to Default Current Version and Default Previous Version. If populated, the specified versions are loaded in the order listed. If not populated, then the first N versions are loaded based on the value of <i>WebVers</i>

\* Trigger files are used primarily to facilitate automated interaction with the Data Relationship Management Web Server.

## Embedded Parameters

The Oracle's Hyperion® Data Relationship Management Web Publishing user interface can also be configured by parameters embedded within the HTML or ASP page that hosts the interface (for example, Default.asp). The parameters use the following format:

```
<Param Name="ParamName" Value="ParamValue">
```

where *ParamName* is the parameter name and *ParamValue* is the desired value.

The following table describes the available parameters:

**Table 8** Embedded Parameters

Parameter Name	Description
DisableExports	Determines whether the Export tab is available. [True, False]
DisplayBy	Determines how each node in the hierarchy tree is displayed. [Default, Name, Description, DefaultAndDescription]
Hierarchy	Determines the default hierarchy to display. The specified hierarchy is displayed if it exists in the default version (the first in the <i>WebVersionList</i> ). The supplied Hierarchy parameter is used whenever a version is selected.