

# Retek<sup>®</sup> Data Warehouse<sup>™</sup> 11.0

## Middle Tier Installation Guide



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# Contents

<b>Chapter 1 – Introduction .....</b>	<b>1</b>
<b>Chapter 2 –System requirements .....</b>	<b>3</b>
Database and ODBC configurations.....	5
<b>Chapter 3 – MicroStrategy Desktop and MicroStrategy Administrator installation and configuration.....</b>	<b>7</b>
Install MicroStrategy Desktop and MicroStrategy Administrator.....	7
Set up ODBC .....	7
ODBC setup for Oracle .....	8
Create the project source.....	8
Remove unwanted RDW 11.0 Workbenches .....	9
Back up the RDW 11.0 Workbenches .....	10
Update the Warehouse database instance .....	12
Update the Warehouse Catalog Read SQL statement.....	13
Manage users and security .....	13
Authentication mode .....	14
Security roles .....	14
User groups .....	15
Users.....	16
Permissions.....	16
Other important notes .....	17
<b>Chapter 4 – MicroStrategy Intelligence Server installation and configuration.....</b>	<b>19</b>
Installation requirements.....	19
Install MicroStrategy Intelligence Server .....	19
Configure Intelligence Server .....	19
<b>Chapter 5 – MicroStrategy Web Server installation and configuration.....</b>	<b>21</b>
Installation requirements.....	21
Install MicroStrategy Web Server .....	21
Configure MicroStrategy Web Server .....	21

**Chapter 6 – MicroStrategy Desktop Installation and Configuration ..... 23**

    Install MicroStrategy Desktop ..... 23

    Create the project source..... 23

**Appendix A – Time ..... 25**

    Time calendar (4-5-4) ..... 25

    Time calendar (4-5-4/Gregorian)..... 25

    Time calendar (13 period)..... 25

**Appendix B – Item differentiators ..... 29**

    Diff attributes ..... 29

        Creating new diff types ..... 30

        Modifying diff types..... 30

# Chapter 1 – Introduction

Retek Data Warehouse 11.0 is deployed using MicroStrategy 7.5.2 as the front-end tool. This document describes installation steps for MicroStrategy Desktop 7.5.2, MicroStrategy Administrator 7.5.2, MicroStrategy Intelligence Server 7.5.2, and MicroStrategy Web 7.5.2 products for a typical client configuration. For a comprehensive guide to all production system configurations please refer to the MicroStrategy 7i Basic Setup Guide.

We highly recommend that you follow the steps in the order described within the chapters of this document.

RDW recommends the following installation locations:

- MicroStrategy Intelligence Server should be installed on its own dedicated server machine.
- MicroStrategy Web should be installed on its own dedicated Web server machine.
- MicroStrategy Desktop and Administrator should be installed on the machine that is designated for the administrator's use.
- MicroStrategy Desktop should be installed on machines for users who are not administrators, but require the Desktop functionality not available in MicroStrategy Web.
- The rest of the products can be installed in varying combinations depending upon who uses them and on what machines.





## Chapter 2 –System requirements

This chapter describes the system hardware and software requirements to install Microstrategy Intelligence Server 7.5.2, Microstrategy Web 7.2, Microstrategy Desktop 7.5.2, and Microstrategy Administrator 7.5.2. See each of the MicroStrategy 7.5.2 products' readme file for the most up-to-date requirements as well as its certified and supported configurations. For sizing factors, refer to the MicroStrategy 7i Basic Setup Guide.

The following table shows the recommended (and minimum) hardware requirements for MicroStrategy products.

Microstrategy Product	Processor	Memory	Storage
Administrator	<ul style="list-style-type: none"> <li>• 1 GHz or higher</li> <li>• Pentium compatible (minimum 450MHz)</li> </ul>	1 GB (minimum 256 MB)	500 MB
Desktop Products	<ul style="list-style-type: none"> <li>• 1 GHz or higher</li> <li>• Pentium compatible (minimum 600MHz)</li> </ul>	1 GB (minimum 512 MB)	500 MB
Intelligence Server	<ul style="list-style-type: none"> <li>• 1 GHz or higher</li> <li>• Pentium compatible (minimum 600 MHz)</li> </ul>	2 GB (minimum 512 MB)	2 GB (minimum 512 MB)
<b>MicroStrategy Web</b>			
Web Server	<ul style="list-style-type: none"> <li>• 1 GHz or higher</li> <li>• Pentium compatible (minimum 450 MHz)</li> </ul>	1 GB (minimum 512MB)	1 GB (minimum 500 MB)
Web Client	<ul style="list-style-type: none"> <li>• 1 GHz or higher</li> <li>• Pentium compatible (minimum 450 MHz)</li> </ul>	512 MB or higher (minimum 128 MB)	Additional space not required

In addition to the MicroStrategy products listed above, the database server on which your MicroStrategy metadata is hosted should run on a machine with the following minimum configuration:

- Processor: 400 MHz or higher Pentium compatible
- Memory: 256 MB
- Storage: 200 MB

For successful installation of MicroStrategy products, the following product-specific software requirements must be satisfied.

Microstrategy Product	Software Requirements
Microstrategy Administrator	<ul style="list-style-type: none"><li>• Microsoft Windows 2000 SP1 or higher</li><li>• Microsoft Windows 2003 Server Standard Edition or Enterprise Edition</li><li>• Microsoft Windows XP Professional Edition SP1 (not valid for Enterprise Manager)</li></ul>
Desktop Products	<ul style="list-style-type: none"><li>• Internet Explorer 3.01 or higher (Internet Explorer 4.01 to use the Document Editor, Internet Explorer 5.01 is to use the Document Editor with double-byte languages)</li><li>• RealPlayer 8 Basic (installed automatically if not already present)</li></ul>
Microstrategy Intelligence Server	<p>For Windows 2000:</p> <ul style="list-style-type: none"><li>• Windows 2000 Server SP3 or SP4</li><li>• Windows 2000 Advanced Server SP3 or SP4</li><li>• Internet Explorer 5.01 or higher</li></ul> <p>For Windows Server 2003:</p> <ul style="list-style-type: none"><li>• Windows Server 2003 Enterprise Edition</li><li>• Windows Server 2003 Standard Edition</li><li>• Internet Explorer 6.01 or higher</li></ul>
<b>Microstrategy Web</b>	
Web Server	<ul style="list-style-type: none"><li>• Windows 2000 (SP3, SP4) operating system</li><li>• .Net Runtime 1.1</li><li>• Microsoft Internet Information Services 5.0 or 6.0</li></ul>

Microstrategy Product	Software Requirements
Web Client	<ul style="list-style-type: none"> <li>• Windows XP Professional SR1</li> <li>• Windows 2003</li> <li>• Windows 2000 (SP1 and higher)</li> <li>• Microsoft Internet Explorer 6.0 SP1</li> <li>• Microsoft Internet Explorer 5.5 SP2</li> <li>• Microsoft Internet Explorer 5.01 SP2</li> <li>• Netscape 7.1</li> <li>• Netscape Navigator 6.2.3</li> </ul>

## Database and ODBC configurations

MicroStrategy components are 32-bit applications that require 32-bit drivers to achieve ODBC connectivity. The following table shows the recommended ODBC driver for each database platform.

DBMS	Recommended Windows 32-Bit ODBC Driver	Windows Status
IBM DB2 UDB for OS/390 7.1	IBM DB2 ODBC Driver 7.01.00.93 DB2 Connect Enterprise Edition 7.2 Fixpak 11 (WR21333)	MD: Supported WH: Supported
IBM DB2 UDB for iSeries V5R1	Client Access Express V5R1M0 SI10376 (Driver version 8.00.07.00)	WH: Supported
IBM DB2 UDB for iSeries V5R2	iSeries Access V5R2M0 SI10914 (Driver version 9.00.07.00)	WH: Certified
IBM DB2 UDB 7.2 for Windows & UNIX with Fixpak 11	IBM DB2 ODBC Driver 7.01.00.93 DB2 Connect Enterprise Edition 7.2 Fixpak 11 (WR21333) or MicroStrategy ODBC Driver for DB2 Wire Protocol (Evaluation) 4.20.00.80	MD: Supported WH: Supported STATS: Supported
IBM DB2 UDB 8.1 for Windows & UNIX with Fixpak 5	IBM DB2 ODBC Driver 8.01.05.449 DB2 Connect Enterprise Edition 8.1 Fixpak 5 (WR21334) or MicroStrategy ODBC Driver for DB2 Wire Protocol (Evaluation) 4.20.00.80	MD: Certified WH: Certified STATS: Certified
IBM Information Integrator 8.1 (Relational Connect Wrapper)	IBM DB2 ODBC Driver 8.01.05.449 DB2 Connect Enterprise Edition 8.1 Fixpak 5 (WR21334)	WH: Supported
Oracle 8.1.7	MicroStrategy ODBC Driver for Oracle Wire Protocol 4.20.00.70	MD: Supported WH: Supported STATS: Supported
Oracle 9i and 9iR2	MicroStrategy ODBC Driver for Oracle Wire Protocol 4.20.00.70	MD: Certified WH: Certified STATS: Certified

DBMS	Recommended Windows 32-Bit ODBC Driver	Windows Status
Oracle 10g	MicroStrategy ODBC Driver for Oracle Wire Protocol 4.20.00.70	MD: Certified WH: Certified STATS: Certified
Teradata V2R4.1	32-bit Teradata ODBC Driver 3.03.00.02	MD: Supported WH: Supported Statistics:Supported
Teradata V2R5	32-bit Teradata ODBC Driver 3.03.00.02	MD: Certified WH: Certified Statistics: Certified
Teradata V2R5.1	32-bit Teradata ODBC Driver 3.03.00.02	MD: Certified WH: Certified Statistics: Certified

# Chapter 3 – MicroStrategy Desktop and MicroStrategy Administrator installation and configuration

This chapter provides general installation instructions and recommended configuration considerations for MicroStrategy Desktop and MicroStrategy Administrator on the administrator's machine. This chapter also provides the steps necessary to be able to connect to the RDW 11.0 workbenches.

## Install MicroStrategy Desktop and MicroStrategy Administrator



**Note:** For step-by-step guidance on how to install MicroStrategy Desktop and MicroStrategy Administrator, please see the Installation section in Chapter 2 of the MicroStrategy Basic Setup Guide.

When asked what products to install, choose the following components along with their sub-components:

- MicroStrategy Desktop Products
- MicroStrategy Administrator

The following sub-components should be installed with the above products:

- MicroStrategy Desktop Products sub-components:
  - MicroStrategy Desktop Analyst or MicroStrategy Desktop Designer depending on your license agreement with Microstrategy
  - MicroStrategy Architect
  - MicroStrategy Project Builder
  - MicroStrategy Server Administrator
  - RealPlayer
- MicroStrategy Administrator sub-components:
  - MicroStrategy Command Manager
  - MicroStrategy Object Manager
  - MicroStrategy Enterprise Manager

## Set up ODBC



**Note:** For detailed information regarding ODBC Setup, please see ODBC and DSNs in Appendix D of the MicroStrategy 7i Basic Setup Guide.



**Note:** Before an ODBC connection can be established with the database, please make sure the machine has database connectivity to both the metadata repository and warehouse databases as outlined in the RDW 11 Database Installation Guide. Please contact your database administrator for guidance and specifications for these connectivity settings.



**Note:** RDW recommends using the Connectivity Configuration Wizard that comes with MicroStrategy to set up ODBC. You can access this wizard through the Start Menu and then navigating through Programs>MicroStrategy>Tools>Connectivity Configuration Wizard.

### ODBC setup for Oracle

When the Connectivity Configuration Wizard displays the list of database drivers, choose MicroStrategy ODBC Wire Protocol. On the driver setup page, enter the following information in the appropriate boxes for making a connection with the selected database driver. Your database administrator should be able to provide you with the appropriate values.

- **Data Source Name:** Type a string that identifies this Oracle data source configuration in the system information, for example, RDW11.
- **Host Name:** Type the name of the Oracle server to be accessed.
- **SID:** Type the Oracle System Identifier that refers to the instance of Oracle running on the server. The MicroStrategy driver provides a default SID of ORCL.
- **Port Number:** Type the port number of your Oracle listener. Check with your database administrator for the correct number. The MicroStrategy driver provides a default port number of 1521.



**Note:** This guide assumes that you are following the Development Database Schema Implementation outlined in the RDW 11.0 Database Installation Guide. If not, you may have to set up separate ODBC data sources for the metadata repository and the warehouse database.



**Important:** The data warehouse DSN should be consistent with every machine that needs to connect directly to the database. This information is stored in the metadata, and therefore must remain consistent across all users.



**Important Note for French users:** An issue has been logged with Microstrategy, Case # 253570, regarding French characters in the warehouse data not showing up correctly when using the MicroStrategy ODBC Driver for Oracle Wire Protocol for the database instance. A work-around would be to create another ODBC for the database instance using Microsoft ODBC Driver for Oracle. At the same time, the NLS\_LANG value of your Oracle Home in your machine's registry should be set to FRENCH\_FRANCE.UTF8.

## Create the project source

A project source contains the information necessary for MicroStrategy products to connect to the metadata in which your projects are stored. It stores the location of the metadata repository that is used to host the projects.



**Note:** The steps below assume that you have already installed the RDW 11.0 MicroStrategy metadata as outlined in the RDW 11.0 Database Installation Guide.

Complete the following steps to create the project source:

- 1 Launch MicroStrategy Desktop from Start > Programs > MicroStrategy > Desktop > Desktop.
- 2 Cancel out of the initial login screen.
- 3 Select Tools > Project Source Manager from the Desktop menu bar.
- 4 Click **Add**.



**Note:** A project source can be defined for either 2-tier (direct) or 3-tier (server) connection. A 2-tier connection is only required for project duplication. The backing up of the RDW 11.0 workbenches utilizes the MicroStrategy duplication process. Thus, at this point, a 2-tier connection is required.

For 2-tier, or direct connection:

- 5 Enter a Project Source Name (for example RDW 11.0 Data Warehouse – Direct).
- 6 Select Direct for the connection mode.
- 7 Enter the ODBC DSN that you created in the **ODBC Setup** above, and the username and password of the user who has access to the metadata tables (for example, rdw11sys).
- 8 Click **OK**.
- 9 You can now log into the RDW 11.0 project source as the administrator without a password. At this point, you should be able to see the four (4) RDW 11.0 workbenches. This verifies that the connection information is correct. It is highly recommended that a password be added to the administrator user as soon as possible.

## Remove unwanted RDW 11.0 Workbenches

- 1 Right-click on a workbench you did not purchase, then select Delete.
- 2 Repeat for every workbench you did not purchase.

## Back up the RDW 11.0 Workbenches


It is vital at this point to create backups of your workbenches. If something happens to one or more of your workbenches, you should be able to go back and start from these original copies.



**Note:** It is highly recommended that you do not only back up your workbenches during initial installation. You should also establish a backup strategy as you go into production. The steps outlined below can be used to create backup copies of your workbenches at any time.

- 1 From the Schema menu, choose Duplicate Project. The Project Duplication Wizard opens.
- 2 Review the information on the Welcome page and click Next.
- 3 On the Source Project Location page:
  - Select the project source you have created above.
  - Under Authentication, choose ‘With the login id and password provided below’ and then provide the Administrator user id and password.
  - Click Next.
- 4 On the Source Project Selection page, select the RDW workbench to duplicate and click Next.
- 5 On the Duplicate Project Location page:
  - Select the same project source in step 3.
  - Under Authentication, choose ‘With the login id and password provided below’ and then provide the Administrator user id and password.
  - Click Next.
- 6 On the Duplicate Project Creation page, type a name and description for the duplicated project (for example, RDW 11.0 Category Management Backup 12012004) and click Next.
- 7 On the Duplicate Objects Selection page:
  - Under Project objects, choose to duplicate All objects.
  - Under Configuration objects, choose to duplicate All objects.
  - Under Users and user groups, choose to duplicate All users and user groups.
  - Click Next.
  - Click Next.
- 8 On the Process Options page:
  - Accept the default choices.
  - Click Next.



- 9 On the Viewing Options page:
  - Select View event log concurrently to watch the duplication process as it happens.
  - If you choose to view the event log, select Log errors and warnings only or Log all events.
  - Click Next.
- 10 On the Log Options page, select the check boxes for each log you want generated:
  - Under Event log, click Browse to specify the location of the log file. Select the Event types to include in the log.
  - Under Corrupted objects log, click Browse to select the location of the log file.
  - Under Statistics log, click Browse to select the location of the log file.
  - Click Next.
- 11 On the Summary page, review the list of preferences you chose, and click Finish.  
 **Note:** Duplicating a project is a lengthy process. Two progress bars indicate the current status of items transferring to the duplicated project and the time elapsed in the duplication process.
- 12 When the duplication process finishes, click Exit to conclude your activity in the Project Duplication Wizard.
- 13 The Finish page signals that you have successfully created your duplicate project. Click OK to return to the Desktop interface.
- 14 Repeat steps 1 to 13 for each RDW workbench you want to back up.

## Update the Warehouse database instance

The initial MicroStrategy database instance, which is accessed from MicroStrategy Desktop under Administration, Database Instance Manager, must be updated if the username (for example rdw11sys), password, or ODBC DSN name in your environment is different than the RDW default.



**Note:** To avoid connection issues, do not change the name of the MicroStrategy database instance unless completely necessary. Only update the login and DSN information within the object.

Perform the steps below to update the MicroStrategy Database Instance to reflect your environment.

- 1 Launch MicroStrategy Desktop from Start > Programs > MicroStrategy > Desktop > Desktop.
- 2 Log into the project source that contains the RDW 11.0 Workbenches as the Administrator, or as a user with administrator privileges. If this is the first time you are connecting to the project source, use the username “Administrator” with no password. It is recommended that you change this password as soon as possible, for security reasons.
- 3 Open the Administration folder and select the Database Instance Manager.
- 4 Double-click on the database instance object in the right-hand pane. Verify that all of the information displayed is correct.
- 5 Click the Modify button to edit the database connection. Verify that the correct ODBC DSN is being used.



**Important Note for French users:** At this point, if you have created another ODBC DSN that uses Microsoft ODBC for Oracle for the database instance (as mentioned in the **ODBC Setup for Oracle** section above), it should be the one specified on step #5 above.

- 6 Click the Modify button to edit the login ID and password. Verify that the login ID and password are correct.
- 7 Click **OK** on all open dialog boxes.
- 8 You must disconnect from the project source and re-connect in order for any changes to take effect.

## Update the Warehouse Catalog Read SQL statement

The initial Warehouse Catalog SQL statement must be updated if the warehouse tables' owner in your environment is different than the RDW default (for example, rdw11dm).

Perform the following steps to update the Warehouse Catalog Read SQL Statement to reflect your environment.

- 1 Launch MicroStrategy Desktop from Start > Programs > MicroStrategy > Desktop > Desktop.
- 2 Log into the project source that contains the RDW 11.0 Workbenches as the Administrator, or a user with administrator privileges. If this is the first time you are connecting to the project source, use the username "Administrator" with no password. It is recommended that you change this password as soon as possible, for security reasons.
- 3 Select a project and then from the Schema menu, choose SQL Generation Options.
- 4 From the Project Configuration dialog, access the Warehouse Catalog Options dialog box by clicking on the Catalog Options button.
- 5 From the Catalog category on the left pane, click on Read Settings.
- 6 Click on the Settings button located at the right of the text 'Customize the SQL statements that query directly the database catalog tables'.
- 7 Change the warehouse owner by modifying the value of OWNER in the SQL statement shown below. Thus, for example, you can change 'RDW11DM' below to your environment's warehouse owner.

```
SELECT DISTINCT OWNER NAME_SPACE, TABLE_NAME TAB_NAME FROM  
ALL_TAB_COLUMNS WHERE OWNER = 'RDW11DM'
```

- 8 Click Ok to save your changes.

## Manage users and security



**Note:** For more detailed information regarding users, user groups, security roles, permissions and privileges, refer to the MicroStrategy 7i System Administrator Guide.

To manage security within the RDW workbenches, RDW recommends the following approach:

- 1 Specify the authentication mode of a project source.
- 2 Create security roles.
- 3 Create groups.
- 4 Assign security roles to groups.
- 5 Create users.
- 6 Assign users to groups.

### Authentication mode

Standard authentication is the default authentication mode and the simplest to set up. Each user has a unique login and password and can be identified in the MicroStrategy application uniquely. By default, all users connect to the data warehouse using one RDBMS login ID, although you can change this using Connection Mapping. In addition, standard authentication is the only authentication mode that allows a user or system administrator to change or expire MicroStrategy passwords.

To specify the authentication mode for your project source:

- 1 From the MicroStrategy Desktop Tools menu, select Project Source Manager.
- 2 Select the project source and click Modify.
- 3 On the Advanced tab, select Standard.
- 4 Click OK.

### Security roles

Security roles are collections of privileges that can be reused from project to project. Security roles enable you to assign a unique set of privileges to users on a per project basis. Security roles are created and maintained at the project source level and assigned to users at the project level.

The following security roles are provided with RDW by default:

- Administrator – This security role gives administrator privileges to a user or user group, for a given project.
- Architect – This security role gives privileges to create and modify schema level objects to a user or user group, for a given project.
- Power User – This security role gives privileges to create and modify public level objects, to a user or user group, for a given project.
- Normal User – This security role has only the privileges defined in the user or user group. All users are defaulted to normal user unless otherwise specified.

To create your own security roles, follow these steps:

- 1 From the MicroStrategy Desktop Administration menu, select Projects>Project Configuration.
- 2 Select Project Access, General, and View. The Security Roles dialog box opens.
- 3 Click New. The Security Role Editor opens.
- 4 Type a name and description for the security role.
- 5 Select the privileges you wish to include in the security role from the Available privileges list.
- 6 Click OK to create the security role. You are returned to the Security Roles dialog box.
- 7 Click OK. You are returned to the Project Configuration Editor. The security role is now available for you to use.
- 8 Click OK.

## User groups

A *user group* is simply a collection of users. Groups provide a convenient way to manage a large number of users. Instead of assigning privileges, such as the ability to create reports, to hundreds of users individually, you may assign privileges to a group. Groups may also be assigned permissions to objects, such as the ability to add reports to a particular folder.

The following user groups are provided with RDW by default:

- MicroStrategy Web Reporter – This user group has privileges to search, change user preferences, print, change view mode, drill, sort, view history list, and run reports in RDW Web.
- MicroStrategy Web Analyst – This user group inherits the Web Reporter privileges and can create new reports, delete objects, export, pivot, save reports, and drill to template in RDW web.
- MicroStrategy Web Professional – This user group inherits the Web Analyst privileges and can format grid and graph, re-execute the report, view the report SQL, and save templates and filters in RDW Web.
- MicroStrategy Desktop Reporter – This user group inherits the Web Professional privileges and can create, save, and modify report objects, such as reports, templates, filters, and metrics, within its own profile.
- System Monitors – While this group does not have any project level inherited privileges, all users in this group have view privileges to the administration folders. These folders monitor the warehouse, connections, users, and cache settings within the repository.
- Developers – This user group inherits the System Monitors privileges and has all Web privileges and all Desktop Designer privileges. Users in this group can open and view information in schema-level editors as well as create, save, and modify all types public of objects. Only Desktop power users should be placed in this group.
- System Administrator – This group inherits all of the privileges of the project administrator. Only the Administrator and Web Administrator should be part of this group.

To create your own groups and assign privileges to each group:

- 1 From the MicroStrategy Desktop Folder List, expand Administration and select User Manager.
- 2 To create a new group, go to the File menu, select New, and then Group. To modify an existing group, right-click the group you wish to modify and select Edit.
- 3 On the Project Access tab, in the Security Role Selection drop-down list for a project, select the security role to be applied to the selected user or group. You may also select Custom to apply multiple security roles (the Project Access dialog box opens).
- 4 You can select a check box for an individual privilege to override those assigned to the user by the selected security roles. This override applies to all projects displayed.
- 5 Click OK to save the privileges.

### Users

Users are defined in the MicroStrategy metadata and exist across projects. You do not have to define users for every project you create in a single metadata repository.

The following user is provided with RDW by default:

- Administrator – This is the project administrator for both MicroStrategy Desktop and MicroStrategy Web. This user bypasses all object level security.

To create your own users and assign them to groups:

- 1 From the MicroStrategy Desktop Folder List, expand Administration, and select User Manager.
- 2 Expand User Manager, and select the group directly under User Manager in which you wish to create a user.
- 3 From the File menu, select New, then User. The User Editor opens.



**Note:** If only Group appears as an option, it is because you selected the group on the right-hand side of Desktop, and not the group name under the Folder List side of Desktop. You must select the group name on the left side of Desktop for User to appear as an option.

- 4 Enter the appropriate information on the General tab.
- 5 On the Groups tab, select the group(s) to which the user belongs.
- 6 On the Authentication tab, enter the user's Login ID or user name (and password for the Warehouse Passthrough) that links them to the authentication system.
- 7 Click OK to save the user.

### Permissions

Privileges are assigned to users (either individually, through groups, or with security roles), but *permissions* are assigned to objects. More precisely, each object has an Access Control List (ACL) that specifies which permissions various users have on that object. For example, in the case of a report, a user may have the permission to view the report definition and execute the report, but may not have the permission to modify the report definition or delete the report.

To modify an object's access control list:

- 1 In the desired project within the MicroStrategy Desktop Folder List, locate and select the object whose access control list you wish to modify.
- 2 From the File menu, select Properties. The Properties dialog box opens.
- 3 Make modifications to the access control list in the Security tab. Click Add to add a new user or group to the list. Click Delete to remove a user or group from the list.
- 4 Click OK to save the settings.

## Other important notes

- RDW 11.0 supports retail 4-5-4, combined 4-5-4/Gregorian, or 13 period calendar. You can choose which calendar to use during database installation. The default calendar is retail 4-5-4. To implement either combined 4-5-4/Gregorian or 13 period, see Appendix A of this document.
- In RDW 11.0, Differentiator Types are hard-coded within the attribute names. See Appendix B for detailed information regarding adding or modifying of these attributes.





# Chapter 4 – MicroStrategy Intelligence Server installation and configuration

This chapter provides general installation instructions and recommended configuration considerations for MicroStrategy Intelligence Server on a separate machine.

## Installation requirements

Installation of the MicroStrategy Intelligence server requires network connectivity. For assistance with this step, refer to the Microsoft Server installation documentation. Contact your system administrator for proper network access.

## Install MicroStrategy Intelligence Server

For step-by-step guidance on how to install MicroStrategy Intelligence Server, see the Installation section of Chapter 2 in the MicroStrategy 7i Basic Setup Guide.

When asked what products to install, choose MicroStrategy Intelligence Server.

## Configure Intelligence Server

For more information regarding the configuration of MicroStrategy Intelligence Server, please refer to the ‘Setup MicroStrategy Intelligence Server section’ in Chapter 3 of the MicroStrategy 7i Basic Setup Guide.

- 1 Once the MicroStrategy 7 Intelligence Server is installed, select the Configuration Wizard from the Start > Programs > MicroStrategy 7 menu on the Intelligence Server machine.
- 2 Select Set up MicroStrategy Intelligence Server. Click **Next**.
- 3 Select the metadata ODBC DSN (that you have previously created) from the drop-down menu. Enter the RDW system username and password (for example rdw11sys).
- 4 Enter the MicroStrategy username and password that you will use to connect to the Metadata Repository. If this is the first time you are connecting to the Metadata Repository, use the username “Administrator” with no password. It is recommended that you change this password later for security reasons.
- 5 Enter a Server Definition Name and select Create New Server Definition. Click **Next**.
- 6 Select the workbenches that you wish to register, or make available via the Intelligence Server. Click **Next**.



**Note:** If you have created backup copies of the RDW workbenches, it is recommended that you do not register these workbenches, so users connecting through 3-tier do not inadvertently modify these projects. It is assumed that only the administrator connects through 2-tier and thus is the only one who has access to the unregistered workbenches.

- 7 Click **Finish**.
- 8 Start the Intelligence Server service, if it does not start automatically. The MicroStrategy Service Manager is launched from the Start Menu by navigating through Programs>MicroStrategy>Tools > Service Manager.



# Chapter 5 – MicroStrategy Web Server installation and configuration

This chapter provides general installation instructions and recommended configuration considerations for MicroStrategy Web Server on a separate machine that has Microsoft Internet Information Services (IIS) installed.

## Installation requirements

- Installation of the MicroStrategy Web Server requires network connectivity. For assistance with this step, refer to the Microsoft Server installation documentation. Contact your System Administrator for proper network access.
- You must have administrative privileges to deploy using MicroStrategy Web. If this is the first time you are logging in and have not changed the default MicroStrategy administrative login, then you can use Administrator as the login with no password. After the first time, the user name and password should be changed for security purposes.

## Install MicroStrategy Web Server

For step-by-step guidance on how to install MicroStrategy Web Server, please refer to Chapter 2, Installation section of the MicroStrategy 7i Basic Setup Guide.

When asked what products to install, choose MicroStrategy Web, ASP.Net version along with its selected sub-components below:

- MicroStrategy Web Server (ASP.NET)
- Microstrategy Web Analyst, MicroStrategy Web Professional or MicroStrategy Web Reporter, depending on your license agreement with Microstrategy

## Configure MicroStrategy Web Server



**Note:** For more information about configuring and tuning MicroStrategy Web, see the MicroStrategy System Administration Guide.

Deploying with MicroStrategy Web requires you to connect MicroStrategy Web to your Intelligence Server by performing the following steps:

- 1 On the machine where MicroStrategy Web is installed (your Web server machine), on the Windows Start menu point to Programs, then to MicroStrategy, then to Web, and then choose Web Administrator.
- 2 The Web Administrator page opens. This is the page where you connect MicroStrategy Web to the Intelligence Server.
- 3 Enter the name of your Intelligence Server in the “Add a server manually” box on the Web Administrator page.
- 4 Click Connect. Any projects registered with the Intelligence Server specified are now available from MicroStrategy Web. Click the Home icon (in the upper left corner of the Web Administrator page) to see the list of projects registered with the Intelligence Server you specified.

- 5 Send your users the URL, which is:

`http://webservername/microstrategy/asp/`

where webservername is the name of the machine hosting your Web server. For example, if the name of your Web server machine is Web\_Srv1, then the URL your users would use to access MicroStrategy Web would be

`http://Web_Srv1/microstrategy/asp`

# Chapter 6 – MicroStrategy Desktop Installation and Configuration

This chapter provides MicroStrategy Desktop general installation instructions and recommended configuration for users that are not administrators, but require the Desktop functionality not available in MicroStrategy Web.

## Install MicroStrategy Desktop

For step-by-step guidance on how to install MicroStrategy Desktop, please refer to Chapter 2, Installation section of the MicroStrategy Basic Setup Guide.

When asked what products to install, choose MicroStrategy Desktop along with its selected sub-components below:

- MicroStrategy Desktop Analyst or MicroStrategy Desktop Designer depending on your license agreement with Microstrategy
- MicroStrategy Architect
- RealPlayer



**Note:** Non-administrator MicroStrategy Desktop users connect through a 3-tier or server connection and do not need to set up ODBC.

## Create the project source

A project source contains the information necessary for MicroStrategy products to connect to the metadata in which your projects are stored. It stores the location of the metadata repository that is used to host the projects.

Complete the following steps to create the project source:

- 1 Launch MicroStrategy Desktop from Start > Programs > MicroStrategy> Desktop>Desktop.
- 2 Select Tools > Project Source Manager from the Desktop menu bar.
- 3 Click **Add**.
- 4 Enter a Project Source Name (for example RDW 11.0 Data Warehouse).
- 5 Select Server for the connection mode.
- 6 Enter the server machine name where Intelligence Server is running.



**Note:** This is the machine name of the server, not the Intelligence Server definition name.

- 7 Click **OK**.



# Appendix A – Time

## Time calendar (4-5-4)

RDW provides support for the retail 4-5-4 calendar. The fiscal 4-5-4 calendar is the calendar supported by RMS and other Retek applications and is populated in RDW via an extract from RMS. The 4-5-4 calendar is the default calendar used when viewing the time dimension via the MicroStrategy middle tier layer of RDW.



**Note:** Even if 4-5-4 is the default calendar for RDW, you can still see the Gregorian Time attributes and transformations from within MicroStrategy. However, you can only utilize these objects if you have opted for Gregorian calendar during database installation.

## Time calendar (4-5-4/Gregorian)

RDW also provides support for the combined 4-5-4 calendar/Gregorian calendar. If a client chooses to use the combined 4-5-4/Gregorian calendar, the client must execute the batch program that generates the text files needed to populate the Gregorian time dimension.



**Note:** In order to update RDW to report in combined 4-5-4/Gregorian calendar, please see section B ‘Create Time in RDW’ of the RDW 11.0 Database Installation Guide for specific instructions. Nothing needs to be modified within MicroStrategy.

## Time calendar (13 period)

The 13-Period calendar can also be used, but RMS does not support it. If a client chooses to use the 13-Period calendar, the client can either provide a flat file with its 13-period time, or utilize a sample 13-period time flat file, and then ETL scripts populate the time dimension with this file during RDW installation. Within the middle-tier application, all references to Month must be manually updated to Period, to comply with the 13 period nomenclature.



**Note:** In order to update RDW to report in 13 period time, follow these steps:

- 1 Update the time dimension tables. (For complete instructions, reference the RDW 11.0 Database Installation Guide.)
- 2 Within the metadata, delete the attribute Half Year, and re-name the objects referencing month.
  - Highlighting the object and pressing the delete key deletes the attribute Half Year. All relationships and hierarchies are automatically updated. The table TIME\_HALF\_DM can also be deleted the same way. A full schema update is required after this step, which can be done from the Schema drop down menu. Only a user with administrator privileges will be able to remove attributes and perform a schema update.
  - Each metadata object can be re-named by selecting the object and pressing F2. A full schema update is required after any changes to objects within the Schema Objects folder. Only a user with administrator privileges will be able to re-name these objects and perform a schema update.

The following is a list of objects that would be re-named for 13 period time.

Object Name	Object Type
Market Measures (Last Month)	Folder
Sales (Last Month)	Folder
Month	Attribute
Last Month	Attribute
No of Months	Base Formula
Month	Expression Prompt
Last Month	Filter
This Month	Filter
This Month's Days	Filter
Monthly Performance Trend (A)	Report
Cashier Monthly Performance (A)	Report
Salesperson Monthly Performance (A)	Report
Weekly Sales to Date (Loc, Month, Week) (A)	Report
Monthly Performance Trend (A)	Template
Cashier Monthly Performance (A)	Template
Salesperson Monthly Performance (A)	Template
Weekly Sales to Date (Loc, Month, Week) (A)	Template
Year, Month, Week, Day	Hierarchy
Year, Month	Hierarchy
Year, Month, Week	Hierarchy
Year, Season, Month, Week, Day	Hierarchy
% Change Sales Value vs Last Month	Metric
Sales Value (Last Month)	Metric
% Change Sales Units vs Last Month	Metric
% Change No of Sales Transactions vs Last Month	Metric
Avg Frequency per Month	Metric
Sales Units (Last Month)	Metric
No of Sales Transactions (Last Month)	Metric
% of Days Out of Stock to Month	Metric
No of Months	Metric
% Change in Dead Net Cost vs Last Month	Metric



Object Name	Object Type
% Change in Net Cost vs Last Month	Metric
% Change Base Cost vs Last Month	Metric
% Change Market Sales Value vs Last Month	Metric
Variance No of Sales Transactions vs Last Month	Metric
% Change in Net Net Cost vs Last Month	Metric
Variance Sales Units vs Last Month	Metric
Variance Sales Value vs Last Month	Metric
Difference in Net Net Cost vs Last Month	Metric
Market Sales Units (Last Month)	Metric
Dead Net Cost (Last Month)	Metric
Market Sales Value (Last Month)	Metric
Market Sales Value (Month)	Metric
Difference in Net Cost vs Last Month	Metric
Difference in Base Cost vs Last Month	Metric
Difference in Dead Net Cost vs Last Month	Metric
No of Days (Month)	Metric
Net Cost (Last Month)	Metric
Avg Profit per Month	Metric
Net Net Cost (Last Month)	Metric
Base Cost (Last Month)	Metric
Avg Sales Value per Month	Metric
Month to Date	Transformation
Last Month	Transformation



## Appendix B – Item differentiators

### Diff attributes

As part of the RDW install, the first five diff types are hard-coded, in both the DIFF\_TYPE\_DM look-up table and in the names of the attributes that point to them. This matches the initial set of pre-defined diff types that are provided within the Retek Merchandising System. This will leave the remaining diff types, and their corresponding attributes, to be defined at the client's discretion at a later date.

The following is a list of differentiators:

DIFF_TYPE_KEY	Attribute Name
1	Size
2	Color
3	Flavor
4	Scent
5	Pattern
6	Diff 6
7	Diff 7
8	Diff 8
9	Diff 9
10	Diff 10
11	Diff 11
12	Diff 12
13	Diff 13
14	Diff 14
15	Diff 15
16	Diff 16
17	Diff 17
18	Diff 18
19	Diff 19
20	Diff 20
21	Diff 21
22	Diff 22
23	Diff 23

DIFF_TYPE_KEY	Attribute Name
24	Diff 24
25	Diff 25
26	Diff 26
27	Diff 27
28	Diff 28
29	Diff 29
30	Diff 30

### Creating new diff types

With each additional diff type that is added to the merchandising system, the attribute name, within RDW, can be updated to more suitably match the name of the new diff type. This is done by completing the following steps.

Attribute Name Update:

- 1 Open the Schema Objects\Attributes\Differentiators folder.
- 2 Select the desired attribute. The first time, this will be Diff 6.
- 3 Press F2 and type the new name over the existing name.
- 4 Once completed, choose Update Schema from the Schema drop-down menu to update the project.

### Modifying diff types

Functionality exists within the merchandising system to modify existing diff types. This can be done by either changing the description of the diff type (for example, change the diff type “Size” to “Fashion Size”) or by deleting the diff type altogether.



**Note:** All of the 30 possible diff types have already been defined as attributes in RDW, regardless of whether they exist yet in the merchandising system. These attributes are generically named with the number corresponding to the DIFF\_TYPE\_KEY, as annotated in the table above.

When the description is changed within the merchandising system, the batch process updates the description column within the PROD\_DIFF\_TYPE\_DM table to match this new description. The attribute name within the MicroStrategy project must be updated manually by completing the attribute name update steps above.

When deleting a diff type within the merchandising system, the batch process updates the description column within the PROD\_DIFF\_TYPE\_DM table to ‘NULL’. The attribute name within the MicroStrategy project must be updated manually to the generic name corresponding to the DIFF\_TYPE\_KEY, by completing the attribute name update steps above. For example, if Color was deleted, the system updates the name of the Color attribute to DIFF 2.