

# Relativity Data Server 2.1

Micro Focus The Lawn 22-30 Old Bath Road Newbury, Berkshire RG14 1QN UK http://www.microfocus.com

Copyright <sup>©</sup> Micro Focus 2009-2016. All rights reserved.

MICRO FOCUS, the Micro Focus logo and Relativity Data Server 2.1 are trademarks or registered trademarks of Micro Focus IP Development Limited or its subsidiaries or affiliated companies in the United States, United Kingdom and other countries.

All other marks are the property of their respective owners.

2016-06-29

# **Contents**

Introduction	4
Product description	5
What's New	6
Resolved Issues	7
Installation	8
System requirements	
Hardware requirements	
Operating systems supported	
Software requirements	
Additional software requirements	9
Downloading the product	
Restrictions and requirements	9
Installing Relativity Data Server	10
What to install	10
Data Server installation	10
Data Client installation	
Java Client installation	
Installation verification	
Data Server verification	
Data Client verification	
Locating the ODBC Administrator	
Locating the ODBC Administrator on Windows 7 32-bit	
Locating the 32-bit ODBC Administrator on Windows 7 64-bit	17
Locating the 64-bit ODBC Administrator on Windows 7 64-bit	
Post-installation considerations	
Location of data files	
Uninstalling	
Licensing information	
To start Micro Focus License Administration	
Installing licenses	
If you have a license file	
If you have an authorization code	
Updates and SupportLine	
Further Information and Product Support	
Information We Need	_
Creating Debug Files	
Dicalaimar	7) [

# Introduction

These release notes contain information that might not appear in the Help. Read them in their entirety before you install the product.



Note: This document may contain a number of links to external Web sites. Micro Focus cannot be responsible for the contents of the Web site or for the contents of any site to which it might link. Web sites by their nature can change very rapidly and although we try to keep our links up-to-date, we cannot guarantee that they will always work as expected.

# **Product description**

Relativity 2.1 enables the construction of a true relational database using existing COBOL application data. It provides a full-featured, Windows Open Services Architecture (WOSA), Open Database Connectivity (ODBC)-compliant relational database engine. Thus, Relativity allows SQL-based client access to COBOL application data without moving, converting, replicating, or re-engineering COBOL data files.

With Relativity providing SQL-based access to COBOL data files, any ODBC-enabled client/server development application or tool can be chosen to build applications for decision support, and specialized data processing functions. Relativity enables any working application to benefit from client/server technology without rewriting or migrating that application.

Relativity is available in the following forms:

#### **Designer Suite**

The Relativity Designer Suite is a Windows-only development tool which enables you to create Relativity databases. The Suite consists of the following components - the Designer, the Database Administrator, and the Data Manager.

You can import COBOL file record definitions into the database, and then create tables based on those record definitions.

Use the Database Administrator to maintain such things as the table connections, date constants, and character sets used in a Relativity database.

#### **Relativity for Windows Workstations**

Relativity for Windows Workstations is Windows-only run-time product and is a single-tier solution required when your ODBC application and COBOL data files reside on the same machine, and the ODBC application is a 32-bit program. Relativity for Windows Workstations requires a Relativity database that was developed using the Designer Suite.

Relativity for Windows Workstations contains the following components - Database Administrator and the Data Manager.

Use the Database Administrator to maintain such things as the table connections, date constants, and character sets used in a Relativity database.

#### **Data Server**

The Relativity Data Server is a run-time product which contains the Data Server for a specific platform (Windows or UNIX), and also a platform-specific Data Client.

It is a client/server solution required when your ODBC application is required to access COBOL data files that reside on another machine, or when your ODBC application is a 64-bit program. The Relativity Data Server requires a Relativity database that was developed using the Relativity Designer Suite.

This product also contains a Java Client, which is part of the client/server solution required by JDBC (Java Database Connectivity) applications.

### What's New

Relativity 2.1 offers the following enhancements:

#### Support for Net Express and Server Express

You can now install and Relativity with either Micro Focus Net Express or Server Express.

See Software Requirements in these Release Notes for information about which versions of Net Express and Server Express are supported.

#### **COBOL** syntax files

The Source Code Import Wizard within Relativity Designer invokes the COBOL compiler to generate information about a COBOL program's File Definition and saves it to COBOL syntax file. The wizard then reads the information from that file and imports it into the Relativity catalog.

The COBOL syntax files have a different extension based on which Micro Focus product you have installed Relativity for:

- · .CST, if you use Relativity with either Visual COBOL or Enterprise Developer
- .RST, if you use Relativity with either Net Express or Server Express

#### A new ODBC driver

This release provides a new Relativity ODBC driver which is optimized for ADO support.

When you use Relativity with an ADO application, it is strongly recommended to use the ADO version of Relativity. To do this:

1. Open the ODBC Administrator and click **Add**.

This displays a list of all ODBC drivers installed on your machine.

- **2.** Select a driver that is appropriate for your environment:
  - Micro Focus Relativity Data Manager for ADO (32-bit)
  - Micro Focus Relativity Data Client for ADO (32-bit)
  - Micro Focus Relativity Data Client for ADO (64-bit)

# **Resolved Issues**

The numbers that follow each issue are the Support Incident Numbers followed by the Reported Problem Incident (RPI) number (in parentheses).

- Data Manager
- Data Server

#### **Data Manager**

#### Back to the list

- An issue where data files with edited data items, such as PIC -9(6).9(2), would return 0 in columns associated with such data items, if the data item contained EBCDIC characters has been fixed.
  - 2862434 (1105012)
- An INSERT into a table defined on a sequential file no longer fails with COBOL error 48,1.
   2849810 (1103083)

#### **Data Server**

#### Back to the list

• The Data Server no longer writes "Assert" messages to the server.log file.

#### Other resolved issues:

- 2862434 (1105011)
- 2859204 (1104837)

### Installation

### System requirements

### Hardware requirements

The requirements for this Relativity product are in addition to the requirements of the Micro Focus product you have installed - either Visual COBOL, Enterprise Developer, Net Express or Server Express. See the in-product documentation for details of the respective product's requirements.

The disk space requirements are, approximately:

Platform	Relativity Data Server	License Administration tool
x86 Windows platforms	100MB	25MB
x64 Windows platforms	100MB	25MB
UNIX	100MB	100MB

### **Operating systems supported**

For a list of up-to-date operating systems supported, check the Product Availability section on the Micro Focus SupportLine Web site: http://supportline.microfocus.com/prodavail.aspx.

This product operates on the following platforms:

- AIX 6.1 and 7.1 on PowerPC
- Red Hat 5.5 through to 7.x on x86
- SuSE SLES 11 through to 12 SP4 on x86
- Windows XP to Server 2012 R2, and everything in between

### Software requirements

This Relativity product requires a Micro Focus COBOL development product.

Micro Focus COBOL development products:

- Visual COBOL for Visual Studio 2010, version 2.2 Update 2, HotFix 5, or a later HotFix
- Visual COBOL for Visual Studio 2012, version 2.2 Update 2, HotFix 5, or later
- Visual COBOL for Visual Studio 2013, version 2.2 Update 2, HotFix 5, or later
- Visual COBOL for Visual Studio 2015, version 2.3 or later
- Visual COBOL for Eclipse, version 2.2 Update 2, HotFix 5, or later
- Enterprise Developer for Visual Studio 2010, version 2.2 Update 2, HotFix 5, or a later HotFix
- Enterprise Developer for Visual Studio 2012, version 2.2 Update 2, HotFix 5, or later
- Enterprise Developer for Visual Studio 2013, version 2.2 Update 2, HotFix 5, or later
- Enterprise Developer for Visual Studio 2015, version 2.3 or later
- Enterprise Developer for Eclipse, version 2.2 Update 2, HotFix 5, or later
- Net Express 5.1 Update 12\*
- Server Express 5.1 Update 12\*



Note: \*This Relativity product has been tested only with the specified maintenance update.

#### Other requirements

This product requires the latest version of the Micro Focus licensing software.

If you have one of the products listed above installed locally, you do not need to install the licensing software separately, as the product setup file also installs a new license server on the same machine.

If your license server is on the network, you must update it before installing your Relativity product, because the client is not able to communicate with license servers of versions older than 10000.2.660. Check the version of your license server by running the **Micro Focus Licensing System Administration** tool and selecting **Help > About** (Windows) or option **8 - Get License Details** (UNIX).

You can download the required version of the license server software from the Micro Focus SupportLine Web site: <a href="http://supportline.microfocus.com">http://supportline.microfocus.com</a>.

### Additional software requirements

To ensure full functionality for some Visual COBOL or Enterprise Developer features, you might be required to obtain and install third-party software in addition to the prerequisite software installed automatically by the product setup file. The following information specifies the third-party software required for each feature.

#### **Compiling Java**

Either the IBM or the Oracle Java Development Kit (JDK), version 1.5 or later, is required for compiling Java.

After installing the JDK, you need to set up your Java environment.

#### JDBC Support

Oracle's Java Platform, Enterprise Edition (Java EE) 6 or Java 7 is required to execute the Java Client and develop a JDBC application. You can download Oracle's Java EE from Oracle's Web site and install it anywhere on your machine.



**Note:** If you are using Java EE 6, it must be a version that contains JDK 6, update 27 as a minimum.

### Downloading the product

Use the download links in your Electronic Product Delivery email to download the required Relativity products.

For more information, follow the same links for the installation instructions and the End User License Agreement.

### Restrictions and requirements

Before starting the installation on Windows, you should consider the following:

- If, when you install a Relativity product, the machine does not have the Microsoft Visual C++ 2012 Redistributable Run-time already installed, it is installed as part of the Visual COBOL, Enterprise Developer, or Net Express install. The installation of Microsoft Visual C++ 2012 Redistributable Runtime adds a number of .dll files, without digital signatures, into the winsxs directory.
- You need to be logged on with a user ID that has write access to the registry structure under HKEY\_LOCAL\_MACHINE, HKEY\_CLASSES\_ROOT, and HKEY\_CURRENT\_USER so that the

installation can set the environment appropriately. You also need to be logged on with Administrator privileges.

### Installing Relativity Data Server



**Note:** Before installing, see *Restrictions and Requirements*.

This version of the product is a full install.

### What to install

You need to install the following files, in the following order:

- The Data Server install file DataServerx86.msi (Windows) or setup dataserver version platform x86-64 (UNIX). See Data Server installation.
- The Data Client install file appropriate to your system DataClientx86.msi, DataClientx64.msi (both Windows) or setup dataclient version platform x86-64 (UNIX). See Data Client installation.
- The Java Client install file if you plan to use JDBC applications jclient.zip. See Java Client Installation.

### **Data Server installation**

The Data Server is one of the core pieces of the Relativity product; either Data Server or Data Manager must be installed in order to use any of the Relativity products.

A Data Server is required in situations where the data files are located on a different machine from the ODBC application, or if the ODBC application is a 64-bit program. When you install the Data Server, it is also necessary to install a Data Client to communicate with it. While the Data Server itself is a 32-bit program, you require a 64-bit Data Client to enable 64-bit ODBC applications to communicate with the Data Server, even if it is installed on the same machine as the ODBC application.

The Data Server requires an installation of one of the following products in order to access data files -Visual COBOL, Enterprise Developer, Net Express (on Windows) or Server Express (on UNIX).

If the Data Server is to be used with the Relativity Designer Suite in order to develop Relativity catalogs, one of the prerequisite products listed earlier must also be installed either on the same machine as the Data Server, or on the machine on which the Designer is installed (see Location of the data files for more information). If either Visual COBOL, Enterprise Developer, Net Express or Server Express is not installed on the machine with the Data Server, then one of these products must be installed on the same machine as the Relativity Designer.

#### To install the Relativity Data Server on Windows:

- Before installing the Data Server, ensure that the Micro Focus COBOL product you are installing Relativity for is installed and licensed.
- 2. Run DataServerx86.msi and follow the wizard instructions to install the prerequisite software and the product.
- 3. Install a Relativity license using the Micro Focus License Administration tool; see *Installing licenses* for more information.
- 4. Following installation of the Data Server, install a Data Client (see Data Client installation), after which you should follow the instructions in the Data Server verification and Data Client verification sections.

#### To install the Relativity Data Server on UNIX:

- 1. Before installing the Data Server, ensure that the Micro Focus COBOL product you are installing Relativity for is installed and licensed.
- 2. Ensure you are logged on with root privileges.
- 3. Depending on the prerequisite product you have installed, do one of the following:
  - If you have Visual COBOL or Enterprise Developer installed, execute cobsetenv to set up the Visual COBOL or Enterprise Developer environment:
    - . /opt/microfocus/VisualCOBOL/bin/cobsetenv
  - · If you have Server Express installed, set COBDIR, PATH and Library Path to your Server Express installation.
- 4. Change the setup file ./setup\_dataserver\_version\_platform\_x86\_64 to be executable:

```
chmod a+x ./setup dataserver version platform x86 64
```

- **5.** Run ./setup\_dataserver\_version\_platform\_x86\_64 and follow the on-screen instructions.
- 6. Install a Relativity license using the Micro Focus License Administration tool; see *Installing licenses* for more information.
- 7. Start the Data Server:
  - . /opt/microfocus/DataServer/RUNACTIVE
- 8. Following installation of the Data Server, install a Data Client (see Data Client installation), after which you should follow the instructions in the Data Server verification and Data Client verification sections.

### **Data Client installation**

A Data Client is required to communicate with a Data Server. The following versions of the Data Client are available:

- A 32-bit version and a 64-bit version for Windows
- A 32-bit version and a 64-bit version for UNIX

Install a Data Client on the machine containing the ODBC application, which is typically on a different machine from the Data Server with which it communicates, but there are two exceptions:

- On Windows, if an 64-bit ODBC application is in use, a Data Server and a 64-bit Data Client must be installed on the same machine to support the 64-bit ODBC application;
- On UNIX, if the ODBC application and the data files both reside on the same machine, both a Data Server and a Data Client must be installed on the same machine, as there is not a Relativity Data Manager available on UNIX.

A Data Client does not require any of the following Micro Focus COBOL products to be installed on the same machine as it does not access the data files directly - Visual COBOL, Enterprise Developer, Net Express, Server Express, COBOL Server, Enterprise Server or Micro Focus Server.

#### To install a 32-bit Data Client on Windows:

- 1. Run DataClientx86.msi and follow the wizard instructions to install prerequisite software and the product.
- 2. After installation of a Data Client, run the Relativity Server Administrator from the Control Panel to define any Data Servers that the Data Client needs to access:
  - a. From the Windows Start menu, select Control Panel.
    - **Note:** If the Control Panel is displaying **Category** view, switch to **Icon** view.
  - b. Start the Micro Focus Relativity Server Admin (32-bit).
  - c. To define a Data Server, on the Select Server screen, click New, enter the network name of where the Data Server resides, and the port number to use to connect, and then click OK.

3. Following installation of the Data Client, you should follow the instructions in the Data Server verification and Data Client verification sections to create the necessary data sources.

#### To install a 64-bit Data Client on Windows:

- 1. Run DataClientx64.msi and follow the wizard instructions to install prerequisite software and the product.
- 2. After installation of the Data Client, run the Relativity Server Administrator from the Control Panel to define any Data Servers that the Data Client needs to access:
  - a. From the Windows Start menu, select Control Panel.

**Note:** If the Control Panel is displaying **Category** view, switch to **Icon** view.

- b. Double-click Micro Focus Relativity Server Admin.
- c. To define a Data Server, on the Select Server screen, click New, enter the network name of where the Data Server resides, and the port number to use to connect, and then click **OK**.
- 3. On completion of the Data Client installation, follow the instructions in the Data Server verification and Data Client verification sections to create the necessary data sources.

#### To install a 32-bit Data Client on UNIX:

- 1. Ensure you are logged on with root privileges.
- 2. Change the setup file to be executable with the following command:

```
chmod a+x setup_dataclient_version_platform_x86_64
```

3. Run setup\_dataclient\_version\_platform\_x86\_64 and follow the on-screen instructions.

```
./setup_dataclient_version_platform_x86_64
```

In order to complete the installation of a Data Client, it is necessary to install an ODBC driver manager, such as iODBC or unixODBC.

- 4. If necessary, download and install one of the aforementioned driver managers.
- **5.** Enter the commands below:
  - a. PATH=\$PATH:/opt/microfocus/DataClient/bin
  - b. LD\_LIBRARY\_PATH=\$LD\_LIBRARY\_PATH:/opt/microfocus/DataClient/lib:/usr/lib
  - c. export PATH LD\_LIBRARY\_PATH
  - d. reldriveradmin --install-driver --directory /opt/microfocus/DataClient/lib
- If necessary, add a rule to the firewall manager to open TCP/IP on port 1583.
- 7. On completion of the Data Client installation, follow the instructions in the Data Server verification and Data Client verification sections to create the necessary data sources.

### Java Client installation

The Relativity Java Client is intended to provide access to a Relativity Server data source from a Java JDBC application.

#### To install the Java Client on Windows and UNIX:

- 1. Unzip jclient.zip to a directory that is accessible to your JDBC application; this should be a directory on the CLASSPATH.
  - This directory is one in which the Java runtime environment or web server will have access.
- 2. After the installation, follow the directions in relidbe.htm to complete the installation.

### Installation verification

By verifying the installation of each product in the Relativity Data Server, you also undertake the initial setup.

The following instructions assume that you have run all required product installations for Relativity Data Server. It is useful to have an ODBC-enabled application, such as Microsoft Access, also installed to fully verify the installation.

### **Data Server verification**

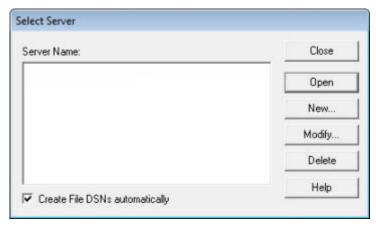
The following instructions enable you to create the server data source used by the client ODBC applications. You only need to create the server data source once, from one of your clients. It is preferable to do this from a Windows client, but if you do not have any Windows clients, follow the instructions in the UNIX section.

#### Windows:

The following instructions assume the 32-bit Data Client is being used on a 64-bit Windows machine, and are applicable if you are connecting to a Data Server on both a Windows or a UNIX platform.

- 1. On the Data Client machine, open the **Control Panel**.
- 2. If the Control Panel is displaying in Category view, change to Icons view.
- 3. Double-click Micro Focus Relativity Server Admin (32-bit) to start it.
- 4. If the User Account Control message box appears, click Yes.

The Select Server screen appears.



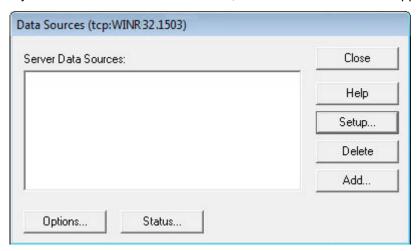
5. Click New.

The **New Server** screen appears.



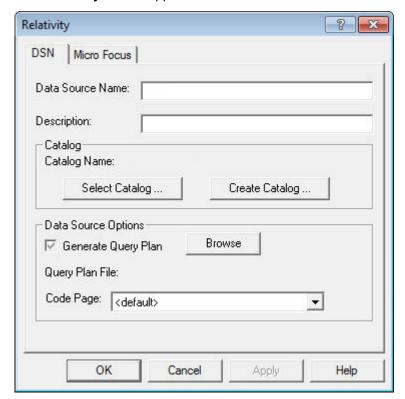
6. Enter the network name of the Data Server to use. If necessary, change the Port Number field to the correct port number (the default is 1583). Click OK.

If you have entered the correct details, the **Data Sources** screen appears.



#### 7. Click Add.

The Relativity screen appears.



- 8. In the Data Source Name field, enter Verify.
- 9. Click Select Catalog.

The **Select Catalog for Data Source** screen appears.

10.Do one of the following:

- If connecting to a Windows server, navigate to %PUBLIC%\Documents\Micro Focus \Relativity Data Server\Samples\MF\Verify, select verify.rcg, and then click OK.
- If connecting to a UNIX server, navigate to samples/mf/verify, select verify.rcg, and then click OK.

The Relativity screen appears.

11.Click OK.

12.Click Close twice to close the Data Sources and the Select Server screens.

After you have created the server data source, you must create a client data source on each client machine; see Data Client verification.

#### UNIX:

If you only have UNIX data clients, you must create the server data source from the Data Server itself. On the command line, enter the following:

- 1. PATH=\$PATH:/opt/microfocus/DataServer/2.2.2/bin
- 2. LD\_LIBRARY\_PATH=\$LD\_LIBRARY\_PATH:/opt/microfocus/DataServer/lib:/usr/lib
- 3. export PATH LD\_LIBRARY\_PATH
- 4. relserveradmin --add-data-source Verify --server-name ServerName.1583 -catalog samples/mf/verify/verify.rcg --type MF

After you have created the server data source, you must create a client data source on each client machine; see Data Client verification.

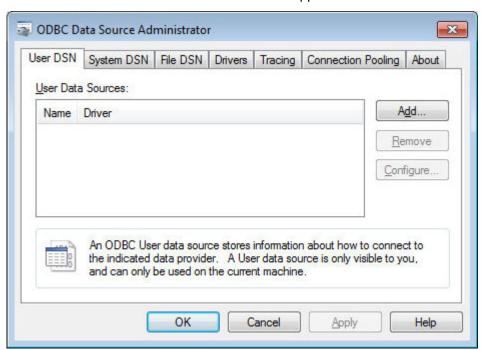
### **Data Client verification**

Follow these instructions on each data client after you have created the server data source, as detailed in Data Server verification.

#### Windows:

1. Open the ODBC Administrator (see Locating the ODBC Administrator).

The ODBC Data Source Administrator screen appears.

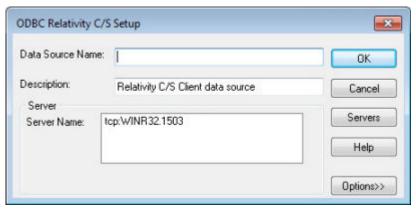


2. Click Add.

The Create New Data Source screen appears.

3. Select Micro Focus Relativity Data Client from the list of drivers, and then click Finish.

The **ODBC Relativity C/S Setup** screen appears.



4. In the Data Source Name field, enter Verify, then in the Server Name list box, select the name used to create the Verify server data source (which you created in Data Server verification).

A Server DSN list box appears, listing the server data source names on the server.

- Select Verify, and then click OK.
- 6. Click OK again to close the ODBC Data Source Administrator screen.



**Note:** In this example, the names of the server data source and the client data source are the same; whilst this is a helpful technique, it is not a requirement.

At this point, the Relativity driver has been loaded, it has opened a Relativity catalog, and a Relativity database has been created. This has very thoroughly exercised the installation; however, as an extra step, start a 32-bit ODBC application, open the Verify data source, and then execute the following SQL query:

SELECT \* FROM BACKORDER

The result should show the BACKORDER table that started life as a COBOL data file.

#### **UNIX:**

On the command line of your UNIX data client, enter the following:

- 1. PATH=\$PATH:/opt/microfocus/DataClient/bin
- 2. LD\_LIBRARY\_PATH=\$LD\_LIBRARY\_PATH:/opt/microfocus/DataClient/lib:/usr/lib
- 3. export PATH LD\_LIBRARY\_PATH
- 4. relclientadmin --add-data-source Verify --server-name ServerName.1583 -server-data-source-name Verify --type S



Note: In this example, the names of the server data source name and the client data source are the same; whilst this is a helpful technique, it is not a requirement.

### **Locating the ODBC Administrator**

The Windows ODBC Administrator is an important utility due to its role of creating data sources.

## Locating the ODBC Administrator on Windows 7 32-bit

On a 32-bit Windows machine:

- 1. From the **Start** menu, open the **Control Panel**.
- 2. Do one of the following:
  - If the Control Panel is displaying in Category view, select System and Security, and then **Administrative Tools.**
  - If the Control Panel is displaying in Icons view, select Administrative Tools.

Double-click Data Sources (ODBC).

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

### Locating the 32-bit ODBC Administrator on Windows 7 64-bit

Creating a 32-bit data source for the Relativity Data Manager or the Relativity 32-bit Data Client requires a 32-bit ODBC administrator on 64-bit Windows. Unfortunately, that is not the default ODBC administrator on a 64-bit Windows 7 machine. To start the required ODBC Administrator, follow the procedure below:

- 1. From the Start menu, in the Search programs and files box, type odbc.
- 2. In the results box, double-click ODBC Data Source Administrator (32-bit).

The ODBC Data Source Administrator screen appears.



Tip: To speed up access to this utility, right-click ODBC Data Source Administrator (32-bit) and select Pin to Taskbar or Pin to Start Menu.

### Locating the 64-bit ODBC Administrator on Windows 7 64-bit

Creating a 64-bit data source for the Relativity 64-bit data client requires a 64-bit ODBC administrator on 64-bit Windows.

To start the correct administrator:

- 1. From the Start menu, open the Control Panel.
- 2. Do one of the following:
  - If the Control Panel is displaying in Category view, select System and Security, and then Administrative Tools.
  - If the Control Panel is displaying in Icons view, select Administrative Tools.
- Double-click Data Sources (ODBC).

The ODBC Data Source Administrator screen appears.

### Post-installation considerations

The steps you must perform after installation depend upon the location of the data files.

### Location of data files

- If the data files exist on a Windows machine, and the 32-bit ODBC application is installed on the same machine, you only need to create a data source using the Windows ODBC administrator.
- If the data files exist on a Windows machine, and the 64-bit ODBC application is installed on the same machine, you must create a server data source using the Data Server for Windows, and then create a client data source using the 64-bit Data Client that references the server data source. (There is not a 64-bit Data Manager.)
- If the data files exist on a Windows machine that is separate from the ODBC application, you must create a server data source on the Windows machine containing the data files, install the Data Client on each client machines containing the ODBC application, and then create a client data source on each that references the server data source.
- If the data files exist on a UNIX machine, you must create a server data source on the UNIX machine containing the data files, install the Data Client on each machine containing the ODBC application, and

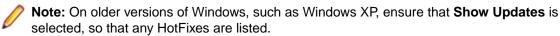
then create a client data source on each that references the server data source. (There is not a singletier Data Manager for UNIX.)

### Uninstalling

#### Windows - all components

To uninstall one or more Relativity products from Windows:

- 1. Log in with the same user ID you used when you installed the product.
- 2. From the Start menu, open the Control Panel.
- 3. Do one of the following:
  - If the Control Panel is displaying in Category view, click Uninstall a program under Programs (or Add/Remove Programs on older versions of Windows).
  - If the Control Panel is displaying in Icons view, double-click Programs and Features.



- 4. Select one of the following products and click **Remove** or **Uninstall**:
  - Micro Focus Relativity Data Client (32-bit)
  - Micro Focus Relativity Data Client (64-bit)
  - · Micro Focus Relativity Data Server
- 5. Click Yes to confirm.
- **6.** If required, repeat from step 4 to uninstall further products.

This process only removes files that the installation software installed. If the product directory has not been removed, delete any unwanted files and sub-directories within it using Windows Explorer. The following folders might not be removed:

- The Micro Focus product name folder in the Start menu you can delete this manually.
- %systemdrive%\Users\Public\Documents\Micro Focus this includes the binaries and the log files of the samples you have built.
- %ProgramData%\Micro Focus this includes some data files used by the Micro Focus licensing tool.
- %Program Files%\Micro Focus you can delete this manually.

Some registry entries are also not removed by the uninstallation process and you need to manually delete them.

To uninstall a product from the command line, you need the installation file, and you need to execute the following command:

```
msiexec /x install-file.msi
```

#### **UNIX - Micro Focus Relativity Data Server**

To uninstall the Micro Focus Relativity Data Server on UNIX:

1. Log in as root, and change directory to the Relativity Data Server's installation directory with the following commands:

```
cd /opt/microfocus/DataServer
cd `cat .active`
```

2. If the Data Server to be uninstalled is currently running, stop it with the following command:

3. Finally, perform the uninstall with the following commands:

```
cd ..
`cat .active`/bin/Uninstall_Relativity_DataServerx.y.sh
```

where  $x \cdot y$  represents the version number.

#### **UNIX - Micro Focus Relativity Data Client**

To uninstall the Micro Focus Relativity Data Client on UNIX:

1. Log in as root, and change directory to the Relativity Data Client's installation directory with the following commands:

cd /opt/microfocus/DataClient/bin

2. Perform the uninstall with the following command:

Uninstall\_Relativity\_DataClient2.2.sh

# Licensing information

To use Relativity, you need to purchase and install a license for it. To buy a license, contact your sales representative or Micro Focus SupportLine.

In addition, the Micro Focus product you have installed Relativity for (either Visual COBOL, Enterprise Developer, Net Express, Server Express, Enterprise Server, COBOL Server, or Micro Focus Server) must also be licensed with its own license.



#### Note:

- If you have purchased a license for a previous release of Relativity, that license will also enable you to use this release.
- Your entitlement for using this product is governed by the Micro Focus End User License Agreement and by your product order. If you are unsure of what your license entitlement is or if you wish to purchase additional licenses, contact your sales representative or Micro Focus SupportLine.

Relativity uses the Micro Focus License Administration software for installing and managing your Micro Focus licenses. See the instructions in the following sections about how to install the Relativity license.

### To start Micro Focus License Administration

#### Windows

From the Windows Taskbar click Start > All Programs > Micro Focus License Manager > License Administration.

#### UNIX

Log on as root, and from a command prompt type:

/var/microfocuslicensing/bin/cesadmintool.sh

### Installing licenses

### If you have a license file

#### Windows

- Start Micro Focus License Administration.
- 2. Click the Install tab.
- 3. Do one of the following:
  - Click Browse next to the License file field and select the license file (which has an extension of .mflic).
  - Drag and drop the license file from Windows Explorer to the License file field.
  - Open the license file in a text editor, such as Notepad, then copy and paste the contents of the file into the box below the License file field.
- 4. Click Install Licenses.

#### UNIX

- 1. Start the Micro Focus License Administration tool and select the Manual License Installation option by entering 4.
- 2. Enter the name and location of the license file.

### If you have an authorization code

#### Authorizing your product when you have an Internet connection

The following procedure describes how to authorize your product using a local or network license server. The license server is set up automatically when you first install the product.

#### Windows

- 1. Start Micro Focus License Administration.
- 2. Click the Install tab.
- 3. Type the authorization code in the Enter authorization code field.
- Click Authorize.

If you change the name of the machine running your license server after it has granted licenses, the licenses stop working.

#### UNIX

- 1. Start Micro Focus License Administration.
- 2. Select the Online Authorization option by entering 1 and pressing Enter.
- 3. Enter your authorization code at the Authorization Code prompt and then press Enter.

### Authorizing your product when you don't have an Internet connection

This method of authorization is required if your machine does not have an Internet connection or if normal (automatic) authorization fails.

#### Windows

- 1. Start Micro Focus License Administration.
- 2. Click Manual Authorization on the Install page.
- 3. Make a note of the contents of the Machine ID field. You will need this later.
- 4. Do one of the following:
  - If your machine has an Internet connection, click the SupportLine Web link in the Manual Authorization Information window.
  - If your machine does not have an Internet connection, make a note of the Web address and type it into a Web browser on a machine that has an Internet connection.

The Micro Focus SupportLine Manual product authorization Web page is displayed.

- 5. Type the authorization code in the **Authorization Code** field. The authorization code is a 16-character alphanumeric string supplied when you purchased your product.
- 6. Type the Machine ID in the Machine ID field.
- 7. Type your email address in the **Email Address** field.
- 8. Click Generate.
- 9. Copy the generated license string (or copy it from the email) and paste it into the box under the License file field on the Install page.

10.Click Install Licenses.

#### UNIX

In order to authorize your product you must have the following:

- Your authorization code (a 16-character alphanumeric string).
- The machine ID. To get this, start the Micro Focus License Administration tool and select the Get Machine Id option by inputting 6. Make a note of the "Old machine ID".

If you have previously received the licenses and put them in a text file, skip to step 6.

- 1. Open the Micro Focus license activation web page http://supportline.microfocus.com/activation in a browser.
- 2. Enter your authorization code and old machine ID and, optionally, your email address in the Email Address field.
- 3. Click Generate.
- 4. Copy the licenses strings from the web page or the email you receive into a file.
- 5. Put the license file onto your target machine.
- 6. Start the Micro Focus License Administration tool and select the Manual License Installation option by inputting 4.
- 7. Enter the name and location of the license file.

# **Updates and SupportLine**

Our Web site gives up-to-date details of contact numbers and addresses.

### **Further Information and Product Support**

Additional technical information or advice is available from several sources.

The product support pages contain a considerable amount of additional information, such as:

- The Product Updates section of the Micro Focus SupportLine Web site, where you can download fixes and documentation updates.
- The Examples and Utilities section of the Micro Focus SupportLine Web site, including demos and additional product documentation.
- The Support Resources section of the Micro Focus SupportLine Web site, that includes troubleshooting guides and information about how to raise an incident.

To connect, enter http://www.microfocus.com in your browser to go to the Micro Focus home page, then click Support.



Note: Some information may be available only to customers who have maintenance agreements.

If you obtained this product directly from Micro Focus, contact us as described on the Micro Focus Web site, www.microfocus.com. If you obtained the product from another source, such as an authorized distributor, contact them for help first. If they are unable to help, contact us.

Also, visit:

- The Micro Focus Community Web site, where you can browse the Knowledge Base, read articles and blogs, find demonstration programs and examples, and discuss this product with other users and Micro Focus specialists.
- The Micro Focus YouTube channel for videos related to your product.

### Information We Need

However you contact us, please try to include the information below, if you have it. The more information you can give, the better Micro Focus SupportLine can help you. But if you don't know all the answers, or you think some are irrelevant to your problem, please give whatever information you have.

- The name and version number of all products that you think might be causing a problem.
- Your computer make and model.
- Your operating system version number and details of any networking software you are using.
- The amount of memory in your computer.
- The relevant page reference or section in the documentation.
- Your serial number. To find out these numbers, look in the subject line and body of your Electronic Product Delivery Notice email that you received from Micro Focus.

On UNIX, you can use the Micro Focus UNIX Support Scan Utility, mfsupport, to create a log file that contains the details about your environment, product, and settings. The mfsupport script is stored in \$COBDIR/bin.

To run mfsupport:

- 1. Start a UNIX shell.
- 2. Set COBDIR to the product with issues.
- 3. Execute mfsupport from a directory where you have write permissions.

This creates a log file, mfpoll.txt, in that directory.

4. When the script finishes, send the mfpoll.txt file to your Micro Focus SupportLine representative.



#### Note:

If COBDIR is set to a location that does not contain etc/cobver, the script outputs the contents of /opt/microfocus/logs/MicroFocusProductRegistry.dat which keeps a list of the installed Micro Focus products.

### **Creating Debug Files**

If you encounter an error when compiling a program that requires you to contact Micro Focus SupportLine, your support representative might request that you provide additional debug files (as well as source and data files) to help us determine the cause of the problem. If so, they will advise you how to create them.

# **Disclaimer**

This software is provided "as is" without warranty of any kind. Micro Focus disclaims all warranties, either express or implied, including the warranties of merchantability and fitness for a particular purpose. In no event shall Micro Focus or its suppliers be liable for any damages whatsoever including direct, indirect, incidental, consequential, loss of business profits or special damages, even if Micro Focus or its suppliers have been advised of the possibility of such damages. Some states do not allow the exclusion or limitation of liability for consequential or incidental damages so the foregoing limitation may not apply.

Micro Focus is a registered trademark.

Copyright © Micro Focus 1984-2016. All rights reserved.