

RightFielder Object

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Quick Start Guide

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THANKS FOR PURCHASING RIGHTFIELDER OBJECT

RightFielder Object's powerful entity recognition and identification algorithms allow extraction of contact information from freeform or unfielded textual data. This product can parse a string of input data and dynamically recognizes what type of data a portion of that string represents. This enables you to take poorly formatted and unformatted data and send it to the proper fields in a database.

RightFielder Object can recognize the following data types:

- Up to three lines of street addresses
- City, State and postal code
- Country

RightFielder Object can also recognize and extract multiple instances of the following data types:

- Personal names
- Company and department names
- Email and web addresses
- Phone numbers

Advanced users can even define custom patterns to recognize data types not listed above, such as Social Security numbers or dates.

TRIAL VERSIONS

The trial version for RightFielder Object can be used with a free 30-day license. During this 30-day trial, RightFielder Object has the full functionality of the paid version. After 30 days, the object must be purchased to continue using the product.

If you wish to purchase RightFielder Object, simply contact your sales representative at 1-800-MELISSA (1-800-635-4772).

WHERE TO FIND HELP

Reference Guide



The RightFielder Object Reference Guide details the functions available for the various objects. A PDF file of this guide is located on your CD-ROM.

Many Linux versions come with a built-in reader, such as Xpdf, to view the Reference Guide.

To view using other operating systems, you must have Adobe Acrobat Reader installed on your computer. This program can be downloaded from the Adobe website (<http://www.adobe.com>).

Melissa Data Website



Check out the technical support section on our website at www.MelissaData.com, where you can view the current application notes and FAQs. Our website also contains the latest product information for RightFielder Object and other Melissa Data products.

Call Us Toll Free



If you need help using RightFielder Object, please call Technical Support toll free at 1-800-MELISSA (1-800-635-4772). Our technical support staff is available Monday - Friday from 6 a.m. - 5 p.m. Pacific Standard Time. You can also post a question on our forums at <http://forum.MelissaData.com> or send an e-mail to Tech@MelissaData.com.

SYSTEM REQUIREMENTS

RightFielder Object is shipped on a CD. It is recommended that you copy the data files to your local or network hard drive, in order to access the data faster. Because this is a programmer's tool, it should be installed on a system that has a development environment.

The following are additional hardware and software requirements:

- 50MB hard disk space (for data files).

- Microsoft® Windows® users — 64-bit Windows Vista, Windows 7, Server 2003 or Server 2008. Most Windows-based programming languages. .NET Framework 3.5 or better required to register the COM object.
- Linux users — Red Hat 64-bit (x64) distribution. GNU C++ 3.4 or later; glibc 3.2 or later.
- Solaris users — Solaris 8,9,10, SPARC platform, 32 or 64-bit. Sun Workshop *or* Sun ONE Studio compiler. G++ 3.3 and later can also be used.
- AIX users — Version 5.2 or 5.3; POWER, rs/6000, PPC, 64-bit. gcc 3.4.6 or Visual Age.
- HP-UX users — Version 11.11, 11.23; PA-RISC or Itanium, 64-bit. gcc 3.4.6 or aCC A.03.70.

The actual deployment system does not require use of the development tools.

INSTALLING RIGHTFIELDER OBJECT

WINDOWS

1. Close all applications that are open, including any anti-virus and e-mail software.
2. Place the RightFielder Object CD in your CD-ROM drive.
3. Click the **Start** button, and then select **Run** from the pop-up menu. The *Run* dialog box opens.
4. Type your CD drive letter followed by `: \SETUP . EXE` in the *Command Line* box. (For example, `D : \SETUP . EXE`). After typing the path, click **OK**.
5. Read the license agreement, and then click **Yes** if you agree to the terms. (To proceed with the installation, you must accept this agreement.)
6. Select the options that you want to install by placing a check mark next to its name and clicking **Next**.
7. The installer will display a screen showing the install location and the selected options. Click **Next** again.
8. Click **Install**.



You do not need any special privileges when installing RightFielder Object, nor do you have to log in as root. During installation, nothing will be modified outside of the target directory.

To install RightFielder Object:

1. Place the RightFielder Object CD in your CD-ROM drive.
2. From the shell prompt (\$), mount the CD and run the applicable `setup.sh` script to install the object(s) to the desired directory.

All of the Unix-based OS sample programs assume that they can locate the required data files and object libraries in the current directory. It is not necessary to modify your `PATH` or `LD_LIBRARY_PATH`. If you prefer, you can run the sample program straight from the CD-ROM — there is no need to install anything.

The final deployment install has to be done manually or by using your system administration utilities. Since the deployment standards vary widely, Melissa Data does not provide any specific instructions. Remember the following:

- RightFielder Object does not require any special privileges
- All files can be made read-only
- There is no need for a `setuid` or `setgid`, neither as file permissions nor anywhere in your application code.

FILE LOCATIONS

WINDOWS

Most of the files are placed in subdirectories of `C:\Program Files\Melissa Data\DQT\`. During the installation process, there may be some files placed in your Windows system directory — these files are required by the Microsoft Visual C++ runtime.

LINUX/SOLARIS/HP-UX/AIX

All files are placed in the target directory that was specified during installation.

UNINSTALLING RIGHTFIELDER OBJECT

To remove RightFielder Object from your computer, do the following:

WINDOWS:

1. Click the **Start** button.
2. Select **Settings** from the pop-up menu.
3. Click **Control Panel**.
4. Double-click **Add/Remove Programs**.

LINUX/SOLARIS/HP-UX/AIX:

1. Verify that all files in the target directory can be safely deleted.
2. Type `rm -rf target-directory`.

If the target directory contains files that cannot be deleted without impacting other software, you will need to manually erase only files from RightFielder Object.

CONFIGURING RIGHTFIELDER OBJECT

A current license string is required to use the full functionality of RightFielder Object. Without a license string, the object will work in demo mode.

The license string should be entered as an environment variable named MD_LICENSE. This allows you to update your license string without editing and recompiling your code.

SETTING THE LICENSE STRING ENVIRONMENT VARIABLE

WINDOWS

Windows users can set environment variables by doing the following:

1. Select *Start > Settings*, and then click **Control Panel**.
2. Double-click **System**, and then click the *Advanced* tab.
3. Click **Environment Variables**, and then select either *System Variables* or *Variables* for the user X.
4. Click **New**.
5. Enter the “MD_LICENSE” in the **Variable Name** box.
6. Enter the license string in the **Variable Value** box and then click **OK**.

Please remember that these settings take effect only upon start of the program. You may need to quit and restart the development environment to incorporate the changes.

LINUX/SOLARIS/HP-UX/AIX

Unix-based OS users can simply set their license string via the following:

```
export MD_LICENSE=A1B2C3D4E5
```

If you decide to put this setting in your `.profile`, remember to restart your shell.

SAMPLE IMPLEMENTATIONS

This section describes the logic behind simple applications using RightFielder Object. The samples are written in pseudocode so they can be easily adapted into almost any language.

INITIALIZATION

Declaring and creating an instance of RightFielder Object is followed by the initialization steps to prepare it for use. These steps only need to be performed once per instance of the object in use.

PARSING

The Parse function accepts a string value containing data to be parsed into the correct data types.

PROCESSING

In the processing stage, you'll display or examine the return values of the Parse function.

TERMINATION

This stage involves destroying the current instance of RightFielder Object when you close the application, freeing up memory to be used by other processes.

RIGHTFIELDER OBJECT SAMPLE

Step 1 — Instantiation: Create an instance of RightFielder Object.

Begin by declaring the object variable.

```
Create RFPtr as New Instance of mdRightFielder
```

Step 2 — Initialization: Set Data Paths and Initialize

The next step is to tell the RightFielder Object where it can find its data files.

```
CALL SetPathToRightFielderFiles WITH DataPath
```

If all of the above have been set correctly, calling the InitializeDataFiles function should return a value of 0. If it does not, call the GetInitializationErrorString function to determine the reason for the failure to initialize.

```
CALL InitializeDataFiles RETURNING Result
```

```
IF Result Is Not ErrorNone THEN
    CALL GetInitializeErrorString RETURNING ErrorStr
ENDIF
```

Step 3 — Lookup: Set Parsing Options

By default, RightFielder Object parses an input for all pieces of data that it can recognize. You can prevent RightFielder from identifying input data as a certain type, which you know does not exist, by setting the respective SetAccept... function to false - disabling that output type.

For example, this would tell RightFielder Object to ignore email addresses and use commas instead of tabs.

```
CALL SetAcceptEmail WITH False
CALL SetDelimiter WITH Comma
```

Step 4 — Lookup: Call One of The Parsing Functions

Pass a string containing the data to be parsed to one of the parsing functions: ParseFreeForm or ParseFielded. ParseFielded is faster and more accurate, but requires that the data is consistently delimited.

Use the Get functions shown in the steps below to retrieve the results.

```
CALL ParseFielded WITH InputString
```

Step 5 — Processing: Check Result Codes

The result codes tell you the level of match found and the reason for any errors.

```
CALL GetResults Returning ResultCode
PROCESS ResultCode
IF ResultCode Indicates Error
    PRINT ResultCode
    Terminate Program
END IF
```

Step 6 — Processing: Retrieve Parsed Data

```
CALL GetAddress Returning AddressLine1
CALL GetAddress2 Returning AddressLine2
CALL GetAddress3 Returning AddressLine3
CALL GetCity Returning City
CALL GetState Returning State
CALL GetPostalCode Returning PostalCode
CALL GetLastLine Returning LastLine
CALL GetCountry Returning Country
```

Step 7 — Processing: Retrieve Multiple Instances of Some Data Types

RightFielder Object can detect and return multiple instances of some types of data, such as personal names, company names, department names, web addresses, email addresses, and phone numbers. The object allows you to cycle through a pair of functions for each data type until all instances have been retrieved. This example shows the return of personal names but the process is identical for all such data types.

```
CALL GetFullName Adding FullName to FullNames Array
WHILE GetFullNameNext Returns True
    CALL GetFullName Adding FullName to FullNames
    Array
END WHILE
```

Step 8 — Destroying the Instance

Be sure to free allocated memory. We do not believe the RightFielder Object leaks allocated resources, however, you must properly destroy the RightFielder Object to force the release of memory.

IMPORTANT INFORMATION

DOES RIGHTFIELDER OBJECT EXPIRE?

Your License String is good for the length of your subscription. When you renew your subscription for RightFielder Object, you will be issued a new license string.

HOW TO PURCHASE

To place an order for RightFielder Object, just call 1-800-MELISSA (1-800-635-4772).

TROUBLESHOOTING

If you need help using the RightFielder Object, please call us toll free at 1-800-MELISSA (1-800-635-4772). Our technical support staff is available Monday through Friday from 6 a.m. to 5 p.m. Pacific Standard Time.

To read about current known issues, visit:

<http://www.MelissaData.com/tech/tech.htm>.

For our online support, visit: <http://forum.MelissaData.com>

You can also send an e-mail to Tech@MelissaData.com.