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About the Tutorial

Rexx (Restructured Extended Executor) is designed to be a scripting language. Its goal is to make scripting as easy, fast, reliable, and error-free as possible. Many programming languages are designed for compatibility with older languages, and are written for specific audiences or platforms. Rexx ignores extraneous objectives. It was designed from day one to be powerful, yet easy to use. It is also very helpful for developing small programs that perform various text file transformations.

This is an introductory tutorial that covers the basics of Rexx and how to deal with its various components and sub-components.

Audience

This tutorial has been prepared mainly for those professionals who are within the IT industry, working as specialists in the field of Scripting and Macro Languages. It is very useful for those professionals who work on Data Processing, text and also for generating reports.

This tutorial is intended to make you comfortable in getting started with Restructured Extended Executor (Rexx) and its various functions.

Prerequisites

It is an elementary tutorial and you can easily understand the concepts explained here with a basic knowledge of how a company or an organization deals with its scripting languages and programs. However, it will help if you have some prior exposure on programming languages, data processing, and generating reports.

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1. Rexx – Overview

Rexx (Restructured Extended Executor) is designed to be a scripting language. Its goal is to make scripting as easy, fast, reliable, and error-free as possible. Many programming languages are designed for compatibility with older languages, and are written for specific audiences or platforms. Rexx ignores extraneous objectives. It was designed from day one to be powerful, yet easy to use.

Rexx was designed and first implemented, in assembly language, as an 'own-time' project between 20th March 1979 and the middle of 1982 by Mike Cowlishaw of IBM, originally as a scripting programming language to replace the languages **EXEC and EXEC 2**. It was designed to be a **macro or scripting language** for any system. As such, Rexx is considered a precursor to Tcl and Python. Rexx was also intended by its creator to be a simplified and easier to learn version of the PL/I programming language.

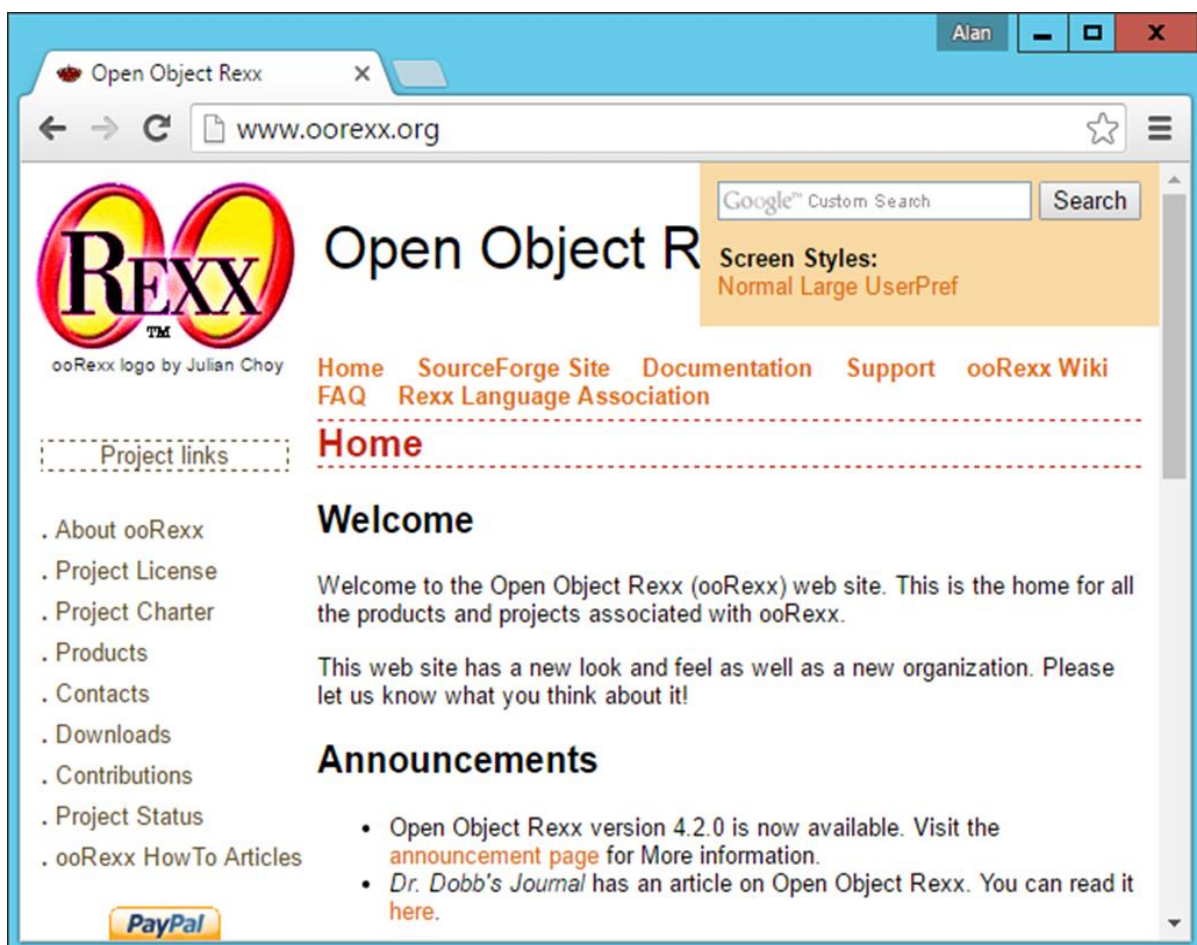
Features of Rexx

Rexx as a programming language has the following key features:

- Simple syntax
- The ability to route commands to multiple environments
- The ability to support functions, procedures and commands associated with a specific invoking environment.
- A built-in stack, with the ability to interoperate with the host stack if there is one.
- Small instruction set containing just two dozen instructions
- Freeform syntax
- Case-insensitive tokens, including variable names
- Character string basis
- Dynamic data typing, no declarations
- No reserved keywords, except in local context
- No include file facilities
- Arbitrary numerical precision
- Decimal arithmetic, floating-point
- A rich selection of built-in functions, especially string and word processing
- Automatic storage management

- Crash protection
- Content addressable data structures
- Associative arrays
- Straightforward access to system commands and facilities
- Simple error-handling, and built-in tracing and debugger
- Few artificial limitations
- Simplified I/O facilities

The official website for Rexx is <http://www.oorexx.org/>



The screenshot shows a web browser window displaying the homepage of the Open Object Rexx (ooRexx) project. The browser's address bar shows the URL www.oorexx.org. The page features the ooRexx logo, which consists of the word "REXX" in a stylized font inside a red and yellow oval. Below the logo, it says "ooRexx logo by Julian Choy". To the right of the logo, the text "Open Object R" is visible. A search bar with the text "Google™ Custom Search" and a "Search" button is located in the top right corner. Below the search bar, there is a "Screen Styles:" section with the text "Normal Large UserPref". A navigation menu includes links for "Home", "SourceForge Site", "Documentation", "Support", "ooRexx Wiki", "FAQ", and "Rexx Language Association". A "Project links" section on the left lists various resources such as "About ooRexx", "Project License", "Project Charter", "Products", "Contacts", "Downloads", "Contributions", "Project Status", and "ooRexx HowTo Articles". A "PayPal" logo is visible at the bottom left. The main content area has a "Home" heading followed by a "Welcome" section. The welcome message states: "Welcome to the Open Object Rexx (ooRexx) web site. This is the home for all the products and projects associated with ooRexx. This web site has a new look and feel as well as a new organization. Please let us know what you think about it!". Below this is an "Announcements" section with two bullet points: "Open Object Rexx version 4.2.0 is now available. Visit the [announcement page](#) for More information." and "Dr. Dobb's Journal has an article on Open Object Rexx. You can read it [here](#)."

2. Rexx – Environment

Before you can start working on Rexx, you need to ensure that you have a fully functional version of Rexx running on your system. This chapter will explain the installation of Rexx and its subsequent configuration on a Windows machine to get started with Rexx.

Ensure the following System requirements are met before proceeding with the installation.

System Requirements

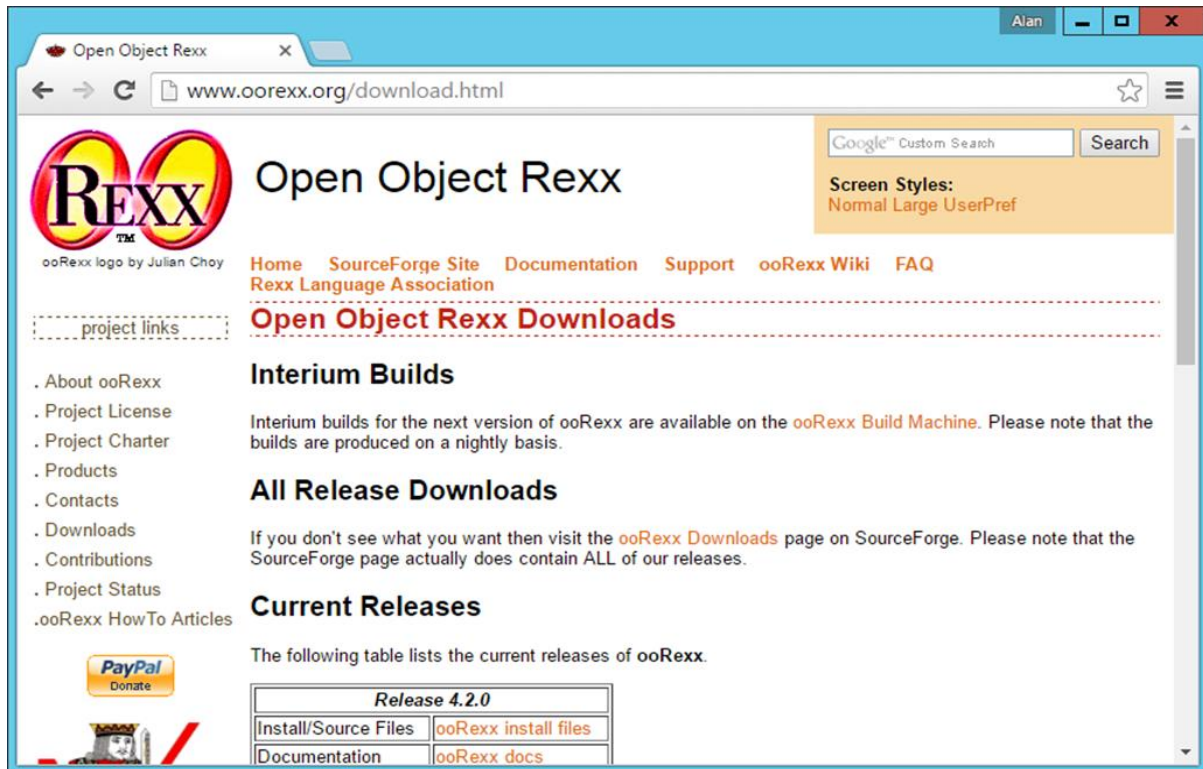
Memory	2 GB RAM (recommended)
Disk Space	No minimum requirement. Preferably to have enough storage to store the programs which will be created using Rexx.
Operating System Version	Rexx can be installed on Windows, Ubuntu/Debian, Mac OS X.

Downloading Rexx

To download Rexx, you should use the following URL –

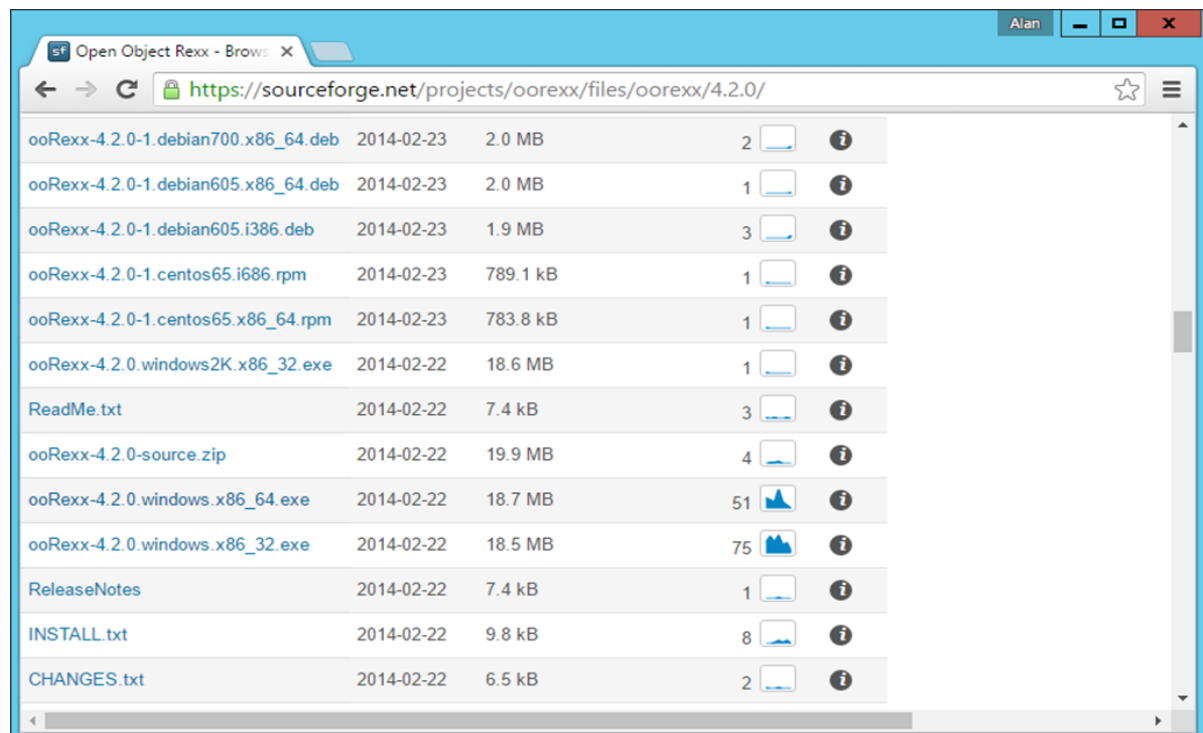
<http://www.oorexx.org/download.html>

This page has a variety of downloads for various versions of Rexx as shown in the following screenshot.



Click on the 'ooRexx install files' in the table with the header of Release 4.2.0.

After this, you will be re-directed to the following page.

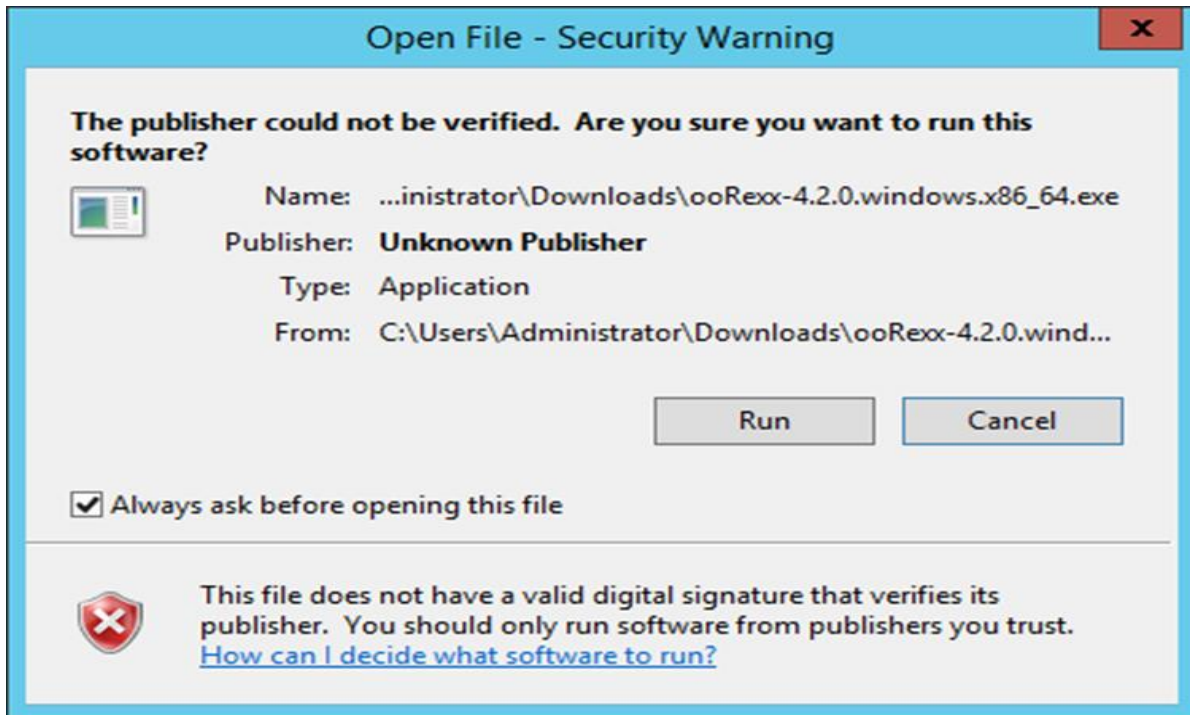


Click on the **ooRexx-4.2.0.windows.x86_64.exe** to download the **64-bit** version of the software. We will discuss regarding the installation of the software in the following chapter.

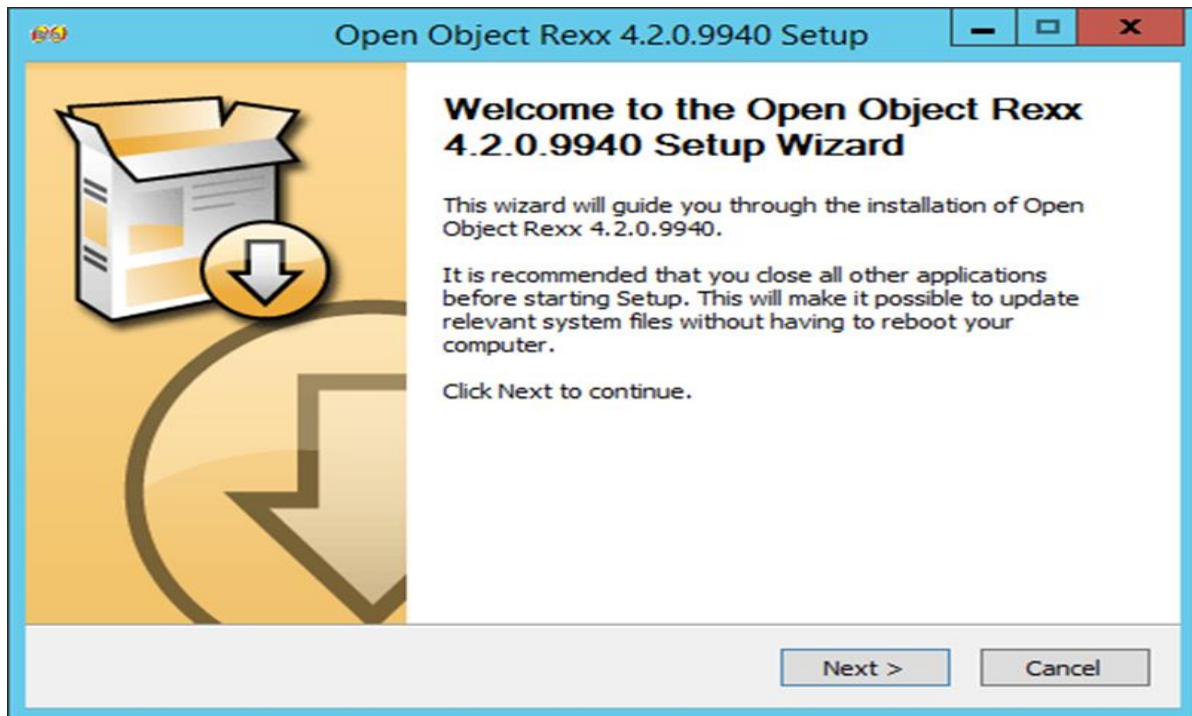
3. Rexx – Installation

The following steps will explain in detail how Rexx can be installed on a Windows system.

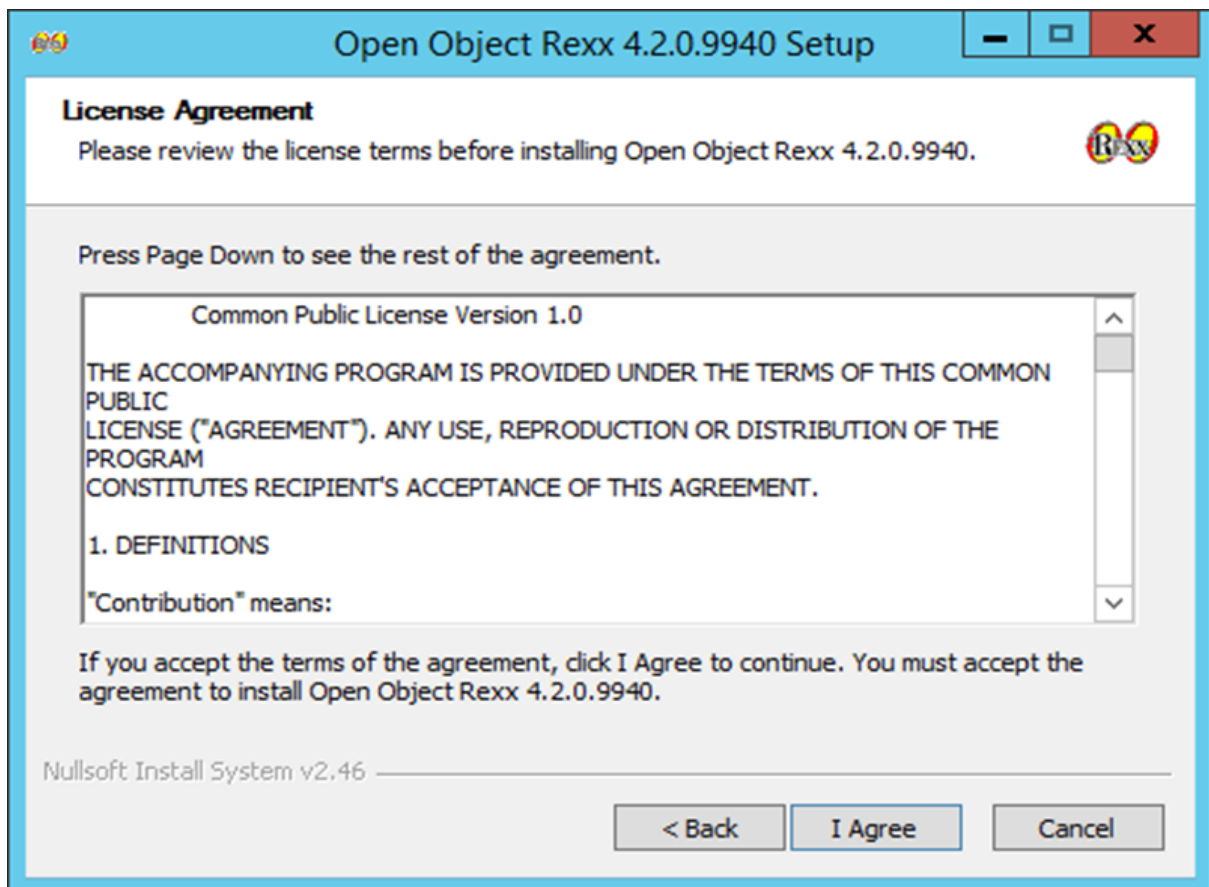
Step 1: Launch the Installer downloaded in the earlier section. After the installer starts, click on the Run button.



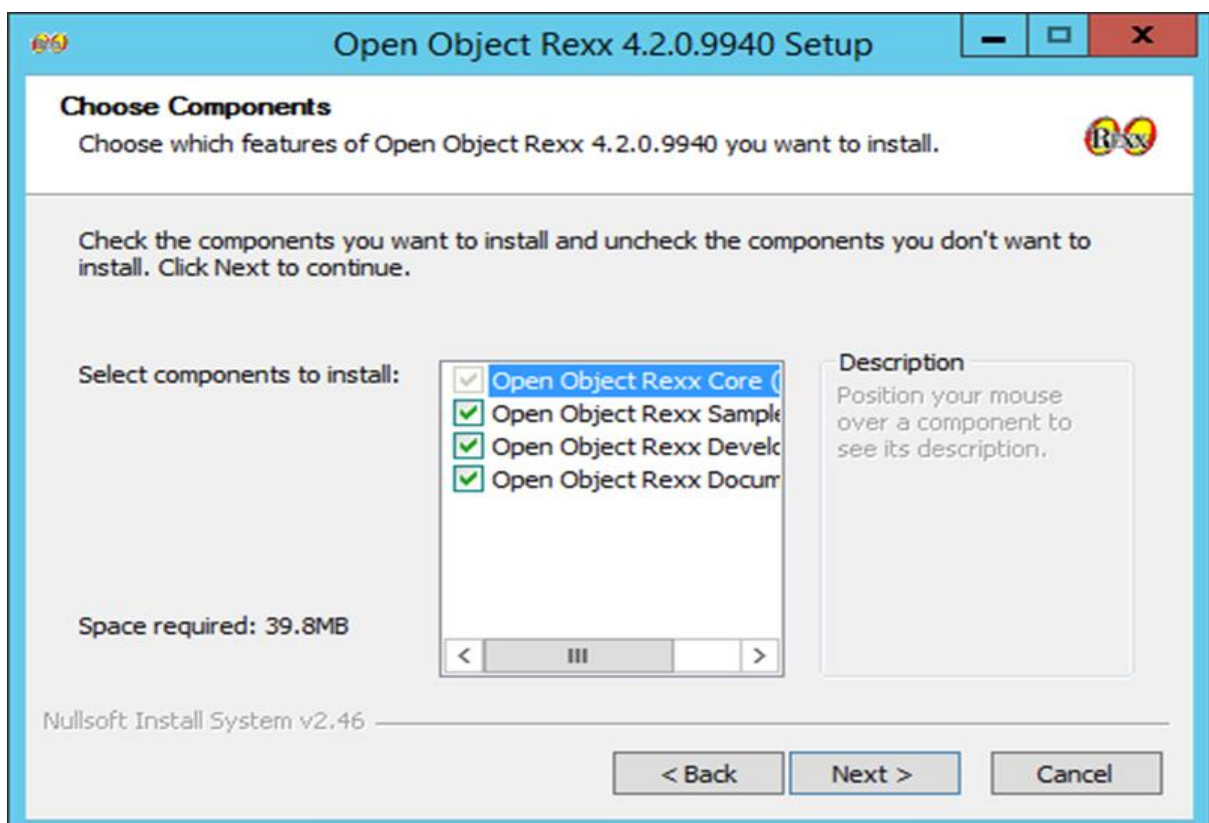
Step 2: Click the next button on the following screen to proceed with the installation.



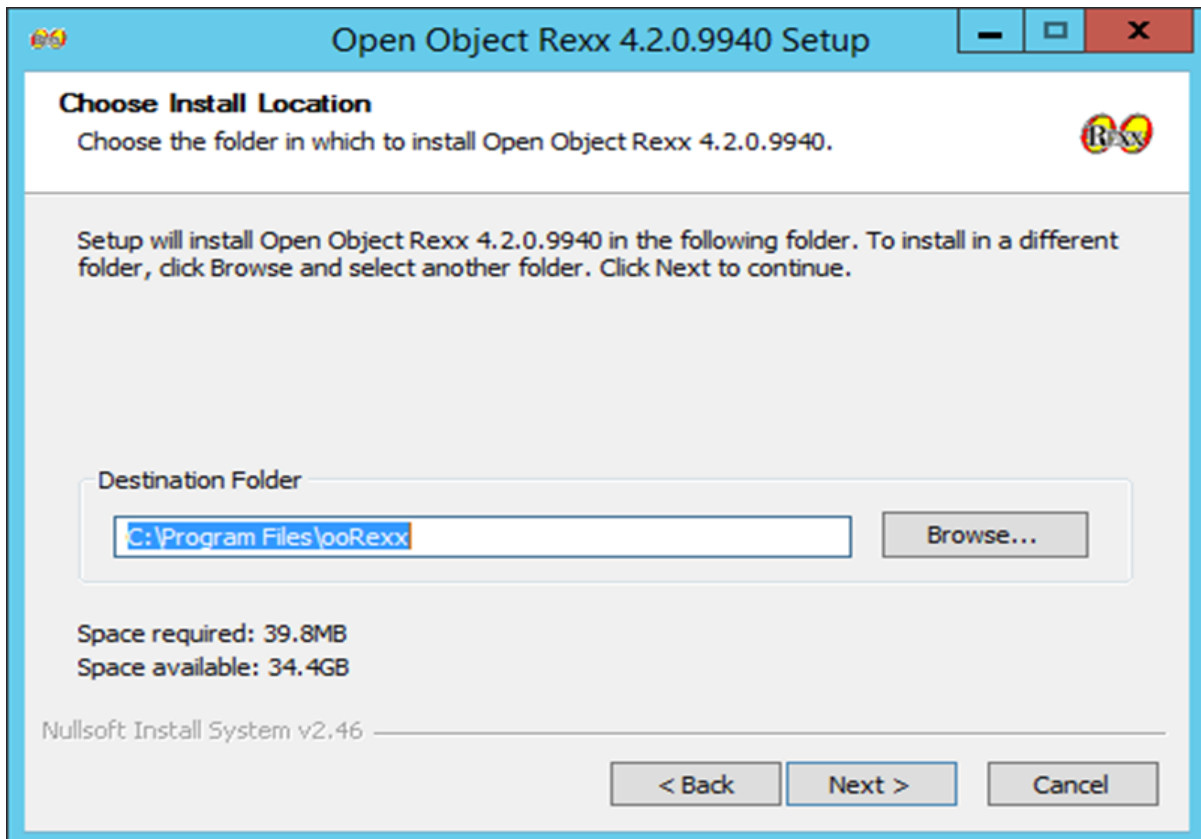
Step 3: Click on the **I Agree** button to proceed.



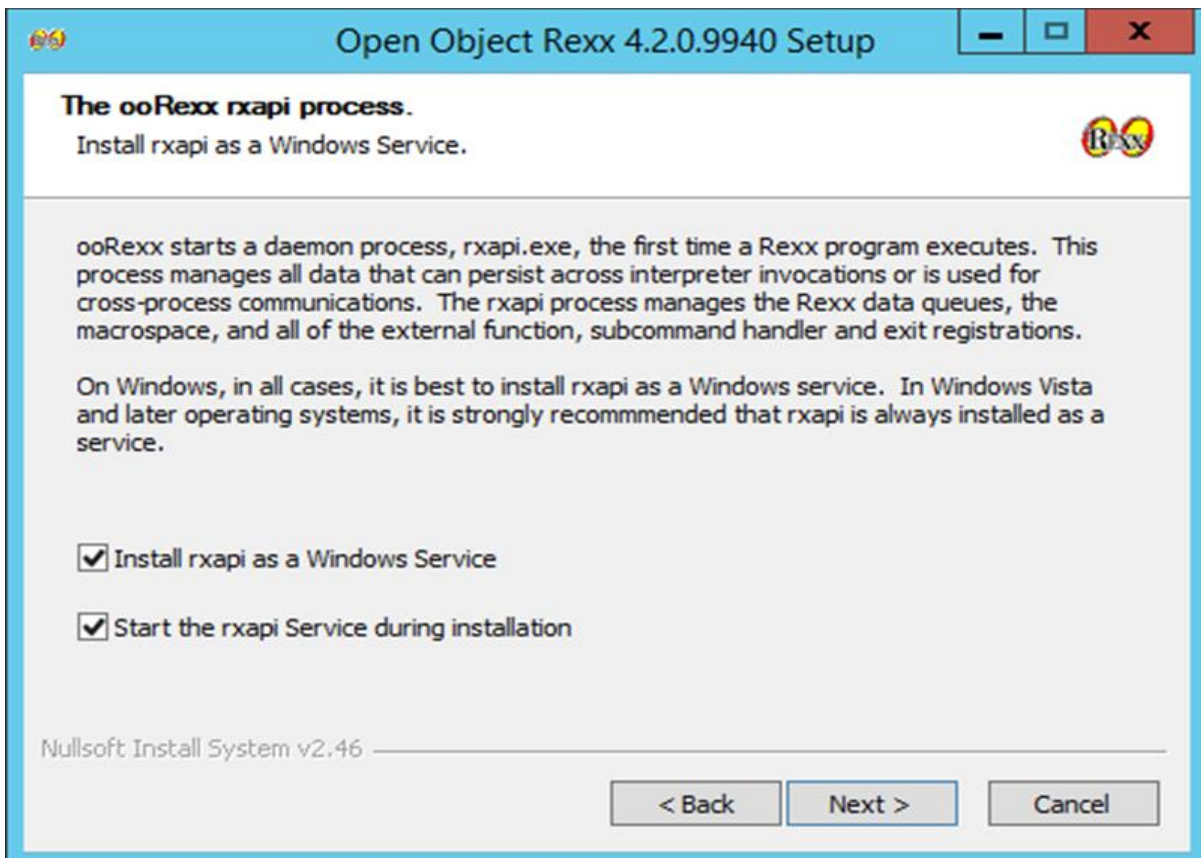
Step 4: Accept the **default components** and then click on the next button.



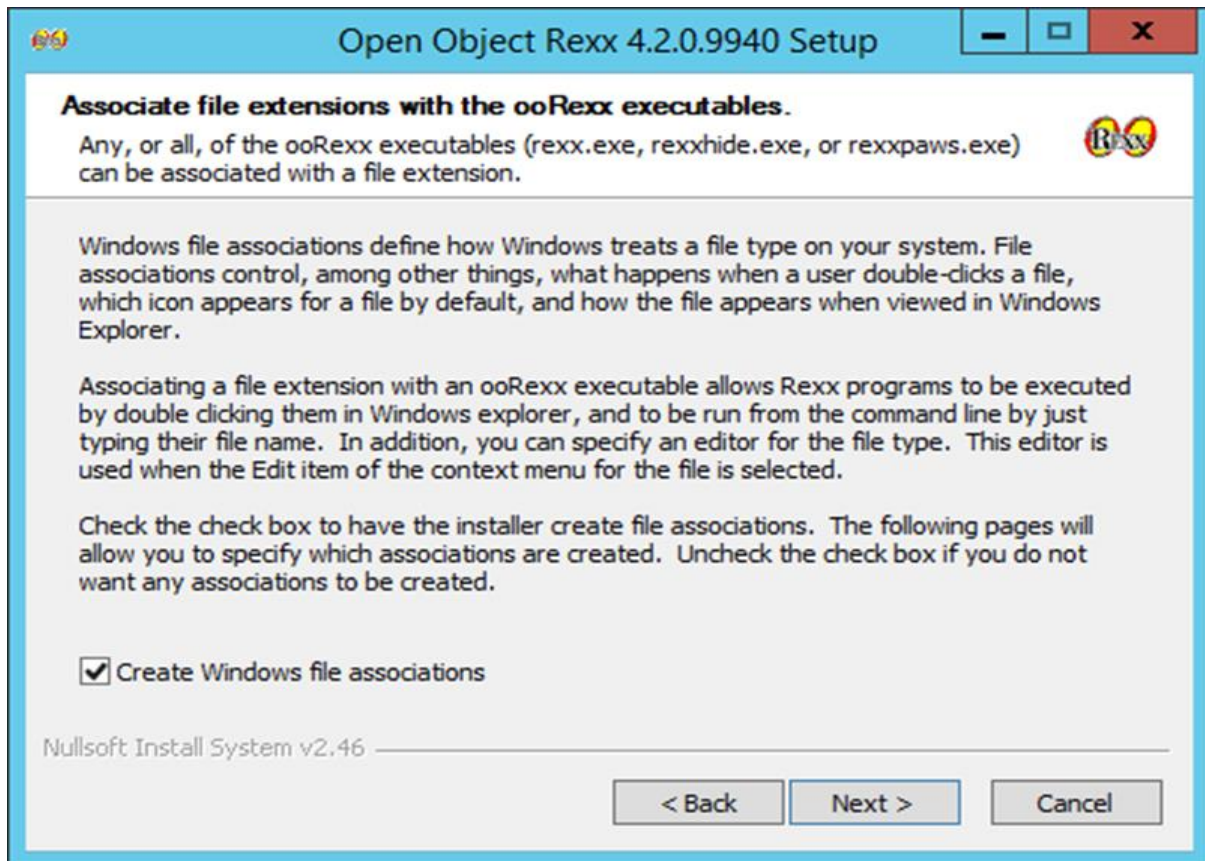
Step 5: Choose the installation location and click on the Next button.



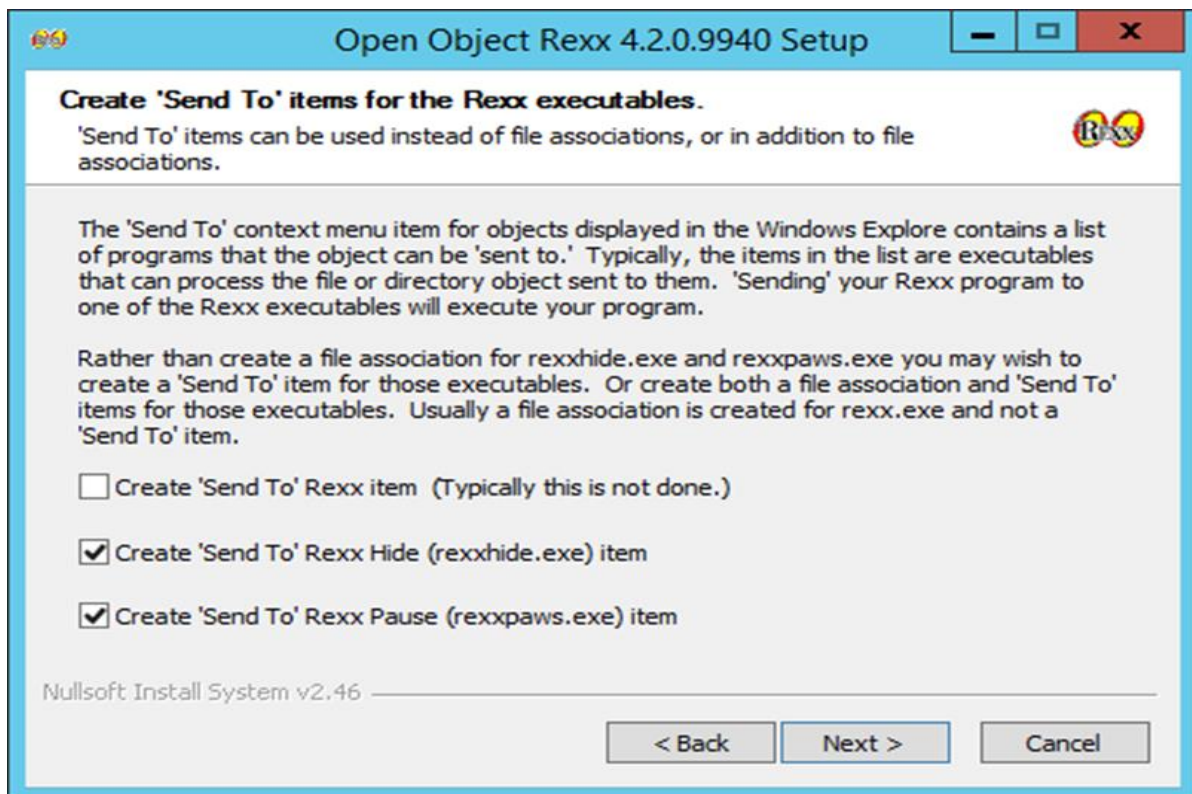
Step 6: Accept the default processes which will be installed and click on the Next button.



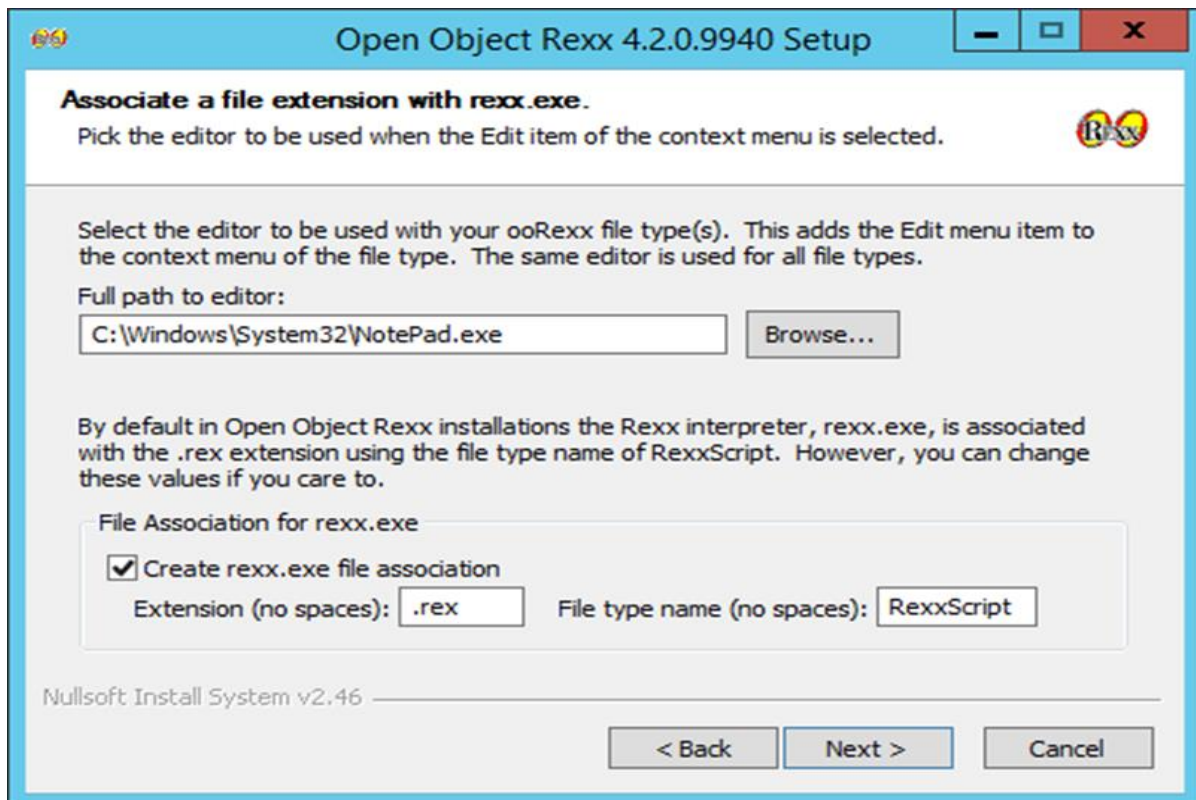
Step 7: Choose the default file associations and click on the Next button.



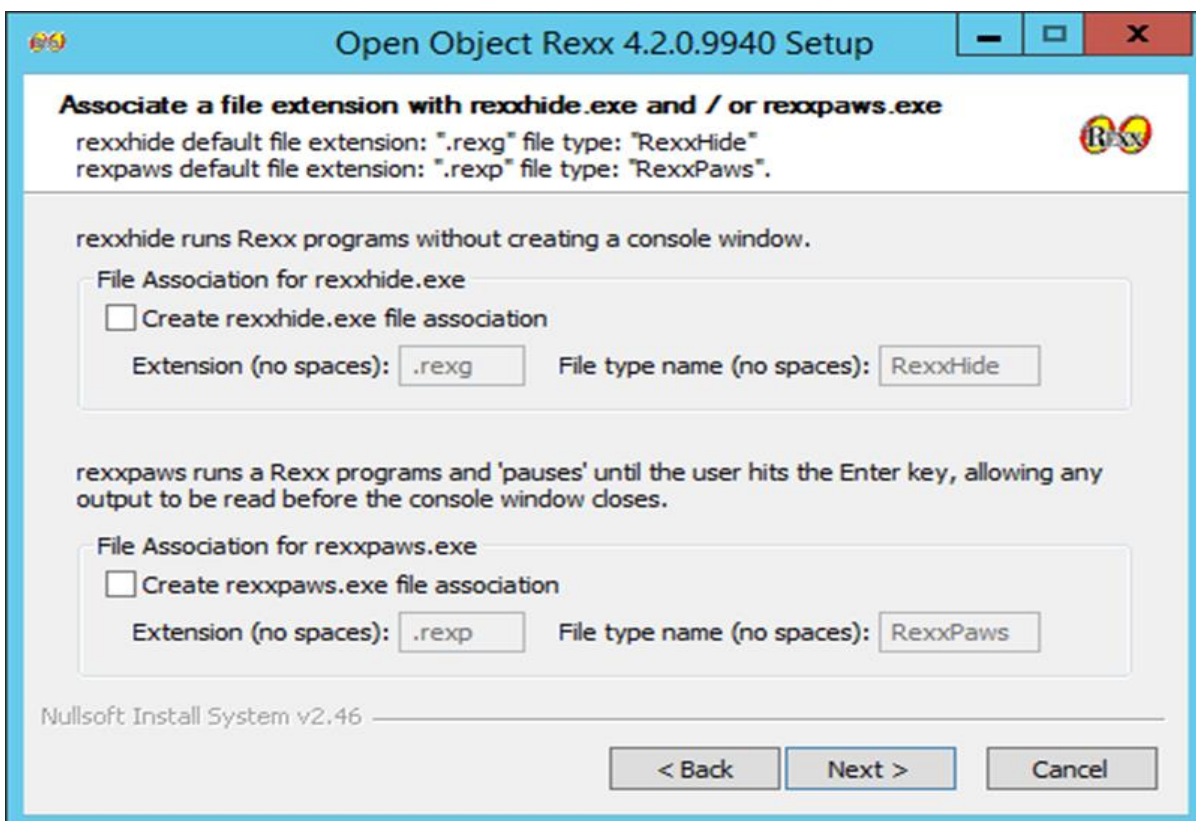
Step 8: Click on the check boxes of send Rexx items to the executables and then click on the Next button as shown in the following screenshot.



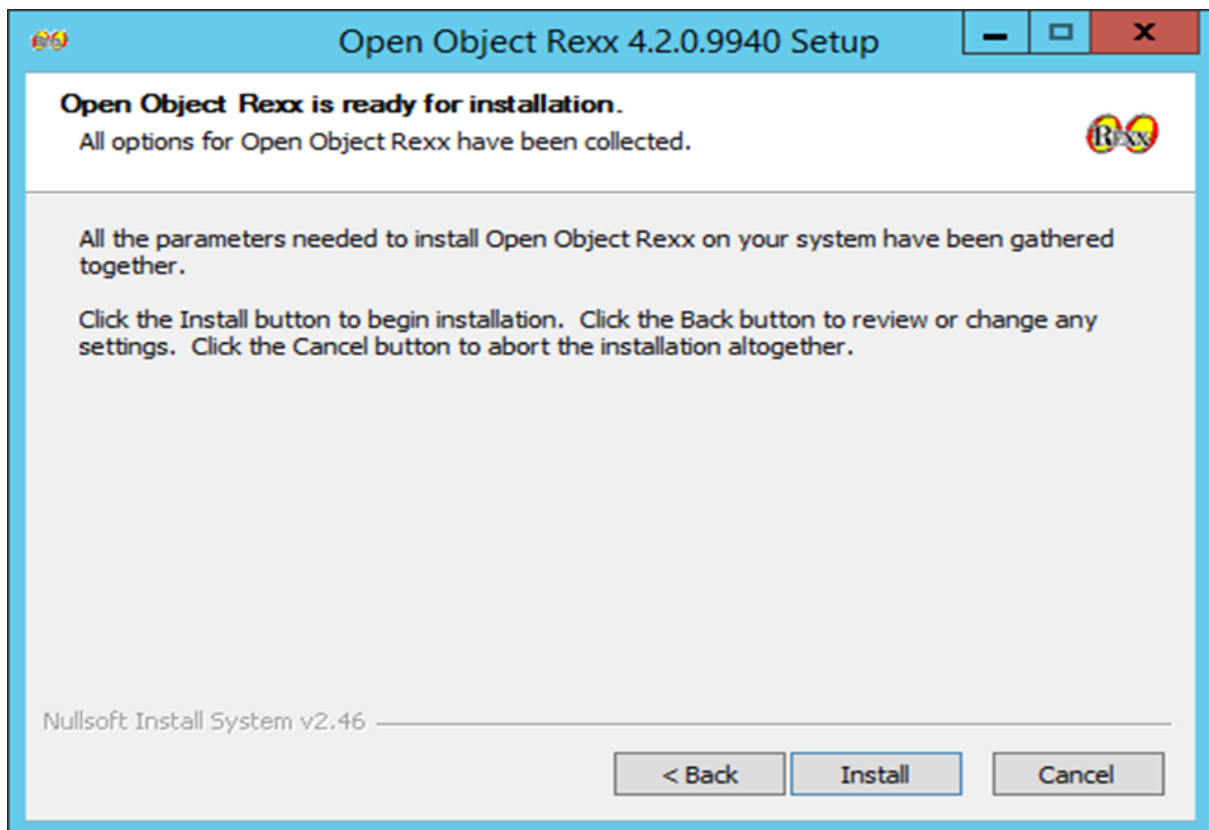
Step 9: In the next screen, choose the editor for working with Rexx files. Keep the notepad as the default option. Also accept the default extension for each Rexx file.



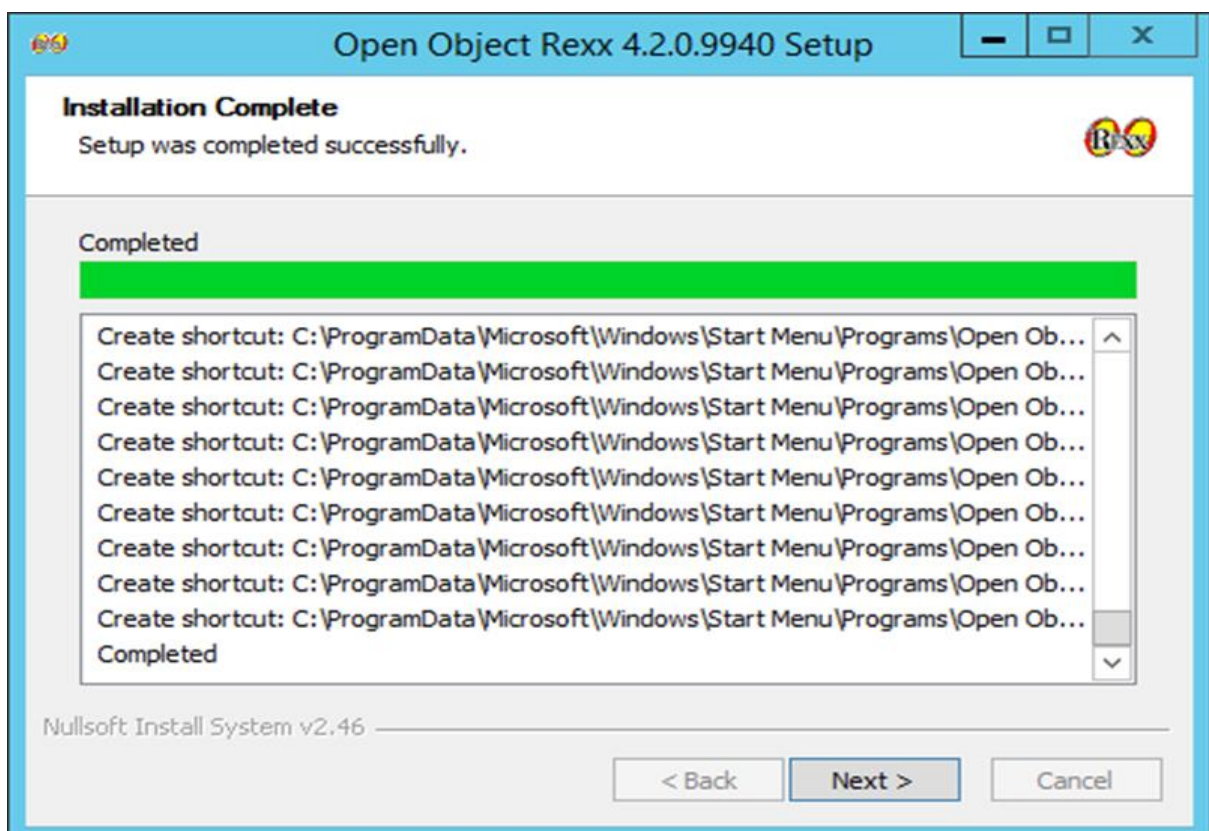
Step 10: Accept the default settings on the following screen that comes up and click on the Next button to proceed further with the installation.



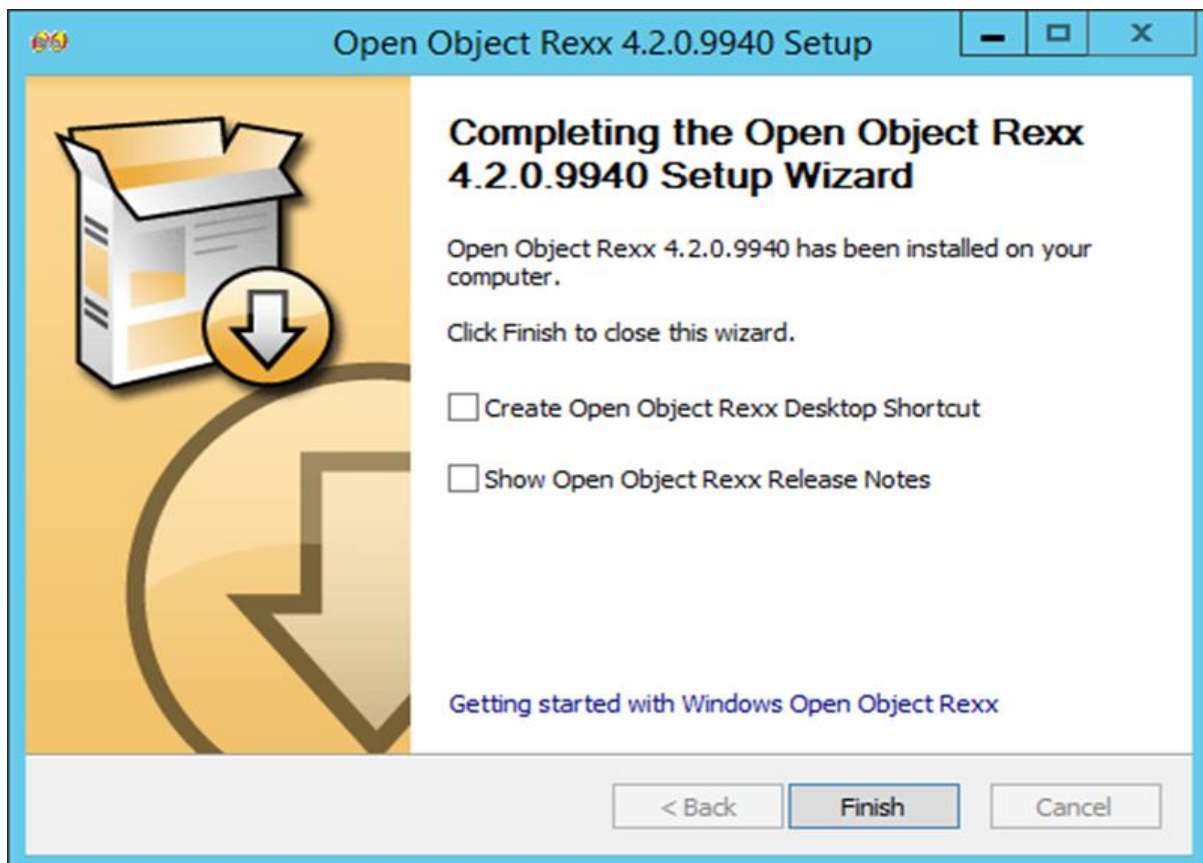
Step 11: Finally click on the Install button to proceed with the installation.



Step 12: Once the installation is complete, you need to click on the Next button to proceed further.



Step 13: Click on the Finish button to complete the installation.



End of ebook preview

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