Software Announcement
February 25, 1997

IBM Object REXX Now Runs on Windows NT and Windows 95

Overview

Initially created as a procedural interpreter, the ease of use, clearly structured concept, and rich set of powerful commands and functions of REXX have led to its high recognition and broad acceptance on IBM and non-IBM platforms.

Object REXX is an object-oriented scripting language based on REXX that fully supports object-oriented concepts, such as inheritance, polymorphism, and encapsulation. As a hybrid language, Object REXX supports procedural and object-oriented programming. It has a natural syntax, free format, and minimal punctuation. Because it is an interpreter, Object REXX programs run immediately without compilation or linkage. Object REXX provides open interfaces to many system functions and to other applications, such as DB2® for relational databases, TCP/IP sockets for communications, and C for programming.

IBM offers Object REXX for Windows® in two editions for Windows NT and Windows 95, Interpreter Edition and Development Edition. The IBM Object REXX Development Edition includes the Interpreter Edition and provides a graphical dialog editor and a programmer's workbench with debug features.

Intended Customers

All Windows NT and Windows 95 users

Key Prerequisites

A PC running Windows NT or Windows 95

Planned Availability Date

February 28, 1997, Interpreter Edition

May 30, 1997, Development Edition

At a Glance

The Object REXX programming language is:

- Based on English-like commands
- Easy to use
- Enhanced with full object orientation
- Compatible and portable over many widely accepted operating systems
- Suitable for network programming, such as Internet or intranet applications

The offering consists of two editions:

- Interpreter Edition available now
- Development Edition available later that also includes:
  - Convenient graphical dialog editor
  - Programmer's workbench

For ordering, contact:
Your IBM representative, an IBM Business Partner, or IBM North America Sales Call Center at

800-IBM-CALL Reference: SE010

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Description

Object REXX is a versatile, free-format language. Its simplicity makes it a good first language for beginners, and for experienced programmers, Object REXX offers powerful functions and the ability to issue commands to multiple environments. Object REXX is designed for object-oriented programming, but it also allows for conventional programming using Object REXX′s procedural instructions.

Programs written in Object REXX are easy to read and to write; its instructions use common English words. Programs written in Object REXX run without further compile or transform steps. Object REXX can be used to write more powerful and better structured command files for Windows, because it has a lot of system interfaces. It also has many programming interfaces to existing applications, such as DB2 or C.

Object REXX has sophisticated, structured, programming constructs: SELECT and DO loops, IF-THEN-ELSE branching, and subroutine calls. It provides superior array handling, high-precision arithmetic functions, and many built-in functions. Because variable or constant names can be up to 250 bytes long, you can use meaningful names rather than abbreviations. You can also run changes and test them immediately.

Object REXX supports:

- Classes, objects, and methods
- Messaging and polymorphism
- Inheritance and multiple inheritance

The inheritance concepts of Object REXX support metaclasses and mix-in classes. In addition to defining object methods, class methods can also be defined. Object REXX allows for the definition of static and dynamic methods, which makes it highly flexible even at run time.

Object REXX is suitable for novice programmers, especially in object-oriented programming, since no time is lost struggling with the programming environment, compile steps, type steps, type definitions, or a complex syntax. It is also suitable for professional developers because of the many programming interfaces to other Windows applications. Programmers can use Object REXX to prototype object-oriented designs easily and quickly.

Typical tasks for Object REXX range from small automation steps to full-blown applications.

Interpreter Edition

The Interpreter Edition contains a full language instruction set that enables you to code small and medium applications.

Development Edition

Comprising the Interpreter Edition, the Development Edition provides more function especially suited for program developers.

The Development Edition has a graphical dialog editor and a dialog class library. Its graphical workbench with debug features helps developers to write, manage, and maintain their programs. These functions are designed to develop large and complex applications.

A built-in tokenizer can transform the readable script into unreadable code for delivery. This allows a developer to write applications and distribute code that a user cannot read and change. Also, the interpreter can run this tokenized code faster.

A REXX application programming interface (API) is provided to develop external function libraries written in C. Because of its high flexibility and its interface to the C programming language, Object REXX can be included in applications developed mainly in C or C++ for parts that are easier to implement with Object REXX or that are configurable by the user.

Product Positioning

IBM Object REXX for Windows NT and Windows 95 is IBM′s REXX solution in the Windows environment for the established REXX programmer community, which has been growing over the last 15 years. By providing IBM Object REXX for Windows NT and Windows 95, IBM protects the investment of our REXX customers in the form of millions of lines of REXX program code.

IBM Object REXX for Windows NT and Windows 95 enables REXX programmers to port their REXX programs to the Windows NT and Windows 95 environment in an easy and effective way. IBM Object REXX for Windows NT and Windows 95 is the ideal language for program developers to learn object-oriented programming.

Trademarks

Publications

Hardcopy Publications

The following printed publications are available from IBM Mechanicsburg. To order, call 800-IBM-CALL (426-2255).

Title	Pages	Form Number	Availability
Object REXX Programming Guide	170	SH12-6222	02/28/97
Object REXX Reference Manual	500	SH12-6223	02/28/97
Object REXX OO Dialog Method	150	SH12-6224	05/30/97

Softcopy Publications

The following table lists the softcopy publications that are included in the program packages:

Title	Development Edition	Interpreter Edition
Object REXX Programming Guide	X	X
Object REXX Reference Manual	X	X
Object REXX OO Dialog Method	X	

These softcopy publications are available as displayable .INF files and in printable PostScript format as part of the basic machine-readable material.

Note: The program packages do not include program documentation in hardcopy.

Technical Information

Specified Operating Environment

Hardware Requirements: **Object REXX Development Edition**

- Windows® 95
  - Processor: 386DX, or faster
  - Screen: VGA, or better
  - RAM: 4MB minimum, 8MB recommended
  - Hard disk: 14MB
  - CD-ROM drive
- Windows NT
  - Processor: 386DX, or faster
  - Screen: VGA, or better
  - RAM: 16MB minimum
  - Hard disk: 14MB
  - CD-ROM drive

Object REXX Interpreter Edition

- Windows 95
  - Processor: 386DX, or faster
  - Screen: VGA, or better
  - RAM: 4MB minimum, 8MB recommended
  - Hard disk: 5MB
  - CD-ROM drive
- Windows NT
  - Processor: 386DX, or faster
  - Screen: VGA, or better
  - RAM: 16MB minimum
  - Hard disk: 5MB
  - CD-ROM drive

Software Requirements: One of the following:

- Microsoft® Windows 95
- Microsoft Windows NT 3.5
- Microsoft Windows NT 4.0

Packaging: Each program package includes the following material:

Development Edition

- One CD-ROM
- IPLA booklet and pointer sheet
- One Proof of Entitlement (PoE) for IBM Object REXX Development Edition
- Customer Feedback Form
- License Information
- Customer Registration Card

Interpreter Edition

- One CD-ROM
- IPLA booklet and pointer sheet
- One PoE for IBM Object REXX Interpreter Edition
- Customer Feedback Form
- License Information
- Customer Registration Card

Note: The program packages do not include program documentation in hardcopy.

Security, Auditability, and Control

User management is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

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Ordering Information

Some changes have been made to the terminology used for IBM software. These changes do not affect terms and conditions, charges, or ordering processes.

Key elements are:

- License: The license shows rights and obligations that complement copyright protection provided by law, and applies to all use of IBM software.
- Charging: IBM software is charged according to the number of use authorizations acquired. Definition of this use and its associated charges for a given product are stated in the product announcement. Use authorizations come with the program package or are available separately, and may be for users or resources. They are reflected as PoEs, provided by IBM.

  Use authorizations continue to be available for some products in use-packs of 1, 5, 10, and 50.
- Supply of Code: The software program itself will be available in various forms; for example, on magnetic media, CD-ROM, or electronically. This supply is accompanied by a use authorization.

The following highlights the key changes:

Previous Terminology	New Terminology
Program Package	Program Package
Additional License	Use Authorization for the right to copy and use the program, (for example, a PoE for "1 Server Install")
Use Based Feature	Use Authorization for Users or Resources, (for example, a PoE for "5 Concurrent Users" or "10 Connected Ports")
Distributed Feature	Use Authorization for Optional or Selectable Portions of a Program, (for example, a PoE for "5 Client Installs")

Orders for new licenses will be accepted now.

Shipments will begin on the planned availability date.

To order these programs for order type, specify the order type number, feature number, part number, program name, media, and quantity.

Program Package: Program supply (diskettes, CDs, and electronic programs), documentation, and PoE.

Description	Feature Number	Part Number	Medium
Order Number 5801-AAR			
IBM Object REXX for Windows NT and Windows 95			
Development Edition	1568	10J9368	CD-ROM
Interpreter Edition	1569	10J9392	CD-ROM

Note: The program packages do not include program documentation in hardcopy.

Use Authorization for the right to copy and use the Program —Non-Software Advantage

Authorization to copy and use the Program Package supply

Description	Feature Number	Part Number
Order Number 5802-AAR		
IBM Object REXX for Windows NT and Windows 95		
Use Authorization — Development Edition	1886	10J9372
Use Authorization — Interpreter Edition	1887	10J9396

Use Authorization for the right to copy and use the Program —Software Advantage

Authorization to copy and use the program package supply and documentation. PoE will be provided monthly as a report.

Description	Part Number
Order Number 5802-AAR	
IBM Object REXX for Windows NT and Windows 95	
Use Authorization —Development Edition	10J9382
Use Authorization —Interpreter Edition	10J9381

Software Advantage Media Packs

Description	Part Number
IBM Object REXX for Windows NT and Windows 95	
Media Pack Development Edition	10J9374
Media Pack Interpreter Edition	10J9383

Terms and Conditions

Licensing: IBM International Program License Agreement. PoEs are required for all authorized use.

Limited Warranty: Yes

Program Services: IBM provides program services for IBM Object REXX for Windows NT and Windows 95 via Internet only. IBM will prepare and collect in downloadable files program fixes, updates, modifications, and enhancements. From time to time these downloadable files will be made available for download from the Internet. Current licensees can download these files at no charge from:

http://service.software.ibm.com/dl/rexx/orexx-L

These program services will be available until December 31, 1999.

To submit a problem report, customers must either:

- Fill in and fax a Customer Feedback form, which is supplied with the program package

  or

- Answer a questionnaire available from the Internet:

  http://www.software.ibm.com/ad/objectrexx

Copy and Use on Home/Portable Computer: Yes

Program Transfer: Yes

Volume Orders: Software Advantage only

Software Advantage Applies: Yes

Upgrade Protection applies: No

Entitled Upgrade for Current Upgrade Protection Licensees: No

Variable Charges Apply: No

Educational Allowance Available: Yes, to qualified education customers.

Charges

Contact your IBM representative for charges information for this announcement.

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Note: Shipments will begin after the planned availability date.

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