



IBM Software

2007 International Rexx Symposium

April 30 – May 3, 2007



Virgil Hein
vhein@us.ibm.com

From Object REXX to ooRexx

Agenda:

- IBM Object REXX Business Status
- History of Object REXX
- Open Source – first steps
- Role of RexxLA
- IBM approval process
- Business/Product Considerations
- Open Source Template
- Customer reactions
- What do we expect from REXXLA

REXX Language Technology - Business Status

▪ **What is Object REXX**

- A object oriented language interpreter similar to Perl, PHP, Ruby and others
- Only available from IBM; supported by IBM REXX team in Germany (at the time)
- Runs on Linux, Linux on zSeries, Windows, AIX, HP/UX, Solaris, and OS/2
- Used by a small but dedicated set of IBM customers

▪ **IBM's objectives in moving Object REXX to Open Source Community**

- Support IBM initiative to support Open Source
- Show IBM's continued involvement in REXX and Object REXX
- Enhance Object REXX functionality and port to additional operating systems (e.g. MacOS)
- Maintain high level of customer satisfaction with the product by allowing customers dedicated to the technology to enhance the source code
- Support IBM's Linux strategy
 - To become an important scripting language on Linux, open source is required
- Increased exposure of IBM REXX products
 - Increased customer attention to Object REXX can lead to new licenses for the REXX compiler

REXX Language Technology - Business Status, continued

- **Products supported**

- IBM Compiler and Library for REXX on zSeries
- IBM Object REXX

- **Supporting organizations**

- External: REXX Language Association (RexxLA)
 - Committed to support the project and manage/coordinate the open source code
 - Several developers (RexxLA members) have stated they will provide contributions
- Internal: Linux Technology Center (LTC)
 - Opens new markets, including embedded systems, high-end servers and Linux Desktop systems

- **IBM sponsored activities**

- Latest release, 4Q03 for Compiler and Library on zSeries
- Product support
- Customer relations / user groups

- **Maintain annuity revenue**

Object REXX History (1)

- 1996: Object REXX as **part of** OS/2 Warp 4
- 1997: Object REXX for Windows. 2 **products**:
 - > **Interpreter Edition**
 - > **Development Edition**
- 1997: Object REXX for Linux: no fee; **as-is**
- 1999: Object REXX for AIX: **Product**
- 2000: Object REXX for zLinux: no fee; **as-is**
- 2000: Object REXX for Sun/Solaris: no fee; **as-is**

Object REXX History (2)

- Object REXX designed as the script language of OS/2

>> OS/2 development ... Stopped!

- IBM products to be transferred to Windows
 - **Object REXX required!**
- Customer applications to be transferred to Windows
 - **Object REXX required!**

>> Object REXX to be transferred to Windows

Object REXX History (3)

Business View:

- on OS/2: no separate business considerations; part of OS/2
- on Windows:
 - **Low priced product Millions of licenses needed.**
 - **Very good acceptance at beginning**
- on Linux:
 - **Free down-loads, marginal interest**
 - **Difficult to get Object REXX on Linux distribution CDs.**

>> Possibilities:

- **Reduce support to minimum**
- **Open Source**

Open Source – first steps

- Discussions with Mike Cowlshaw and Manfred Schweizer
- Discussions with Rick McGuire and development team
- ==>>Pressure of time: REXX Symposium
- Talk to Chip, Rony,..... One-on-one
- Pre-announcement on May 6, 2004 at REXXLA Symposium 2004
 - **Very positive reaction; people were interested**
 - **Meetings day and night**

Role of REXXLA

- REXXLA committee: Chip Davis, Pam Taylor, Rony Flatscher, Mark Hessling
- Structured, clearly defined responsibilities
- ==>> Very good co-operation: Work proceeding well,,,
thanks to the REXXLA team!!!

IBM approval process

- Business: Why are we doing this?
- Legal: Are we allowed to do this?
Patents, Copy right, intellectual properties?
- Sales: What about responsibility to current customers?
- IBM Development: internal use?

Business/Product Considerations

- Decide which part of Object REXX to be part of the Open Source:
 - **Interpreters for Window, AIX, and Linux**
 - **Not: OS/2, Development Edition for Windows**
- Decide on type of open source licence: GNU, CPL,
- Clean up source code
- Cleanup Object REXX books
- Transfer source code to: REXXLA (Rick, Mark, David)
- Prepare IBM announcement
- Prepare Press Release
- (Archive code of Object REXX V 2.1.3...future use?)

Business/Product Considerations, continued

Announcements:

- PreAnnouncement to RexxLA members August 12, 2004
- IBM approval for Open Source September 9, 2004
- IBM announcement October 12, 2004
 - **Object REXX ... Open Source**
 - **Object REXX ... end of market** January 31, 2005
 - **Object REXX ... end of service** March 31, 2006
- IBM Press Release

Object REXX Press Release

IBM Contributes Scripting Language to the REXX Language Association

Encourages Innovation Around REXX Application Development

BÖBLINGEN, Germany -- Nov. 29th, 2004 -- IBM and the REXX Language Association (RexxLA) today announced that IBM is contributing source code of the Object REXX Interpreter Edition to the REXXLA. The source code for Object REXX for Microsoft® Windows®, AIX®, Linux®, and SUN Solaris® will henceforth be available from REXXLA (<http://www.rexxla.org>) under Common Public License (CPL) V1.0.

By contributing this software to the Open Source community, IBM is encouraging innovation around REXX and Object REXX applications.

Today's news is a natural evolution of IBM's engagement in the open source community. Currently, IBM participates in and contributes to more than 150 open source projects. These projects include Linux, the Globus Alliance, Eclipse, and Apache.

Mike Cowlshaw, IBM Fellow and inventor of REXX, commented, "The ANSI standard REXX language is available for almost every platform, thanks to the efforts of the open source community and REXXLA. I'm delighted that programmers and users everywhere will now benefit from the same freedom to use Object REXX."

"The REXX Language Association is delighted that IBM is contributing Object REXX to the open source community," said Chip Davis, President of REXXLA. "We are targeting the first release of Open Object REXX for early 2005 and are enthusiastic about the opportunities to introduce an ever increasing community to the ease and power of programming in REXX."

About Object REXX

Object REXX is an interpreted scripting language based on Programming Language REXX, ANSI X3.274-1996, and extended to support object-oriented programming.

Object REXX for Windows was first announced in February 1997. Since then it has been ported to AIX, Linux, and SUN Solaris. Object REXX includes support for TCP/IP sockets, regular expressions, mathematical functions, and ActiveX/OLE. For more information on the IBM Object REXX products, visit: <http://www.ibm.com/software/awdtools/obj-rexx/>

About the REXX Language Association

The REXX Language Association (RexxLA) is a worldwide, independent, non-profit organization dedicated to promoting the use and understanding of the REXX programming language. For more information about REXXLA, visit: <http://www.rexxla.org/>

Open Source Template

Overview

- **Describe the Open Source Software (OSS):**
 - *Object REXX* is a scripting programming language (similar to Perl, PHP, Ruby, or others), running on MS Windows, AIX, several Linux implementations, and SUN Solaris
 - Initial announce and GA of Object REXX was in 1995
 - Initially available to run on OS/2 Warp 4
- **Who will distribute the OSS and what OSS license will be used?**
 - *Object REXX* will be maintained by the user group *Rexx Language Association* (<http://www.rexxla.org>) and the CPL (Common Public License V1) will be used
- **Why do we want to publish it in the attached community?**
 - Support IBM strategy to support Linux
 - To become an important scripting language on Linux, open source is required
 - Support IBM initiative to support Open Source
 - Propagate IBM REXX language technology to clients and servers
 - Show IBM's continued involvement in REXX and Object REXX
 - Protect customers' investments

Community Assessment

- **Are we donating code to an existing community?**
 - Yes, to RexxLA (Rexx Language Association (<http://www.rexxla.org>)). RexxLA is a user organization and subgroup of SHARE
- **Technical relationship established with people in community?**
 - Yes, especially with Mike Cowlshaw, inventor of REXX and Rick McGuire, main developer of Object REXX
 - Code quality, documentation, function?
 - Code quality: Stable, high quality, less than 15 APARs per year
 - Documentation: Will be available in the form of a Programming Guide (170 pages), a Reference (570 pages) and additional README files (describing bug fixes and enhancements). The documentation will be available in PDF, Windows Help File (hlp) and via XHTML. Source files will be provided as part of Open Source via SGML.
 - Function: The product is functionally complete and has no dependencies on other products or components other than the underlying operating system.
- **Have we communicated with the community about our donation?**
 - Yes, to a core team at the most recent user group meeting
 - International REXX Language Symposium 2004 in Sindelfingen, Germany, May 2, 2004

Community Assessment, continued

- **What are IBM's objectives of donating to the Open Source Community?**
 - Enhance Object REXX functionality and port to additional operating systems (e.g. MacOS)
 - Maintain high level of customer satisfaction with the product by allowing customers dedicated to the technology to enhance the source code
 - Continue to support partnerships with external development communities through open source projects (Eclipse project has led the way)
 - The REXX compiler may also benefit. The increased attention of the customers to Object REXX can lead to new licenses for the REXX compiler
 - To keep IBM presence in REXX technology

Technical Assessment

- **Resource in place to participate in the community - at least short term? Yes**

- Who is the IBM technical lead? [Lavrentios Servissoglou/Germany/IBM](#)
- Future versions planned? [Not within IBM](#)
- Will you accept any fixes and/or minor modifications from others?
 - Since Object REXX on Windows continues to have an IBM support commitment through March 2006, IBM will maintain a set of source code for customer reported problems.
 - Separately, Rexx LA will maintain a set of source code and will manage any enhancements, fixes, and modifications submitted by the OSSC.
 - IBM will not make any changes to the OSS. IBM will communicate fixes to the OSS community.

- **Publication method?**

- Under control of *Rexx Language Association* user group
- Pointers to published code will be added to
 - DeveloperWorks
 - Ongoing development and maintenance will be under control of Rexx LA

Legal Assessment

- **What is the license governing the open-source software?
What are the important terms and conditions?**
 - CPL (Common Public License) 1.0
(<http://www.ibm.com/developerworks/oss/CPLv1.0.htm>)
 - No additional terms and conditions
- **What are the implications regarding the use of the code?
What are the implications associated with contributing to
this community?**
 - Base code, as delivered to OSS community the first time, is owned by IBM
(contains IBM Copyright statements)
- **If contributing device drivers or hardware enablement
code - is there IP in the hardware interfaces? Approved
by the hardware owner?**
 - Not Applicable

Customer reactions

- **Existing customers: few questions to REXXLA organization**
- **Prospects: Positive interest at last SHARE**
- **Publications:**

What do we expect from REXXLA concerning ooRexx

- **Keep ooRexx reliable**
- **Keep ooRexx compatible to Object REXX and REXX programs**
- **Provide easy migration from Object REXX to ooRexx**
-
-
- **Acceptance on Linux ...(get on Linux distribution CDs)**
- **Port to other platforms**

**The rest is
history**