

# 16<sup>th</sup> International Rexx Symposium Highlights

18-21 April 2005 Pamela J. Taylor René Vincent Jansen

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## Weekend Wiki with Rexx

#### Mike Cowlishaw

The session began with a little background about wiki. Mike got started writing his own because he wanted to integrate years of collected reference material with wiki pages, include plain text files, have common markup for web pages, notes, Wikipedia input, and have interlinking among multiple projects. He demonstrated ease of markup and use in his implementation.

Mike then described the Rexx code for a web server, how to program a wiki, and the basic structure of the project/page directory.

Mike's implementation added some interesting additions to standard wiki processing:

- ability to quickly do a Google search for items related to the current page
- ability to generate a static snapshot for a publishable version of a project (also includes facilities to manage the snapshot)
- allows use of any HTML tags
- proper handling of quotes, shorthand for accented characters and for superscripts

# Cross-Platform TCP/IP Socket Programming in REXX

#### **Bob Stark**

Bob started with an overview of TCP/IP communication concepts and defined important terminology. He also level-set everyone on the basics of sockets. Bob reviewed the Rexx function calls available, comparing the mainframe and distributed platform ways of doing things – this is particularly useful for programmers who are actually writing the code on both sides of cross-platform applications. He also distinguished between which functions are used by servers and which by clients.

Bob then showed a sample program and demonstrated it working between his Windows desktop used for the presentation and the ProTech mainframe system.

Being frustrated with having different function calls on different platforms, Bob decided to write his own über-function (xsocket()) to have a consistent way of doing things. He showed his Rexx code for xsocket() and then illustrated how he used it in other programs.

# A NetRexx Application Using Hibernate and JFS

#### René Jansen

René gave us some background into the business and regulatory issues facing ABN-AMRO that were drivers for the project in which he's been involved. They chose a portal-based solution for managing access to and maintenance of reference data across many silos (both business and geographical) within the bank.

They developed the technical architecture around the ABN-AMRO standard of J2EE. For initial implementation, they chose JBOSS as the app server but are planning an eventual migration to WebSphere Application Server (WAS). WebSphere MQ (MQSeries) provides the communication layer; the team also created client software for use by sites that had not yet deployed MQ.

René provided a lot of insight into the development principles that allowed a small team to succeed on such a mission-critical project. He also discussed how the team chose other elements of the architecture, including Java Server Faces (JSF) for page switching, Hibernate for object model management, database design, object identifiers and the like.

# ADL3 – a REXX-based application server

#### Don Bourdage

Michael Beer of Market Development Consulting believes that there is resurgence in the application server market and the company is looking to play a role in that space. They are working on software to serve these needs. ADL3 is written completely in REXX, using REGINA as the implementation language. The system is a complete application server, integrating an http server, a mail list manager and several tools, including a tool to create PDF/HTML data. The system is designed in a platform independent way, with an initial implementation under windows. An unexpected development prevented Michael's attendance but he graciously arranged for Don to present his talk.

# What's Right with Rexx: Can Rexx Be Used for General Application Development?

#### Gil Barmwater

Gil led an exploration of the value of Rexx for general-purpose application development. He asked the group to address some key "objections" to Rexx in the industry: (1) It's just a mainframe language; (2) It's just a scripting language; (3) Rexx is different.

He related this to the specific applications at Safe Data, Inc., and how this has allowed them to have "non-programmers" who understand the business issues to successfully develop and deploy the IT applications needed to run the business.

Group discussion included

- trends in languages (compiled versus interpreted)
- interfaces/APIs of other systems are often extremely complicated
- Perl has a large library of packages in a "global" repository with a package manager that assists in locating the needed functionality
- does the language need an IDE?

# Business Update on IBM REXX Products

#### Virgil Hein

Virgil provided an update from the IBM business perspective. He provided updates on plans for moving to end-of-support for Object REXX on Windows and Unix, a few notes on the ooRexx initiative, and the status of currently supported IBM products (e.g., the REXX compiler).

### From Object REXX to ooRexx

#### Manfred Schweizer, Uwe Berger

Manfred provided a history of the evolution of Object REXX and how the decision to contribute it to open source was reached. He provided a fascinating insight into the behind-the-scenes activities necessary to actually have a successful transfer from commercial product to open source. There's so much corporate bureaucracy to navigate – nothing's as easy as it seems like it should be. <sup>(2)</sup> But a year later, both IBM and RexxLA have come through it all and delivered the first ooRexx release.

# How to "Open Source" a Commercial Product

#### Mark Hessling

Mark's talk picks up the story from where Manfred's leaves off. Once the open source decision was made in IBM and the source turned over to RexxLA, what did it take to get the first release delivered?

Mark presented a timeline of the activities leading up to the first public release. Setting up an open source project is a complex initiative. There are lots of details necessary to convert a commercial product into an open source project, such as deciding on a product name, obtaining a SourceForge project name, registering domain names, searching for potential conflicts, etc.

He also shared some of the characteristics of doing development in an open source environment and how that differs from the closed source world.

### **Open Object Rexx Documentation**

#### David Ashley

David gave some background on markup languages as context for some of the decisions the ooRexx team had to address relative to the user documentation. They needed text format, a solution that could be easily version-controlled, and something that could easily produce a variety of published formats. David reviewed the pros and cons of the available choices, why he chose DocBook, and why he wrote his own Rexx program to convert from the original XHTML source to an SGML document suitable for DocBook.

He then described the ooRexx documentation distribution and how it is built. He showed example documents and illustrated the build process.

# Marketing Rexx

#### **Howard Fosdick**

Howard took us through the need for and challenges of marketing the value of Rexx. He presented a thorough situational analysis, pointing out that the key problem is one of awareness. He posted the ooRexx announcement on OSDIR.com and discussed the results. He identified some key targets where Rexx could be promoted, and some techniques that individuals can use to promote Rexx.

Howard believes Rexx has "way less mindshare than it deserves" but that there are plenty of ways in which this can be changed.

#### **Using BSF4Rexx**

#### **Rony Flatscher**

Rony began with some of the basics about OpenOffice, including the history of its evolution. He then provided insight into the OpenOffice architecture, including supported programming languages, as background for developers.

Rony showed the steps needed to create a connection to the server using Java. But since there's no support for ooRexx in OpenOffice, how could one use ooRexx for automation? Use BSF4Rexx!

Rony reviewed Bean Scripting Framework and then showed how to use BSF4Rexx to automate OpenOffice.

## Automating Microsoft Excel Via ooRexx ActiveX/OLE Lee Peedin

Lee refreshed everyone's memory on ActiveX/OLE and moved quickly to showing how to use ooRexx to automate Excel. He provided the important tip that using Excel's macro recorder is a very easy way to bootstrap creation of your automation scripts. He then took a stepby-step approach to the things one must do to automate Excel, and pointed out some tips (for example, suppressing display alerts and closing workbooks) to ensure success.

Lee wrapped up by demo-ing an application developed at Safe Data, Inc. using this capability and the RxVB.PrinterObject he discusses in his second presentation. This application has proven very beneficial to SDI.

# Automating OpenOffice with ooRexx: ooRexx Nutshell Examples for Write and Calc

#### **Rony Flatscher**

In classic Rony fashion, he updated his presentation during the Symposium by writing a brand new wrapper class (OOo.cls) to simplify the interface to the OpenOffice. Rony first showed how little code is required to actually interface with OpenOffice, using the code to initiate the Write application as an example.

Rony went through a number of examples to access and manipulate the Write and Calc components of OpenOffice. He walked through the code and then executed each of the examples. His "nutshell" examples were originally developed by one of his students.

## **Open Object Rexx RxFtp Class**

#### David Ashley

When IBM contributed Object REXX to open source, they were unable to provide the source to the Rexx FTP function package. As a member of the ooRexx development team, David replicated RxFTP as an ooRexx class. This is a client package only and is included in the current distribution.

The obvious first question was what language to use? David chose ooRexx.

David reviewed the principles that guided his development effort. He then discussed the methods implemented in the new RxFTP.cls, including some methods not in the original IBM implementation that make using the new class easier. He also discussed his test suite and demonstrated it for the audience.

David issued a "call for help" for testers, and for developers to propose or contribute additional methods.

# Intro to DB2 UDB Programming using REXX

#### **Bob Stark**

Bob presented background on the capabilities of the DB2 Universal Database (UDB) and the programming APIs and tools, including REXX/SQL (from Mark Hessling). Bob then showed some standard patterns of things one would want to do in a database table and illustrated the differences between the native UDB functionality and the REXX/SQL functionality.

Bob showed example Rexx code for each of the steps in the standard patterns. He also described REXX/SQL, the pros and cons of using it, how to install it, and his wrapper function code.

# Using ooRexx ActiveX/OLE and the RxVB.PrinterObject to Create Professional Documents

#### Lee Peedin

Lee presented his RxVB.PrinterObject, a tool to produce professional documents using ooRexx for Windows. He showed us how to instantiate the PrinterObject and discussed the available methods and attributes provided. He also gave some good advice on the practicalities of printing on Windows. The PrinterObject is not limited to handling text, but can also print graphics and do transformations. It can interrogate the capabilities of the printer. The presentation concluded with a demonstration of the process employed to print the badges for the RexxLA Symposium attendees.

### Visual SlickEdit with Rexx

#### Gil Barmwater

Gil discussed the specific advantages of the Rexx support in the Visual SlickEdit text editor product. After an introduction on the history of this product within RexxLA, Gil demonstrated how it could be customized to edit ooRexx source code. This was followed by a discussion on the progress of adding extended support for ooRexx. Gil plans to contact the Visual SlickEdit developers to encourage support for ooRexx in future versions.

### May the Parse Be With You

#### **Chip Davis**

Chip explained the use of the PARSE instruction from simple word parsing to complex string analysis. New keyword features such as LOWER and CASELESS were introduced. Using examples of increasing complexity, the advanced capabilities of PARSE were demonstrated. Chip offered sound advice on what to do, and what to avoid. This very in-depth tutorial of PARSE deserves a place on each participant's essential on-the-job survival kit.

# **RexxLA Annual Meeting**

#### Chip Davis

Gil Barmwater, RexxLA Secretary/Treasurer, presented a positive Treasurer's report and acknowledged IBM's generous contribution to the success of last year's Symposium.

Chip Davis, RexxLA President, reported on the actions taken at Monday's Board meeting.

- Approval of ooRexx project charter
- Formal appointment of ooRexx project team
- Appreciation to the transition team for the work leading to the establishment of the ooRexx project
- Approval of mechanism for managing donations made for the support of the ooRexx project
- Agreement to investigate consolidating RexxLA IT resources to Safe Data, Inc.
- Made preliminary decision on 2006 Symposium venue and dates -- Austin, TX, first week of May

Chip Davis conducted the annual election process. He reviewed the make-up of the Board and identified the positions for which elections are to be held in 2005. Chip then reviewed the slate and invited additional nominations from the floor. The slate was unanimously approved.

Newly elected officers and board members:

President	Chip Davis
WebMaster	Mark Hessling
ListMaster	Frank Clarke
Board Members	Rony Flatscher David Ashley