REXX LA Symposium

Business Update on REXX at IBM
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REXX (Restructured eXtended eXecutor) History

- **March 1979 Mike Cowlishaw (IBM Fellow) writes initial specification**

- **Late 1979 first implementation internal to IBM on VM/CMS.**

- **Available to the general public in 1983 VM (3rd release)**

- **1989 REXX Compiler for MVS and VM released**

- **1990 first (annual) Rexx symposium**

- **1996 ANSI "Programming Language REXX", X3.274-1996**

- **1996 NetRexx (for Java) / Object REXX   released**

- **2003 REXX Compiler Release 4 (aka Version 1.4)**

- **2005 Open source ooRexx   (Object REXX)**

- **2011 Open source NetRexx**

"Other" REXX at IBM

- **System REXX (SysRexx)**

  - **'Server' infrastructure through which REXX may be run outside the normal TSO/E or batch environments; ability to initiate REXX directly via operator console**

- **IBM Rexx for CICS**

  - **webpage (http://www-306.ibm.com/software/htp/cics/products/rexx/)**

REXX Compiler on z/OS and z/VM

- **IBM Compiler for REXX on zSeries Release 4**

  – z/VM, z/OS: PID 5695-013

- **IBM Run Time Library for REXX on zSeries Release 4**

  – z/VM, z/OS: PID 5695-014

  – VSE part of operating system

- **IBM Alternate Library for REXX on zSeries Release 4**

  – Free download

  – http://www-306.ibm.com/software/awdtools/rexx/rexxzseries/altlibrary.html

  – Included in z/OS 1.9 base operating system

- **Continued ongoing support for Release 4**

  – Release 4 has been available since 2003

  – Release 3 is no longer in service

Object REXX / NetREXX as Open Source

- **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**

  – Object REXX includes support for TCP/IP sockets, regular expressions, mathematical functions, and ActiveX/OLE

- **NetRexx is a system independent programming and scripting language, which blends the clean, easy-to-learn syntax of Rexx with the Java™ environment**

  – With NetRexx, applications and applets for the Java environment can be created faster and more easily than by programming in Java

- **Object REXX and NetRexx as open source are maintained by the international user group REXX Language Association (http://www.rexxla.org)**

  – Recent activities include:

    • Rexx LA plans to release ooRexx v4.2 before year end 2011   **????**
      – A major memory leak has been fixed in ooRexx v4.2 in the rxapi daemon
      – A new version of ooDialog will be included in ooRexx v4.2 (the previous ooDialog will continue to be maintained)
    • Recently assumed ownership of NetRexx as open source

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- **Language track**

  - Session Title   Submitter Email   PeopleP

    - LE for Dummies   craig.schneiderwent@dot.wi.gov Tom Petrolino (Speaker)

    - Language Environment Futures Workshop and AMODE 64 Discussion craig.schneiderwent@dot.wi.gov John Monti (Speaker), Visda Vokhshoori (Speaker), Tom Petrolino (Speaker), Tom M. Ross (Speaker)

    - Introduction to IPCS for Application Programmers   craig.schneiderwent@dot.wi.gov John Monti (Speaker)

    - Language Environment, COBOL, PL/I, C/C++, Rexx Project Opening craig.schneiderwent@dot.wi.gov   M. Carl Gehr (Speaker)

    - REXX Language Coding Techniques   craig.schneiderwent@dot.wi.gov Virgil Hein (Speaker)

    - An Introduction to Using REXX with Language Environment craig.schneiderwent@dot.wi.gov Barry L. Lichtenstein (Speaker)

    - Full Speed Ahead with COBOL Into the Future   craig.schneiderwent@dot.wi.gov Tom M. Ross (Speaker)

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- **Language track**

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    - Exploit Condition Handling in LE craig.schneiderwent@dot.wi.gov
      Tom M. Ross (Speaker)

    - REXX – PARSE Command Bruce.Koss@WellsFargo.com
      Bruce Koss (Speaker)

    - REXX – Trouble Shooting   Bruce.Koss@WellsFargo,com
      Bruce Koss (Speaker)

    - Look What I Found Under the Bar!   craig.schneiderwent
      John Monti (Speaker)

    - Heap Damage, Is Your Insurance Up-to-date?
      craig.schneiderwent@dot.wi.gov   John Monti (Speaker)

    - Finding Debugging Clues in LE Dumps   craig.schneiderwent@dot.wi.gov
      John Monti (Speaker)

    - COBOL Performance - Myths and Realitiescraig.schneiderwent@dot.wi.gov   Tom
      M. Ross (Speaker)

    - Make your PL/I and C/C++ code FLY with the right compiler options
      craig.schneiderwent@dot.wi.gov Visda Vokhshoori (Speaker)

REXX Requirements   (May 2011 note)

- **Hello REXX fans, z/OS REXX requirements for the interpreter, not the compiler, should be routed to the z/OS -> TSO pipeline in FITS. Who is the IBM contact that is routing these requirements? These should go to TSO. I'll need to go over our list, but should have news to report soon about some REXX requirements we are about to mark as accepted, not just recognized. There are already many in recognized status. TSO/E compids 566528508 and 5665IXX00 cover z/OS REXX and the z/OS REXX Interpreter. These are part of TSO/E and ship with our TSO/E FMID (as in HTE7790). Not part of the REXX compiler!   If you need a IBM contact for z/OS REXX you can contact me directly. My co-worker _Bill Yurkovic_ has more REXX expertise than I do but I can answer any of your questions or respond to requirements. John Eells attends every SHARE and handles software**

  strategy for both TSO/E and REXX, so he can be easily contacted as well.

  In terms of REXX being dead, SYSREXX and SDSF REXX are just two or many recent features that are using and extending REXX. Best regards, Mike: z/OS Software Service   TSO/E Change Team Dept D27A   Poughkeepsie, NY   Bldg 707-2-F-03 845-435-8075 (T/L 295-8075)   _mkasper@us.ibm.com_

Recent REXX requirements addressed

- **summary of what has been done in recent releases for TSO/E REXX (based on previous requirements noted)   - - as of April 2011**

  - z/OS V1R8 - Allow REXX execs to trap output from authorized commands in 31-bit storage not 24-bit storage with a new VARSTORAGE(HIGH) profile option. This was in response to user requirements.

  - z/OS V1R9 - Updated REXX and the LISTDSI function in REXX to support data sets with new DSNTYPE LARGE and add a new LISTDSI variable SYSSEQDSNTYPE.

  - z/OS V1R10 - TSO/E REXX support for System REXX or SYSREXX, which was also rolled back to z/OS V1R9 through an SPE new function APAR.

  - z/OS V1R11 - Updated REXX and the LISTDSI function in REXX to support new EAV data sets and add two new LISTDSI variables SYSEATTR and SYSEADSCB.