About The Speaker

With an IT career spanning over 30 years, Charles Guarino has been a consultant for most of them. Since 1995 he has been founder and President of Central Park Data Systems, Inc., a New York area based IBM midrange consulting company. In addition to being a professional speaker, he is a frequent contributor of technical and strategic articles and webcasts for the IT community. He is a proud member of COMMON's Speaker Excellence Hall of Fame and also Long Island Software and Technology Network's Twenty Top Techies of 2009. Charles currently serves as a member of COMMON's Strategic Education Team (SET) and is also Immediate Past President and monthly Q&A host of LISUG, a Long Island IBM i User's Group www.lisug.org.

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Twitter - @charlieguarino

What We'll Cover …

- The Path to Application Development Tools Modernization
- Crash Course on RSE and LPEX
- Out Of This World Debugging
- Hot Off The Press!
- Wrap-up

Who are you?

20

10 * 2

4 * 5

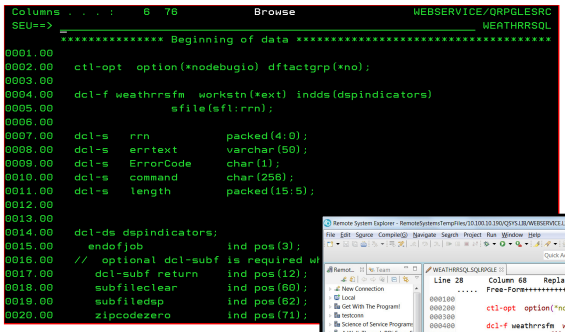
1 * 20

Scary Myths

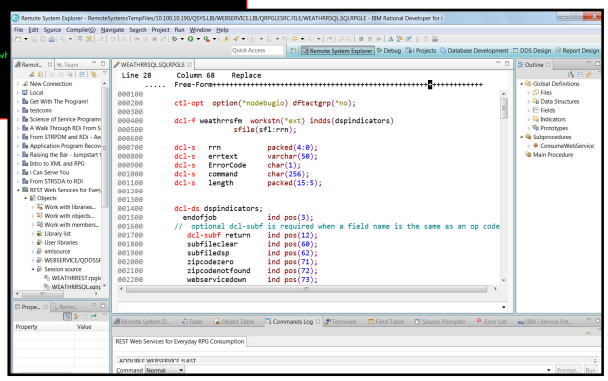
Application Development Tools Modernization Myth #1

“I can develop faster using what I already know”

CLI versus IDE



```
Columns . . . :    6  76          Browse                  WEBSERVICE/QRPGLESRC
SEU==>                                                     WEATHRRSQL
****************** Beginning of data *************************************
0001.00
0002.00   ctl-opt  option(*nodebugio) dftactgrp(*no);
0003.00
0004.00   dcl-f weathrrsfm  workstn(*ext) indds(dspindicators)
0005.00                 sfile(sfl:rrn);
0006.00
0007.00   dcl-s   rrn           packed(4:0);
0008.00   dcl-s   errtext       varchar(50);
0009.00   dcl-s   ErrorCode     char(1);
0010.00   dcl-s   command       char(256);
0011.00   dcl-s   length        packed(15:5);
0012.00
0013.00
0014.00   dcl-ds dspindicators;
0015.00     endofjob            ind pos(3);
0016.00   //  optional dcl-subf is required wh
0017.00      dcl-subf return     ind pos(12);
0018.00      subfileclear        ind pos(60);
0019.00      subfiledsp          ind pos(62);
0020.00      zipcodezero         ind pos(71);
```



Application Development Tools Modernization Myth #2

“LPEX is just another editor, just like SEU”

SEU vs LPEX – It's Not Even A Fair Fight

SEU features
"Full Screen" Source code editing
Can prompt fixed format specs
Left side SEU commands ("D", "P", "CC" etc.)

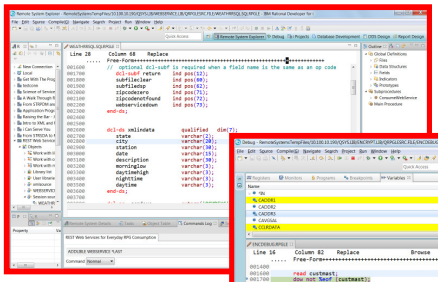
- Supports RPG free form enhancements
- Tokenization (colorized)
- Copy and Paste
- Edit multiple members at once
- Hyperlinks
- Windows functions (CTRL-Z, CTRL-Y, Up/Down)
- Member and source code filtering
- Data Structure and Procedure Wizards
- Split screen view of source code editor
- Automatic update of Outline view

- Source Code Verification
- Content Assist and source code prompting
- Set breakpoints while editing source code
- Automatic closure of control blocks
- Show block nesting
- Change font size
- Customize screen for maximum productivity
- Display help text for prompted statements
- Control block indentation and auto complete

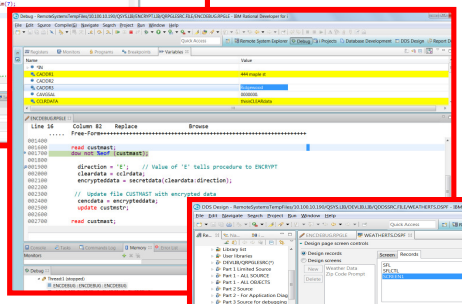
Application Development Tools Modernization Myth #3

"The new tooling is difficult to learn"

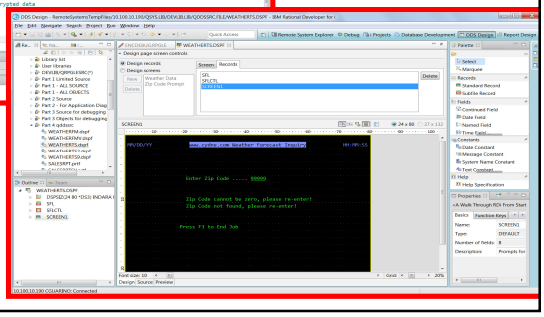
Meet the Perspectives…



Remote Systems Explorer (RSE)



Debug

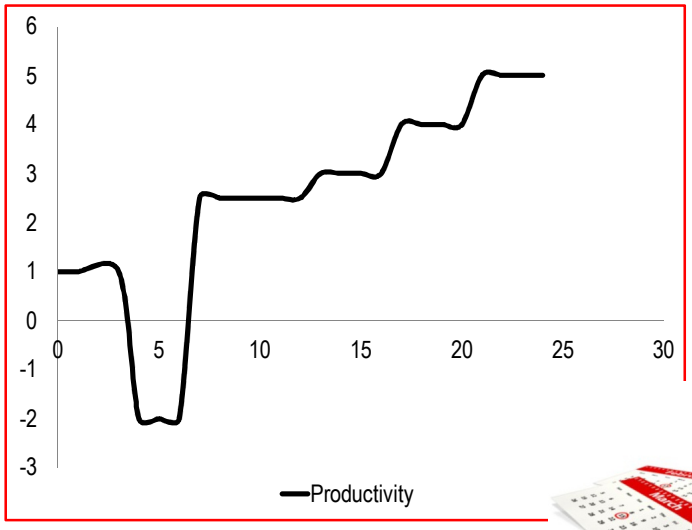


Graphical Screen and Report Designer

Application Development Tools Modernization Myth #4

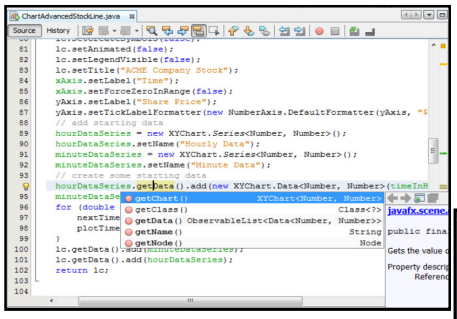
“I’m too busy and it will take too long to learn RDi”

Productivity Gains Over Time

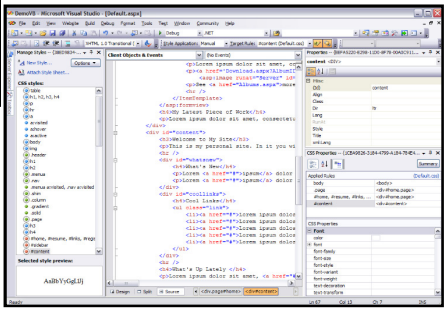


RDi Truths

Application Development Tools Modernization Truth #1



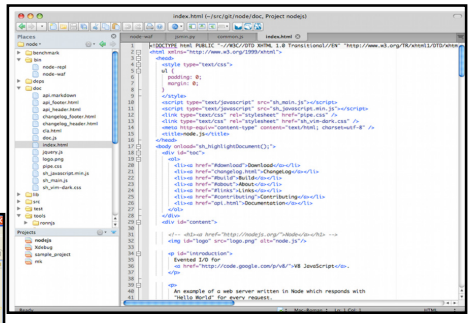
NetBeans IDE for Java
www.netbeans.org

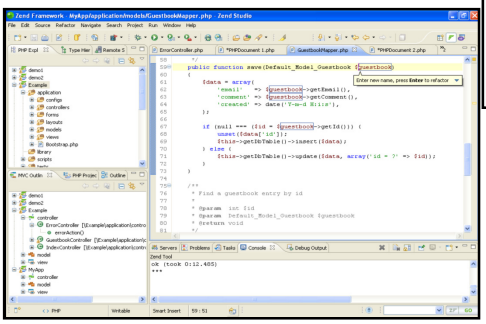


Visual Studio
www.visualstudio.com

Application Development Tools Modernization Truth #1

Komodo Edit
http://www.activestate.com/komodo-edit





Zend Studio for PHP
www.zend.com

Application Development Tools Modernization Truth #2

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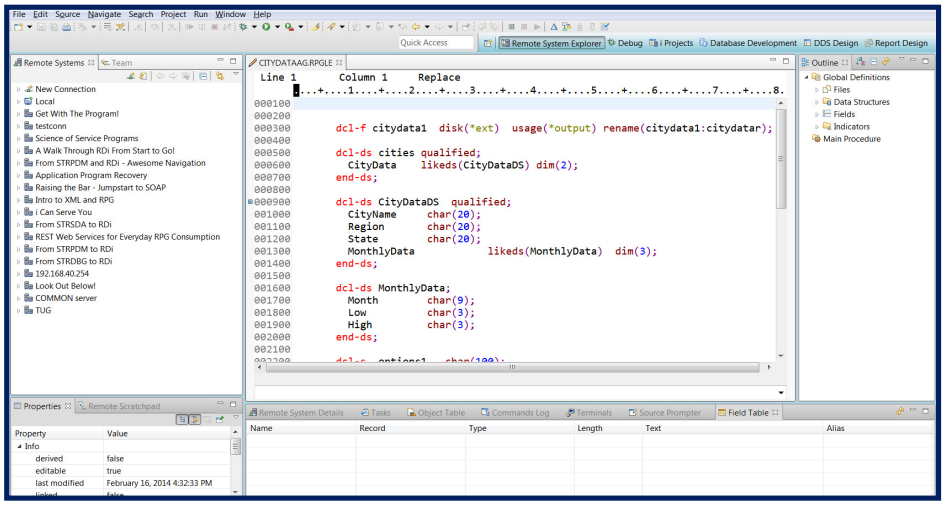
RSE and LPEX – A Winning Combination



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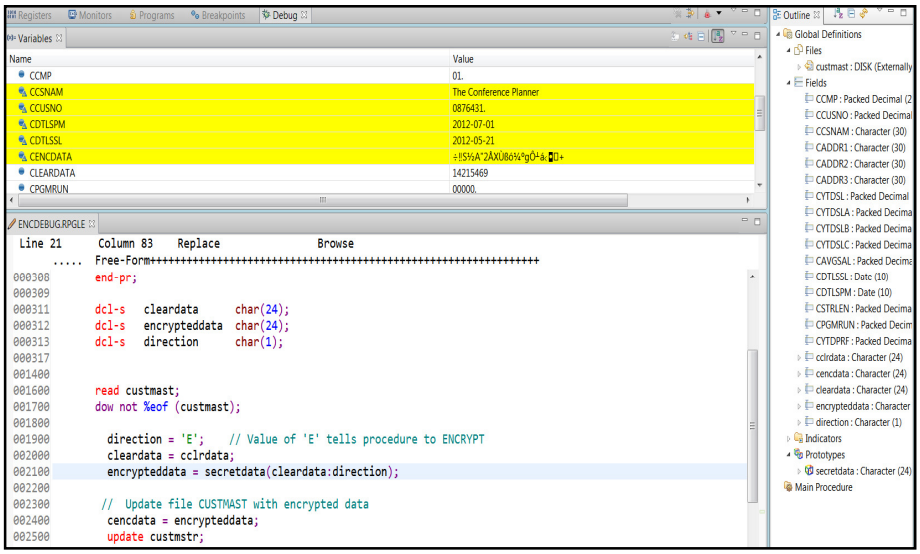
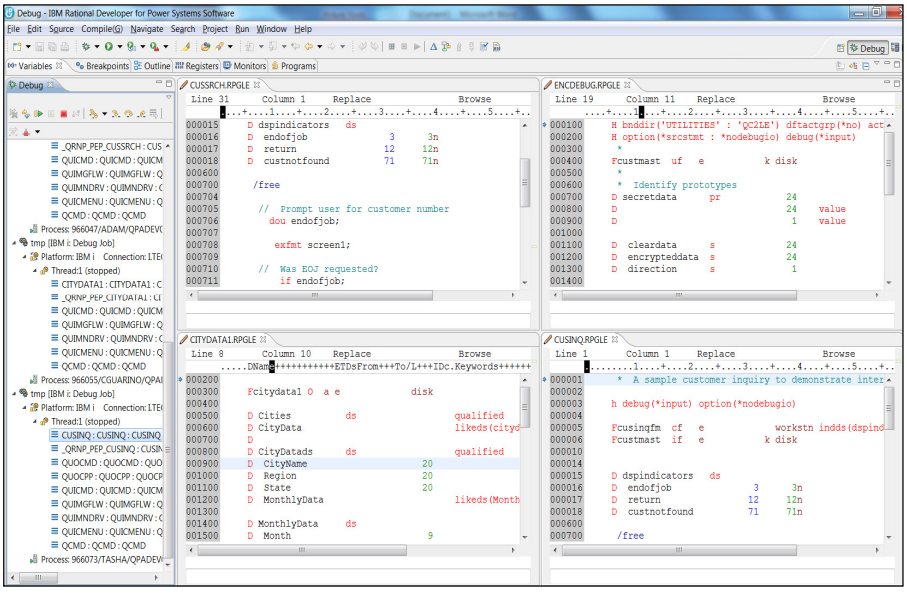
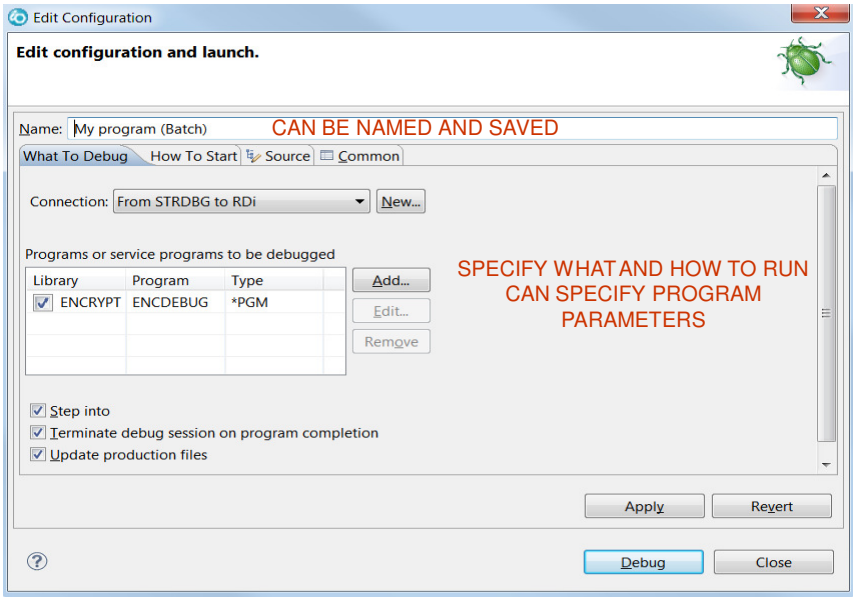
Debugging free form RPG using RDi



Can debug multiple jobs at the same time!



Debug configurations



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Version 9.1 is Announced and Available Shortly

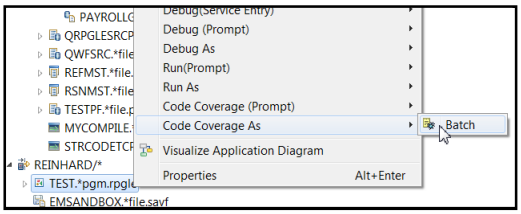
Passport Advantage
May 23 – Electronic Availability
June 6 – Physical Availability

Advanced Administration System (AAS)
June 13

Power Systems IBM

RDi 9.1 Line level Code Coverage Analysis Capability

- Code coverage can be launched on any program or service program that can be debugged – independent of language



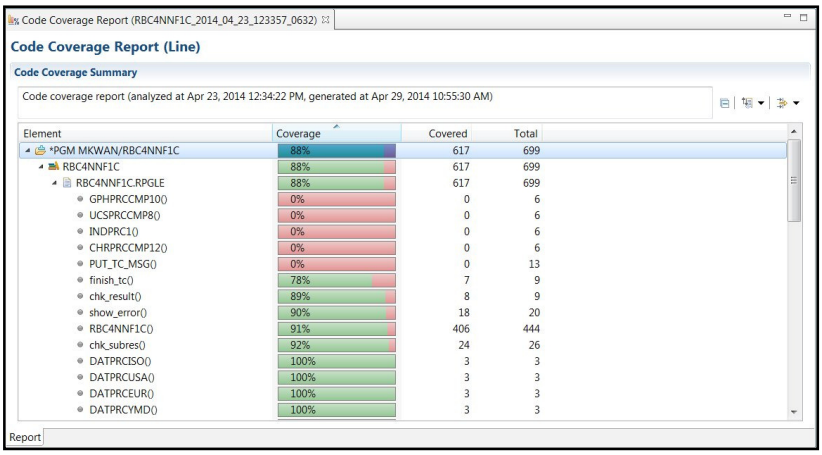
- You can see exactly which lines were covered and not.
- This can be used to determine the effectiveness of automated or manual tests
- Can help focus additional testing on code paths that have not been executed
- Can aid in detecting duplicate tests
- Can help recognize dead code

Power Systems

IBM

Code Coverage Report

- After running code coverage, a report is shown as an editor.
- You can drill down through programs, modules and procedures and see the coverage statistics for each

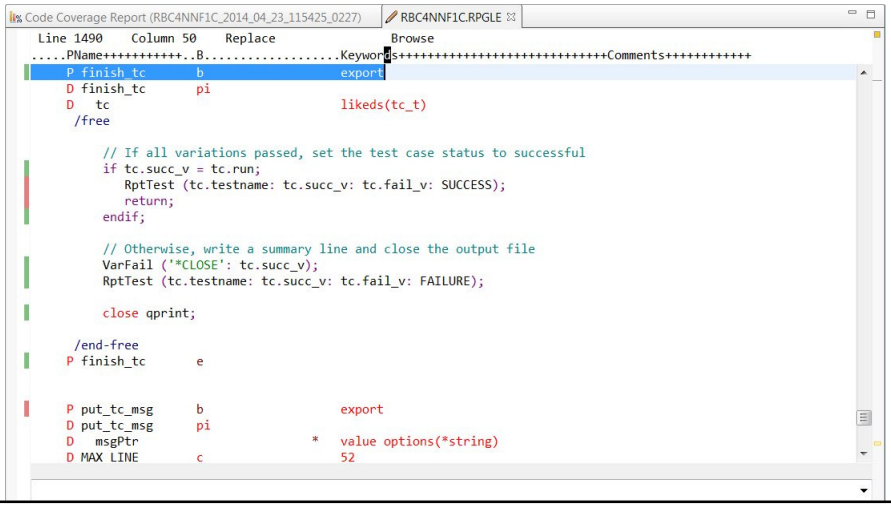


Power Systems

IBM

Coverage annotated in the editor

- Drilling down from the report, the editor will be opened on the related member with green and red annotations showing which lines were covered.

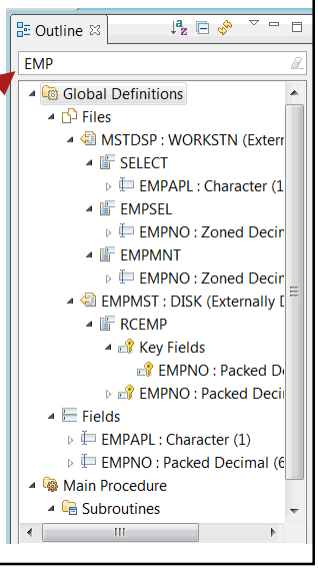


Power Systems

IBM

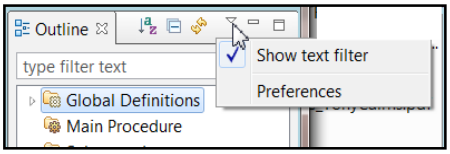
RDi 9. 1 - Filterable outline view

- The following 2 RFEs were implemented using an optional filter field at the top of the outline view that subsets the view as you type, quickly zeroing in on the definition you had in mind.



- RFE 10188 Search within Outline VIEW - 28 votes
- RFE 24677 Outline View: Filtering - 20 votes

- As you can see in the screen cap below, after type EMP, only those definitions containing EMP are visible in the outline view

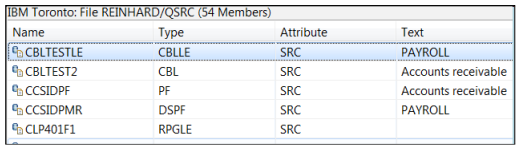


Power Systems

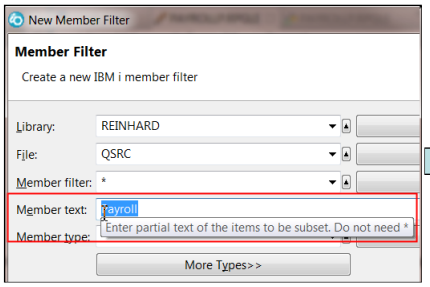
IBM

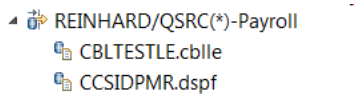
Extend IBM i member filters to be able to use member text

- CAAC AD0150 – IBM is listening!
- With 10 characters, names are too restrictive for filtering


IBM Toronto: File REINHARD/QSRC (54 Members)

Name	Type	Attribute	Text
CBLTESTLE	CBLLE	SRC	PAYROLL
CBLTEST2	CBL	SRC	Accounts receivable
CCSIDPF	PF	SRC	Accounts receivable
CCSIDPMR	DSPF	SRC	PAYROLL
CLP401F1	RPGLE	SRC	





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COMMON Europe
Enterprise Modernization Tour

common EUROPE

Arcad SOFTWARE