

RPG TOOLBOX™

RPG Toolbox™ modernizes RPG source code and allows developers to write/maintain applications faster.

for iSeries and System i

QuickFacts

RPG Toolbox benefits:

- Modernizes RPG source code to the latest syntax for your OS/400 release
- Improves maintainability of apps with standardized and consistent source code
- Increases developer productivity with over 70 new programming tools
- Reduces training time for new RPG syntax
- Allows new features to be added to your applications more quickly

"RPG Toolbox is so good that I don't even bother to test a program after conversion because after converting hundreds of source members, I've never encountered a problem. Overall this is a 'must have' utility for RPG programmers!"

-Tim Phinney, MG Maher

RPG Toolbox will greatly improve the productivity of developers who write and maintain software on the System i and iSeries. The Toolbox allows you to modernize your RPG programs, write applications faster and maintain source code more effectively.



CRANK IT OUT!



>> Visit www.linomasoftware.com for more information or to download a demo.

RPG Modernizer

RPG Toolbox will enhance your source code to take advantage of the most modern syntax available for your OS/400 release.

- Convert your RPG III and RPG/400 source to RPG IV
- Enhance existing RPG IV source
- Convert to the new /Free form syntax

Over 40 configurable options are available to allow you to customize the conversion process. The RPG Toolbox Wizard can be launched from PDM or WDS. This proven tool has successfully converted millions of lines of source code.

- Redefine data structures to use modern syntax
- Move Calculation-defined and *LIKE-defined fields and lengths to the Definition specs
- Indent nested logic when converting to /Free form
- Convert ADD, SUB, Z-ADD, Z-SUB, MULT and DIV operations to EVAL operations
- Convert MOVE, MOVEL and MOVEA operations to EVAL operations
- Convert CAT operations to EVAL operations
- Convert SETON, SETOF and COMP operations to EVAL operations
- Convert traditional operations to their corresponding BIFs. For example, SUBST becomes %SUBST
- Insert file I/O BIFs, such as %FOUND and %EOF, under file operations
- Redefine IFxx, DOxxx, WHxx, ANDxx and ORxx expressions to use modern syntax
- Convert eligible GOTO operations
- Convert DO operations to FOR operations
- Qualify END operations (ie. an END under an IF becomes an ENDIF)
- Convert most conditioning indicators (left hand) to IF operations
- Document the beginning and ending of IF, DO, DOW, DOU, SELECT, CAS and FOR structures
- Convert CALL and CALLB operations to CALLP operations
- Highlight comment lines
- Convert source logic to lower, upper or mixed case

Example of converting a file operation to use built-in functions.

Example of converting left hand indicators and traditional operations to their /Free form equivalents.

Example of converting an ADD operation to an expression.

Before: RPG/400 source code before conversion

```
I.....PFFromTo++DFldnmeLlMlFrPlMnZr.
I          DS
I                      1   7  FIRST6
I                      4   6  PREFIX
I                      1   3  AREACD
I                      1  10  PHONE

CL0N01N02N03Factor1+++OpcdeFactor2+++ResultLenDHHiLoEq
C          *LIKE      DEFN AREACD  WAREA
C* Retrieve customer record
C          CNBR      CHAINCUSTMAS          99
C* Prepare values
C                      MOVE *ZEROS      XX
C N99                MOVE AREACD      WAREA
C N99                EXSR  PROCESS

C* Calculate
C          PROCESS   BEGSR
C                      ADD 1          XX      30
C          WAREA    IFNE *BLANK
C          XX       MULT 100          NUMBER
C                      SETON                      61
C                      END
C                      ENDSR
```

SEU Plus

RPG Toolbox adds over 70 new line commands and function keys to IBM's SEU (Source Entry Utility). This includes commands to:

- Modernize blocks of source code
- Color source
- View Key lists and Parameter lists
- Convert source to lower, upper or mixed-case
- Quickly view compile errors in a pop-up window
- Document and indent nested logic
- Break and combine lines
- Save and copy lines from memory
- Examine field lengths and types
- Enter long expressions
- Plus much more

You can also easily create your own line commands to use within SEU.

Snippets

Included in RPG Toolbox are over 190 predefined source code Snippets which you can insert right from within SEU. Snippets for every /Free form RPG operation and every BIF up to V5R3 have been included. You can also quickly develop your own Snippets. This will allow you to develop new applications much more rapidly using proven source code.

"We have been using the RPG Toolbox for two years and have come to depend on the SEUPLUS portion daily. We have written numerous snippets to standardize and ease programming. It has become a must have tool. I would recommend this product to any development shop out there. Consider the small cost an investment rather than an expense." **-Bill Barnes, The Pantry**

After: /Free form

```
DName+++++++ETDsFrom+++To/L+++IDc.Keywords+++++++
D          DS
D PHONE          10
D FIRST6        7   OVERLAY (PHONE)
D AREACD        3   OVERLAY (FIRST6)
D PREFIX        3   OVERLAY (FIRST6:4)
//
D WAREA         S           LIKE (AREACD)
D XX           S           3 0
/FREE
// Retrieve customer record
CHAIN CNBR CUSTMAS;
*IN99 = NOT%FOUND(CUSTMAS);
// Prepare values
XX = *ZEROS;
IF *IN99 = *OFF;
    WAREA = AREACD;
    EXSR PROCESS;
ENDIF;
// Calculate
BEGSR PROCESS;
    XX = XX + 1;
    IF WAREA <> *BLANK;
        NUMBER = XX * 100;
        *IN61 = *ON;
    ENDIF;
ENDSR;
/END-FREE
```



Linoma Software: Over 2500 Customers Worldwide

3M Unitek
Abbott Laboratories
Anheuser-Busch Theme Parks
Bank of Jamaica
Baxter Healthcare Corporation
BIC Graphic USA
Boise Cascade Corporation
Boyd Gaming Corporation
Brotherhood Mutual Insurance
Cabela's
CDW
Chicago Faucets
Circuit City Stores, Inc.
City of Wilmington
Core-Mark International
Countrywide Financial
FedEx Corporate Services
First Data Resources, Inc.
Friedman Corporation
GANZ
Infor Global Solutions
InfoUSA
Jack Henry & Associates
Knott's Berry Farm
KOA Campgrounds of America
Kronos, Inc.
Lionel L.L.C.
Manhattan Associates
McKesson Canada
Nintendo of America
Oracle
Pfizer
Reebok
Sony Music Canada
Spencer Gifts, Inc.
Tyco Healthcare
Virginia Lottery
Volvo Cars
Volvo Data AB
Wells Fargo

About Linoma Software

Founded in 1994, Linoma Software provides innovative technologies to consistently meet evolving data transmission, translation, encryption and code modernization needs. Linoma Software has a diverse install base of over 2,500 customers around the world including corporations, non-profit organizations and government entities. With its dedication to research, development and superior customer service, Linoma Software is recognized as a leader in software development.

Customer Support

The success Linoma Software has achieved is largely based on our customer-centric approach to the markets we serve. Providing the highest level of customer support is Linoma's number one priority.

Linoma is able to quickly and efficiently troubleshoot any issues that may occur through phone, e-mail and live online assistance.

>> Visit www.linomasoftware.com for more information or to download a demo.

Technical Specifications

RPG Toolbox for System i

Operating System: OS/400 V4R2 or higher
Disk Space: 17 MB

"We successfully converted our entire banking application (over 13,000 RPG programs) using RPG Toolbox. RPG Toolbox addressed all our conversion requirements and is by far the most robust RPG conversion utility we tested. We recommend it to all our clients."

-Darrell Priddy, Fiserv, Inc.

"I found the new RPG Toolbox Snippet and SEUPLUS line commands very helpful and both should help in reducing development time for our staff."

-Jonathan Warren, KLLM Inc.

"Have really enjoyed RPG Toolbox. It has been a great teaching tool. We converted all of our old RPG source to ILE at once and all of us have been writing ILE code ever since. My manager said that was some of the best money he had ever spent."

-Tim Lord, HPS

"My favorite part of the RPG Toolbox is the RPG Wizard. Where I work they have tons on RPG III code. I refuse to maintain it unless I can convert it to RPG IV using the Toolbox... We LOVE the RPG Toolbox here!"

-Bob Twigg, Tim-Bar Corporation



LINOMA
SOFTWARE
REVOLUTIONARY SOLUTIONS FOR YOUR WORLD

1409 Silver Street
Ashland, Nebraska 68003
(402) 944.4242
(800) 949.4696
www.linomasoftware.com
email: sales@linomasoftware.com

