

# Library Brief

"MRCLEAN" v2.1 (Make Readable & Clean)  
by SSC, Charter Member

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Niakwa is pleased to present "MRCLEAN", developed by the Software Systems Company vision of Vistar, Inc. Orders for this Orange Library (Niakwa Distribution Category) may be made through SSC.

MRCLEAN enables NPL Resellers to automatically enhance existing BASIC-2C software to provide software that is easier to read, smaller in size, and faster in overall performance. One-time use on entire platters can provide substantial benefits for end users and Resellers alike. Resellers desiring to update legacy code or who wish to freely hire programmers familiar with QB, VB and/or other BASIC languages are encouraged to acquire this package.

The recompiled code can be run on any Niakwa-supported platform. The following features are included:

- Multi-statement program lines are indented for FOR/NEXT, WHILE/WEND and similar constructs. The tab settings for indentation may be changed as desired. For example,  

```
0010 FOR I = 1 to 10: X=Q: NEXT I
```

 is changed to:  

```
0010 FOR I = 1 to 10
      X=Q
      NEXT I
```
- Lines that branch to the following line are replaced by structured DO/ENDO or IF/ENDIF constructs. For example,  

```
0070 IF A=B THEN 80: X=Q: C=D
```

 is changed to:  

```
0070 IF A<>B
      X=Q
      C=D
      END IF
```
- Unreferenced line numbers are removed to reduce program size and provide faster resolution (a 10%+ improvement is typical). To permit safe use of overlays, lines separated by 100 or more are retained. Line numbers for DEFFNs, PROCEDURES, FUNCTIONS and other 'block separators' are also retained for better readability.
- REM statements are replaced by semicolon REMs (;) for better readability. REM \$PC statements may be removed.
- Inconsistent programming practices are converted to uniform constructs. For example, PRINT HEX(0A) statements are replaced by PRINT, INIT( is replaced by ALL(, etc.
- ERROR statements are converted to ERROR DO/ENDDO for clarity.

Optional features requiring NPL v4.x include:

- Conversion to "unary operators" (e.g. Apple=Apple+1 becomes Apple+=1). This greatly improves the readability of programs using long identifiers.
- Most IF .. THEN DO statements are replaced by structured IF statements. Nested IF/DO constructs are modified "from the inside out", one level per pass (multiple passes may be required for optimum results).

#### ACTUAL OPERATION:

Once installed, MRCLEAN may be operated in one of three modes:

- 1) Type 'MRC to recompile a single program.
- 2) Run program MRSCAN to recompile all programs on a diskimage.
- 3) Use the FUNCTION call provided to construct a custom recompiler.

#### "MRINC"

"MRINC" is a bonus program that provides a quick means of adding INCLUDE T statements to every program on a diskimage. It is recommended for all NPL developers to provide an instant solution to the problem of accessing COMMon variables within modules. A single pass with "MRINC" creates a revised software set in a new diskimage. Simply create a module to hold your COMMon variables, remove them from your start-up program and run "MRINC" and copy the results back to your source platter!

#### COMPATABILITY:

This product is compatible with source code written using BASIC-2C v1.0+ or NPL v4.0+. NPL v4.0+ is required to execute MRCLEAN (DOS Extender or MS-Windows only). MRCLEAN is known to be incompatible with a small number of rarely-used programming practices (e.g. the use of underlined literal strings as in Q\$="ABC"). MRINC requires a 32-bit version of NPL.

#### FREE TRIAL VERSION:

A free "Trial Version" of MRCLEAN is available for download from [www.niakwa.com](http://www.niakwa.com). It is a fully functional version except that it will only process programs up to 10 sectors in size. You may upgrade to an unrestricted version without reinstalling the software.

## Library Information:

Type of Library: General Programming

Operating Systems Supported: MS-DOS/386, Windows (excludes real-mode DOS)  
NPL Version Required: v4.x (DOS Extender or Windows)  
Other Software Requirements: Niakwa utilities ("NPLDEV") and B2C  
Number of Modules: 4  
Lines Of Code: > 700  
Memory Required: > 500K  
Written in: NPL v4.x

## Pricing & Policies:

Pricing: One-time fee of \$300.00 for the first #GOLDKEY; \$50 each additional #GOLDKEY. Distribution, transfer, and/or sale to other resellers is strictly prohibited.

Upgrade Fee: Free (via download)  
Source Code Available: Partial source is supplied (full source is not available)  
Documentation: Adobe Acrobat files (.PDF)  
Media: Download or via email  
Payment Policy: Company Check, VISA or MasterCard  
Evaluation Policy: Free download of limited edition  
Support Policy: \$100 per hour in 1/10th hour increments  
Warranty: 30-Day Refund

Distribution Category: Orange: Developer tested, supported and distributed

Order Procedure: Letter and company check, or credit card by phone.  
You MUST specify a Niakwa #GOLDKEY number with your order!

Comments: If you wish to modernize your software or staff, this is a MUST HAVE utility.

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