

NRcobol

cHArRiOTt

COLLABORATORS

	<i>TITLE :</i> NRcobol		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
WRITTEN BY	cHArRiOTt	October 9, 2022	

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

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Chapter 1

NRcobol

1.1 main

NRcobol 1.0e Copyright ©1997,1998 by cHArRiOTt

Introduction

Installation

Usage

Syntax

Implemented?

History

Todo

Bugs

Feedback

Contacts

Salutations

Distribution

Credits

Disclaimer

Apologies

Thank You

and finally?

NUff REsPEct.....peace n more time.

1.2 introduction

Why COBOL?

To those of you thinking not another new language, COBOL is in fact one of the oldest high-level languages, its roots going back to the late 1950's. Ofcourse there are those of you who already know this but regard COBOL as not so much an high-level language, as the original computer virus. To these people i say RESPECT the source of the mother toungue. (sic!)

When so many languages have come and gone (what ever happended to Modulus II, and who outside of the Amiga community has heard of 'E;), COBOL (with the most source code on the planet, circa 89) has seen in the advent of STRUCTURED, and ↵
now
OBJECT methodologies, its adapted absorbing the latest in Database Management, SQL etcetera, and gone on from strength to strength. Indeed as an introduction to records there's alot to be said in its favour. So when people say why, i say why not?

This implementation of COBOL is largely ANSI 85 compatable and takes the form of MicroSoft(TM) COBOL, with maybe the exception of some stuff in ENVIRONMENT DIVISION - SPECIAL-NAMES. And some stuff left over from the days when memory was premium and no one had the imagination to contemplate speed.
see

Implemented?

This would have been bought to you sooner, if it weren't for ↵
the moron, in
the bedsit downstairs, with something of an habit!! which in lean times even extend to a fixation with gas. 'would you adam n eve it'.

WARNING dope really @&*\$% you up! something to do with short term memory going to pot!

STOP THE PRESS!.

"COMPUTING" MAY 8th 97

'Cobol crisis looms' The skills cris is luring Cobol programmers out of retirement with offers of up to £1000 (\$1700) per day..... hmm :-)

1.3 installation

Installation

Nothing could be simpler, Just copy the runtime program 'RUNCOB' anywhere in your path, that's ram: c: or in the same directory as the created .INT files.

Files with the extension .INT are created as a result of successfully running NRCOBOL ..see

Usage

There are several ToolTypes which you'll need to tailor to ←
suite your
system. To access these single click on the icon of NRCOBOL, then select information from the sysem menu to find the following:

TEXTEDITOR=C:ed
edit cobol source file.

TEXTVIEWER=sys:utilities/multiview
view list / debug files, if not set then the editor set for TEXTEDITOR is used.

SOURCEDIR=
where cobol source files are to found by NRCOBOL's requester

RUNCOBDIR=
where runcob prog is to be found, default ram: c: or current directory
Note: the absence of a space after the '=' and in the case of SOURCEDIR and RUNCOBDIR if a directory is stated it should end with ':' or '/'

To avoid those moments of head scratching, you are advised to use ABSOLUTE path names. see..

Thank You

If you are one the few who haven't yet discovered 'UrouHack' by Tinic Urou

then i urge you to get hold of a copy aminet util/wb. This prog ←
redefines

the system gadgets to very impressive xen like gadgets and leaves the rest of the system looking like MUI, and then some, without slowing the system down. If that's not reason enough, it also improves the appearence of this prog :)

1.4 usage

Usage

After creating your cobol source file with your favourite text editor, and saving it with the .COB extention you have a choise of evoking the compiler from CLI/shell or Workbench.

From CLI/SHELL

```
NRCOBOL <sourcefile>.(COB | CBL) [-l] [-d] [-e]
```

where the optional flags:

- l produces a simple listing <sourcefile>.LST
- d produces a debug listing <sourcefile>.DBG
- e errors ignored when compiling with wildcard option

The wildcard pattern match option will now recognize #?.(cob|cbl)

A successfull compilation produces <sourcefile>.INT
to run type... RUNCOB <sourcefile>.INT

From Workbench

Use of the program from workbench is self explanatory, but for those too dim.

```
+-----+
|                                     |
|                                     | [.] [#]
|+-----+-----+-----+-----+|
||Titles                               || | <-- What When Who
||                                     || |
||                                     || |
||+-----+-----+-----+-----+| |
|File: |                               || | <-- current sourcefile. ←
|   COB                               || | |
|   +-----+-----+-----+-----+| |
|_____+-----+-----+-----+-----+| |
||                                     || |
|| IDENTIFICATION                       * || | <-- status block
|| ENVIRONMENT                           * || |      *'s replaced by
|| DATA                                 * || |      PASSED or FAILED
|| PROCEDURE                             * || |
||                                     || |
||                                     || | <-- current line
||+-----+-----+-----+-----+| |
|+-----+ +--+ +-----+ +-----+ +-----+| | <-- ancillary output ←
|   files                               || | | | | | | | | | | | |
|| | | | List +-----+ Debug +-----+ | || |
|   DBG                               || |
||COMPILE | |>| +-----+ +-----+ |EDITOR|| |
|| | | | | ABORT | | RUN! | | | | | | |
|+-----+ +--+ +-----+ +-----+ +-----+|=|
+-----+
^           ^           ^
|           |           |
|           |           |
|   filerequester       Edit sourcefile.COB/LST/DBG
```

Make it so #1

The Editor option allows one to view sourcefile.COB, sourcefile.LST or sourcefile.DBG. The file editor defaults to 'ED' as supplied in sys:c. You can however, set TEXTEDITOR in NRcobol's icon to launch your favourite editor. eg TEXTEDITOR=c:ced . Note no space between = and editor named. see..

Installation

The menu options allow:

- 1, A window on a custom screen, ie high resolution non interlace or a window on the current public screen.
- 2, The date check on debug/listing files can to be disabled, ie, open the last debug/listing file related to current cobol source file, regardless of the date on the source file.
- 3, Terminal runtime check on SIZE ERROR condition.

In both cases an ICON is produced named <sourcefile>.INT to execute just double click.

The debug option produces a file which you may find useful in locating runtime errors, which sadly is normal for cobol. Usually this is to do with uninitialised variables, you know, finding alpha data in a numeric field.

Runtime errors usually return a value in the form 0x????, where 0x???? is an offset into the data space allocated in the Data Division. Stradling values, ie value between offset values indicates a postion within a table, (a subscripted identifier).

For those of you looking to automate compilation, possibly using Arexx, the following codes are now returned by NRCOBOL:

```
8000 nrcobol ?   called
8001 filename   error
8002 compilation error
8003 savefile   error (.int or T:debug_) file
8004 identifier limits
8005 too many files found with wildcard. [500 max]
1002 memory     error
```

1.5 syntax

Syntax

I may at a later date add the syntax, in the mean time the following books are recommended:

- COBOL for the IBM Personal Computer by kip R Irvine
- COBOL for the 80's by J Wayne Spence
- Structured Programming in COBOL by B J Holmes
- COBOL 85 for programmers by Jim Inglis
- COBOL for students, fourth edition by Andrew Parkin
Richard Yorke

OK go on then..

1.6 ok

The basics

The Syntax of the COBOL Language

At the moment COBOL has strict rules on where different parts of the program should be, a legacy of the days of coding sheets. So lets start with the ruler ←

The COBOL Ruler and the COBOL Source File

Program Syntax

	1		2		3		4		5		6	←
			7									
123456789012345678901234567890123456789012345678901234567890123456789	^		^									

The A Zone

The B Zone

The seventh column is reserved for several special purposes. Those are: * / - D

'*': When the 7th column contains an '*' , the entire line is taken to be a comment.

'//': A '/' in the 7th column behaves in much the same way as an asterisk, in that the entire line is taken to be a comment. The

only difference is that in the compiler listing [if one is produced] there will be a page break before the comment is printed. This can be used to enhance the readability of the source listing.
See examples.

'-': When the 7th column contains a '-', the line is taken to be a continuation of the previous line.
See examples.

'D': The letter 'D' in the 7th column flags the line as a debugging line. The line will be conditionally compiled for debugging. If the source-computer paragraph has the phrase WITH DEBUGGING MODE, the line will be compiled. This feature is used by some compilers to provide a program trace.

See example

.

'T': keep watch this space.

1.7 a

The A Margin

Positions 8-11 is used in general for Division, Section and Paragraph names. The exception to this being the 01 level label in the data division.

See example

.

1.8 b

The B Margin

Positions 12-72 used for data and programe code.
Note comment entry are allowed in some compilers from position 73+.

See example

1.9 programsyntax

Program Syntax

Any COBOL program is composed of exactly four divisions: identification, environment, data and procedure. These divisions appear explicitly in the COBOL source in the form:

```
division name DIVISION.
```

Each division may be further subdivided into sections and paragraphs. For further information, select from the following list of divisions:

The IDENTIFICATION Division

The ENVIRONMENT division

The DATA division

The PROCEDURE division

If you have a problem remembering the exact order in which the divisions must appear in the COBOL source file, try the mnemonic: "I Enjoy Data Processing".

See example

1.10 identification

The IDENTIFICATION Division

The identification division provides information about the program. Of this information, only the name of the program, specified in the PROGRAM-ID paragraph, is essential.

```
IDENTIFICATION DIVISION.
PROGRAM-ID. program-name.
[AUTHOR. comment.]
[INSTALLATION. comment]
[DATE-WRITTEN. comment]
[DATE-COMPILED. comment]
[SECURITY. comment]
```

The program name is just a user-defined name. It doesn't seem to have much of a use, and therefore some authors recommend that if at all possible [given OS constraints], the program name should be chosen to equal the name of the source file.

The compilation date paragraph contains the date of the most recent compilation.

Supposedly some COBOL compilers, VAX-COBOL and IBM COBOL/2 (thanks ron) will automatically update the comment in this paragraph each time the program is re-compiled, but why?

A user-defined name is a sequence of characters satisfying the following conditions:

The length of a user-defined name cannot exceed 30 characters.

- A user defined name can contain letters, digits, or the hyphen.
- A user-defined name cannot begin with a hyphen.
- A user-defined name must contain at least one letter.

See example

1.11 environment

The ENVIRONMENT Division

The purpose of the environment division is to abstract out of the program all of its system-dependent aspects. Some of those aspects are:

Information for humans, on the type of computers used for development and execution of the given program.

Information as to the character set assumed throughout the program, as well as any special aliases the programmer might want to use.

Comment fields provide information on the development and target computers.

```
ENVIRONMENT DIVISION.  
[CONFIGURATION SECTION]  
[SOURCE-COMPUTER. [comment [with DEBUGGING MODE].]]  
[OBJECT-COMPUTER. [comment.]]  
[INPUT-OUTPUT SECTION]  
[SPECIAL-NAMES.  
[CURRENCY sign is literal]  
[DECIMAL-POINT is COMMA].]
```

See example

1.12 data

The DATA Division

```
DATA DIVISION.  
[SUB-SCHEMA SECTION.]  
[FILE SECTION.]  
[WORKING-STORAGE SECTION.]  
[LINKAGE SECTION.]  
[COMMUNICATION SECTION.]  
[REPORT SECTION.]  
[SCREEN SECTION.]
```

...as MicroSoft (TM) COBOL 2.xx

See example

1.13 procedure

The PROCEDURE Division

```
PROCEDURE DIVISION.  
...
```

ACCEPT

ADD

CALL

CANCEL

CLOSE

COMPUTE

CONTINUE

DELETE

DISPLAY

DIVIDE

EVALUATE

EXIT

GO

IF

INITIALIZE

INSPECT

MERGE

MOVE

MULTIPLY

OPEN

PERFORM

READ

RELEASE

RETURN

REWRITE

SEARCH

SET

SORT

START

STOP

STRING

SUBTRACT

UNSTRING

USE

WRITE

See example

1.14 example

Example Cobol source

OK, this is short hello to cobol for more involed examples see the files (extension .cob) accompanying this release. The key thing to note is the requirement of the verbs STOP RUN and the use of 'fullstops' to define the scope of a COBOL statement. LIN and COL are system defined.

```

      *ROUTINE TO DISPLAY A MULTIPLICATION GRID.
~~~~~ IDENTIFICATION DIVISION.
~~~~~ PROGRAM-ID.    EXAMPLE.
~~~~~ AUTHOR.    C HARRIOTT.
~~~~~*
~~~~~ ENVIRONMENT DIVISION.
      CONFIGURATION SECTION.
      SOURCE-COMPUTER.    AMIGA A1200 WITH DEBUGGING MODE.
~~~~~*
~~~~~ DATA DIVISION.
~~~~~ WORKING-STORAGE SECTION.
~~~~~ 01  WS-X-SCREEN-DFT      PIC 99 VALUE  10.
~~~~~ 01  WS-Y-SCREEN-DFT      PIC 99 VALUE  05.
~~~~~ 01  WS-XY-PRODUCT        PIC 9(3).

      01  WS-COUNTERS.
          05  WS-Y-ROW          PIC 99.
~~~~~ 05  WS-X-COLUMN          PIC 99.
~~~~~ 05  WS-X-POS             PIC 99.
~~~~~ 05  WS-Y-POS             PIC 99.
      01  WS-BUTTON            PIC X(8) VALUE "PRESS ME".
~~~~~*
~~~~~*
~~~~~ PROCEDURE DIVISION.
~~~~~ 001-MAIN.
      DISPLAY (1 , 10)
~~~~~ "Routine to CALCULATE and DISPLAY a MULTIPLICATION TABLE".
~~~~~ MOVE ZEROS TO WS-COUNTERS.
~~~~~ PERFORM 002-ROWS
~~~~~     VARYING WS-Y-ROW FROM 1 BY 1 UNTIL WS-Y-ROW > 10.
~~~~~ STOP RUN.
~~~~~*
~~~~~*
~~~~~ 002-ROWS.
~~~~~ MOVE ZEROS TO WS-X-COLUMN.
~~~~~ PERFORM 003-COLUMNS
~~~~~     VARYING WS-X-COLUMN FROM 1 BY 1 UNTIL WS-X-COLUMN > 10.
~~~~~*
~~~~~*
~~~~~ 003-COLUMNS.
~~~~~ MOVE ZEROS TO WS-X-POS.
~~~~~ MULTIPLY WS-X-COLUMN BY 5 GIVING WS-X-POS.
~~~~~ ADD WS-X-SCREEN-DFT TO WS-X-POS.

```

```

~~~~~*
~~~~~
MOVE ZEROS TO WS-Y-POS.
MOVE WS-Y-ROW TO WS-Y-POS.
~~~~~
ADD WS-Y-SCREEN-DFT TO WS-Y-POS.
~~~~~*
~~~~~
MULTIPLY WS-Y-ROW BY WS-X-COLUMN
~~~~~
GIVING WS-XY-PRODUCT.
~~~~~
PERFORM 004-DISPLAY-PRODUCT.
*
~~~~~*
~~~~~ 004-DISPLAY-PRODUCT.
D PERFORM 005-DEBUG.
MOVE WS-Y-POS TO LIN.
MOVE WS-X-POS TO COL.
~~~~~
DISPLAY (LIN , COL) WS-XY-PRODUCT.
~*
D005-DEBUG.
D DISPLAY (24 5) "Debug optioned: X-POS = " WS-X-POS
D " , Y-POS = " WS-Y-POS.
* ACCEPT (24 50) WS-BUTTON FROM AMIGA-BUTTON.
~~~~~*****END*****

```

1.15 later!

```

LATER!
*****

```

To be continued, but who knows when?

1.16 accept

```

ACCEPT
*****

```

ACCEPT identifier.

ACCEPT identifier FROM {DATE |DAY |TIME |DAY-OF-WEEK |INTEGER-OF-DATE | ←
INTEGER-OF-DAY |AMIGA-BUTTON}.

DATE	YYMMDD
DAY	YYDDD
TIME	HHMMSShh
DAY-OF-WEEK	D sunday == 0
INTEGER-OF-DATE	YYYYMMDD
INTEGER-OF-DAY	YYYYDDD
TODAYS-DATE	YYMMDD
AMIGA-BUTTON	

ACCEPT *screenrecord ON ESCAPE imperative(s) . . .

*screenrecord as defined by MicroSoft(TM) Cobol 2.xx

1.17 implemented?

Implemented?

IDENTIFICATION DIVISION.

The program-id is required to be the same as the filename bar ←
the
.COB file extension. This allows for consistent CALLs to subprogram
and nested programs ie via their program-ids.

ENVIRONMENT DIVISION.

The only options supported in SPECIAL-NAMES are CURRENCY and ←
DECIMAL-POINT.

I-O-CONTROL SECTION. recodnised but not implemented!

To read a record file created in a text editor, specify ORGANIZATION IS
LINE SEQUENTIAL. If you are unfortunate enough to have created your record
file with a PC editor, dont forget to convert the file to amiga (CrossDOS etc),
or add an extra character to the record definition, to account for the PC's 'LF' ←
' .

DATA DIVISION.

There is no support for the REPORT SECTION or communications.
BLOCK and RECORD clauses recodnised but not implemented!
USAGE IS default always ie no support yet for PACKED / BINARY etc..
SYNCHRONISED is recodnised but not implemented!
SCREEN SECTION is as defined by Microsoft 2.XX , plus support for basic
BUTTON GADGETS.

PROCEDURE DIVISION.

.

All keywords above have been implemented!

CORR/CORRESPONDING not supported.

1.18 history

History

1.00 July 97 - first release CU Amiga Magazine

1.0a August 97 - CU Amiga Magazine (15)/ Aminet
resort to pre 'reference modification' version, since
last minute addition of reference modification option
introduced strange/terminal errors ...sorry!

1.0b November 97 - font sensitive main program
NRCOBOL compiled under GNU C 270 ,just!
still trying with runcob (NorthC1.3 + A68k)
support only for A1200 or better
...unless i get feedback from pre A1200 users :)
MOVE ALL ...
HIGH-VALUE(S) LOW-VALUE(S) sign sensitive
blank when zero should now work
fixed oversight with full stop now allowed in zone/margine ↔
A

relaxed LEVEL 02-49 positioning, now allowed in zone/ ↔
margine A
Amiga Format Magazine's CDROM (106 ;)

1.0c February 98 - NRCOBOL + RUNCOB compiled under DICE 3.15 ,all as 68000
fixed PERFORM inline/times options
fixed justification
fixed SIZE ERROR handling
extended post statement error clause (only just come ↔
across dis)
eg
ON SIZE ERROR
imperative...

NOT ON SIZE ERROR
imperative...
END-???

now available for:

AT EOP
AT END
INVALID KEY
ON SIZE ERROR
ON EXCEPTION
ON OVERFLOW

fixed ASSIGN TO " "
now mutually exclusive to VALUE OF FILE-ID IS " "
see..

Thank You

extension of ACCEPT funtion to include ↔
ansi89 like :) functions

for millennium date
INTEGER-OF-DATE YYYYMMDD
INTEGER-OF-DAY YYYYDDD

```

        added support for AMIGA-BUTTON gadget

        see..
ACCEPT
        added tooltypes for:
        TEXTVIEWER
        SOURCEDIR
        RUNCOBDIR

        improved GUI to indicate option available
        see..
Thank You
        WB1.3 compatible compilation back by ←
        demand
1.0d  March 98  -  fixed terminale oversight with cli interface sorry!(
        added TODAYS-DATE to ACCEPT function.

        see..
Thank You
        Amiga Format Magazine's CDROM (110, AFCD26 ←
        thanks guys!;)

1.0e  Sept  98  -  reference modification now implemented ...Halleluiah!!
        'P' option for PICTURE declaration done
        multiple PICTURE declaration, ie s9(5)v9(3)
        new tooltype for WINDOW=PUBLIC or WINDOW=CUSTOM via menu
        level 78's ,ie pseudo constants

        see..
Thank You
        better implementation of edited_number and ←
        edited_string

        basic menu options
        GO TO ....DEPENDING legal implementation
        INSPECTING ...converting clause fixed
        '.cbl' now allowed as sourcefile extension
        wildcard for bulk compilation from cli done
        compilation speed improvements
        ROUNDED option fixed
        figurative constants now allowed with conditions
        precedence of section and paragraph names in PERFORM fixed
        empty PERFORMS allowed :) PERFORM ...[1000000] TIMES
        + fine tuning of assembler maths routines

```

1.19 todo

Todo

- font sensitive runtime screen
this option would already have been done, if i could only work out how to add and remove button /string gadgets to an open window, on the fly, using 'gadtools' can anyone help??

- own rather than system input, ditto!
- Totally ANSI 85 see Implemented?
- Intrinsic functions ANSI 89
- support for SQL trainer module, possible interface to Hughe's MSQL
can anyone say how SQL reports to cobol after EXEC SQL commands
COBOL <> SQL overview welcomed.

- OBJECT????? Hmmmm :-)
- suggestions welcomed
 - Feedback
 - Trace facility ...is this defined by ansi??
- expand ACCEPT functionality (Amiga specific)
- expand guide's introduction to cobol syntax

- possible allow cobol's CALL command to access dos commands, is this legal?

1.20 bugs

Bugs

- DICE m68020 compilation for A1200 or better.

1.21 final

STOP PRESS

Since nrcobolld i've compleated the collage course which allowed me access to the internet, and as im quite sure they are not going to allow me a freebee access (them's the rules), i have had to resort to Hotmail. This service curtesy of www.juno.com/ should allow free email via my local cyber cafe.

Anyway for now keep using the 'HA.ROT@bigfoot.com' address which has been configured to re-route emails to my old collage email address and the new freebee hotmail address 'harriottc@hotmail.com'.

please note, with the improvements to the program, the status of NRcobol has changed from Postcard ware to Magazine ware 8^)

see ...

Distribution

1.22 feedback

Feedback

- 'things aint wot they ougt a'
- unexpected output or syntax ... well you never know
- congratulations
- bribes not to continue
- buy outs / takeovers
- Donations of money / hardware..
- or even a post card from what ever part of the planet you and your Amiga reside. Amiga dead? Long live Amiga.
- OBJECT COBOL example code???
- Spare copy of latest ANSI COBOL standard??
this comes via limited access to Ansi74 plus the stuff at the back
of most books on COBOL + pdf files available via [http://www1.shore.net/~](http://www1.shore.net/~daschric/j4.htm) ←
daschric/j4.htm
- Offers of work :-(

- have you any cobol source you're proud of, and would like included with
the next release?

email : HARRIOTTTC@hotmail.com (new!!)
email : HA.ROT@bigfoot.com (re-router/lifetime email curtesy of
<http://WWW.bigfoot.com/>)

snail mail

Mr C Harriott
14a Splott Road
Splott
Cardiff
Cf2 2BZ
UK

Salutations

1.23 contacts

Contacts

For further information on the COBOL scene you might try the FAQ
created and maintained by

jfid@mfltd.co.uk (James Fidell)
<http://www.mfltd.co.uk/~jfid/>

<http://www.mfltd.co.uk/FAQ/cobol-faq.html>
<http://www.cobol.com/>
<http://www.netcom.com/~wmklein/cobolfaq.htm>
<http://www1.shore.net/~daschric/j4.htm>
<http://www.dkuug.dk/JTC1/SC22/WG4/>
News:comp.lang.cobol

1.24 greetings

Hellos

A big 10:4 to the staff at ITEC (cardiff) especially Sheila & Maria.

Also thanks to Mike Evans at Cardiff Uni for the email account, however long it lasts.

Hello to Nick (Newport) 'i will get round to returning that HD cradle'

Gday to Mark Bowman, put a shrimp on the barby for me. happy new year :*)

ADVERTISEMENT FOLLOWS 8-^

support your indepent local retailers
greetings to the staff at:

Golden Image (UK) Ltd
Unit 65,
Hallmark Trading Estate,
Forth Way,
Wembley,
Middx HA9 OLB

Sales No: 0181 900 9291
<http://www.Goldenimage.co.uk>

Still doing budget accelerators...

1.25 distribution

Distribution

Distribution is granted to anyone via floppy and internet/ BBS provided documentation remains as is, only a nominal fee is charged for copying and no attempt is made to reverse engineer the program. Distribution is also granted to anyone compiling a CDROM provided the above conditions are met AND i am sent a copy of the CDROM. Please??

You may also like to consider this product, Magazine Ware.
This means if you find this program useful you may send me an issue of
a recent magazine you consider 'interesting', 'very interesting' or even
'Wow, is that for real?' :)

All this for the price of a stamp? Go on you know you want to!

Ego calling...

Feed Me

1.26 credits

Credits

Would you believe i wrote this with the public domain 'C' compiler
NorthC 1.3 ...if you're out there S Hawtin thanks dude. Although i have to
say it makes for lazy programing. Hopefully GNU C will induce disipline!
Ouch!

Thanks expressed to Thore Böckelmann for the use of his disclaimer (quite
frankley i couldn't have put it better myself) also thanks for gifting
the Amiga community his EXCELENT CyberAVI and CyberQT. A real babe of a
program. SHoWING?? Now how about some avi/mov files AF/CUCD/ANOther?

Thanks to Markus Hillenbrand

Author

for the excellent GUICreator,

which was used to create (after much tweeking) the newface of NRCOBOL.
Please note the difference in compilation speeds is due solely to the use
of gadtools ;(

Its amazing the people we take for granted, like that bloke

Tinic Urou

who wrote that delicious piece of eye candy called 'UrouHack', ←

if you havent

installed it yet what are you waiting for.

Thanks also to those unknown warriors who gave their all to bring us the
freedom to program in assembler.. the authors of A68K and BLINK
without which..... RESPECT!

1.27 disclaimer

Disclaimer

No warranty, either express or implied, is made with respect to the fitness or merchantability of NRCOBOL.

chArRiOTt (referred to as "the author"), reserves the right to not develop any future versions of NRCOBOL.

The author will try to make a good faith attempt at correcting any problems if any are discovered, but is in no way required, nor bound to correct them.

The author neither assumes nor accepts any responsibility for the use or misuse of these programs. He will also not be held liable for damages or any compensation due to loss of profit or any other damages arising out of the use, or inability to use this program.

The author will not be liable for any damage arising from the failure of this program to perform as described, or any destruction of other programs or data residing on a system attempting to run the programs.

The user of this program uses it at his or her own risk.

1.28 1.5 Author

GUICreator1.5 Author

Address:

Markus Hillenbrand
Hauptstra_e 6
36124 Eichenzell-Lvschenrod
Germany

Phone: -49/6659/3176 (Sa-Su) and -49/631/99658 (Mo-Fr)
(Germany)

EMail: m_hillen@informatik.uni-kl.de
(not during holidays)

Banking:
Raiffeisenbank Eichenzell (BLZ 53060180)
Account # 2103850

This program was developed on an A4000/040.

I'd be grateful for:

- presents
- SCSI hard drives
- SCSI tape drives
- lottery winnings

and of course

- bug reports
- suggestions for improvement
- comments

and most of all

- REGISTRATIONS

1.29 urouauthor

UrouHack Author

If you want to tell me that urouhack has destroyed your machine or simply want to have a little chat then write to:

5uro@informatik.uni-hamburg.de

My postal address:

Tinic Urou
Gaertnerstrasse 15
20253 Hamburg
- GERMANY -

I am also reachable on IRC, usually from Monday to Friday between 10.00am and 09.00pm CET. Leave me an email if you want to talk...

1.30 sorry!

Sorry!

My apologies to anyone who tried and failed to make contact at my old email address. At around 18th september my account was suddenly and without warning terminated. Imagine my suprise to find i no longer exist, to find my account ↔
fini,
to find this parrot's dead. No longer on this mortal coil, no longer with us, gone to software heaven, frankly needing more than a magnetic medium to get in touch with our dearly departed data :(KO'ed at HQ by HO.

This ment not only the loss of pending email, but records on all contacts made to date. If that wasn't bad enough, i had just, that week, been published on ↔
the
CDROM of the CU Amiga magazine (CUCD15), which ment all those potential ↔
contacts

are now lost.

Anyway, due to an act of devine intervention, (new JAVA course) i am now back
 on
 line. Existing from day to day, suddenly aware of my own mortality, unsure of
 the
 integrity of the system, but gradually rekindling my trust... bare with me.
 Willing to forgive but never forget!

If you were one of those who tried and failed, ...do call again y'all :*)

Feedback

1.31 thank-you!

Thanks!

Special thanks to the following who had made contact, and are fondly remembered
 :

JAVE. ...Groetjes, pointing out fullstop zone error resulting in
 bad compilation for paragraph/section names less then 4
 characters
 request for relaxation of level 02-49 zone 'B' done!

...microFocus COBOL85 info? still treading water?)

Charles Elliott ...still beta testing? trace environment directives?

Claus Luethje ...offer of docs, nice to know my prog, from its humble
 origins
 has found such a grand home. Wow the stuff dreams are
 made of !))

Alan W Rateliff II ...alerting me to the ASSIGN TO "file-named"
 output formatting in the FILE SECTION?

Shawn D. Kelly ...for requesting the TOOLTYPES TEXTVIEWER, SOURCEDIR and
 RUNCOBDIR
 and changes to the GUI.

Ron Copley ...Who actually uses the 'big-iron compilers' looking
 forward to your

offer of docs.

Loren Wilton ...Detailed debug , cli crash

Fahiem Wagiet ...Rainbow person in the New Rainbow Land , viva

Shaun C. Murray ...for obvious encouragement with this project ;)
requesting level 78's and public window
Thanks for the posting on comp.lang.cobol

Francois Landry ...yep!

Matti Niskanen ...only Amiga makes it possible,

Saul Bertuccio ...Thanks for the CED Arexx macro, pity i couldn't get
it to run ;(How about a step by step guide to use?
see /wb13/extra/NRCOBOL.REXX

Frank Reibold ...Try the Perform empty-perform 1000000 times now!)

i am afraid the rest of you went down with the great crash :((
do call again!

Feedback
