PBCompiler-GUI.rexx

COLLABORATORS

	TITLE : PBCompiler-GUI.rexx		
ACTION	NAME	DATE	SIGNATURE
WRITTEN BY		July 31, 2024	

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

Contents

Chapter 1

PBCompiler-GUI.rexx

1.1 PBCompiler-GUI.rexx

```
PBCompiler-GUI.rexx 1.2                                                    |
Program and documentation by A. Greve

English isn't my  native language. If You have problems  reading this doc,
please don't hesitate to contact the  Author ...

Changes in this Guide's contents  compared to the previous version will be
marked with "|" at the right margin.

This script supplies the PureBasic  compiler with a  Graphical User Inter-
face (GUI). All  arguments since  compiler version 1.30 are supported. The
GUI will run with the demo version.


 Features, News                                                           |
 Requirements
 Installation
   Adjustments, Tooltypes
 Usage                                                                    |
   GUI elements                                                           |
 History                                                                  |
 Hints
 Legal Stuff
 Thanks
 Author
```

1.2 Features, News

```
* A  bubble help (like MUI, but our  bubbles  are  rectangular :-) can  be
  added.
* The GUI can be opened on any existing PubScreen.
* A (defineable) texteditor can be started with the  selected source file.
* The so  called "Fake" mode will show the command line in the output win-
  dow, instead of starting the compiler itself.

New in version 1.1:
```

* Bug fix: Error messages in the compiler output window weren't readable
  due to a missing delay. In case of an error the window now will be held
  open for 5 seconds.
* Now an evironment variable "PureBasic_SourceName" will be checked. It
  should contain the path and filename of the last saved source file and
  is inserted in the according text field.
* It is possible now to create a file containing the actual GUI settings
  like options, priority, etc. It can be loaded with the next compiling
  and thus preserves You from having to set up the old conditions for the
  re-compiling. This file is related to the respective source file ".pb"
  and is called ".§§".
* Starting from a texteditor is possible, see "PureBasic:Extras/CygnusEd/"
  directory.
* If started from a texteditor the "Edit Src" button is disabled.
* The check button "Forget Window" causes the GUI to forget the last posi-
  tions (normal and zoomed sizes) after quitting. At next start the GUI
  window will be centered on the screen again.
* The PureBasic helpfile ("Reference.guide" in the "Help/" directory) can
  be reached via Help key. In combination with the Shift key this file
  ("PureBasic:GUI/PBCompiler-GUI.guide") will be displayed.
* If the check button "Create Icon" is set the default icon "PureBasic:
  Compilers/Default_Icon.info" will be added to the executable, by this
  the created program can be started from Workbench by doubleclick. Please
  take care that You will have to enter "WBStartup()" at the source code's
  beginning in this case.

```
New in version 1.2:                                                       |
* Bug fix:  By wrong  positioning of double quotes  copying of the default |
  icon with "Create Icon" caused an early program exit.                    |
* With "Stack Size"  the stack size can  now be changed directly  from the |
  GUI. If an icon already exists the stack size will be read in at setting |
  the executable's name. There's an additional button to set the  standard |
  value 4096.                                                              |
```

1.3 Requirements

```
PureBasic:
* PureBasic has to be installed (script will run with the demo version).
* "PureBasic:" must be assigned to the PureBasic directory.

Editor:
* A text editor should  be installed. The  default is, if no other  one is
  defined, "Ed".

Libraries:
* triton.library v1.3+,        by Stefan Zeiger,     Aminet: dev/gui
* tritonrexx.library v37.6+,  by Jürgen Kohrmeyer, Aminet: util/rexx
* rexxtricks.library v38.6+,  by Jürgen Kohrmeyer, Aminet: util/rexx
* rexxsupport.library v34.9+, part of the ARexx installation

System:
* Kickstart/Workbench 2.04+ (see the requirements of the libs above in the
  corresponding docs).
* RexxMast must be running.
```

1.4   Installation

Copy the files of Your language ("PureBasic/GUI/" for English version,
"Deutsch/GUI/" for German version) to "PureBasic:GUI/".
If Frederic will keep these files into his distribution, the installing
script should do the right things to put them to this directory.

 Changes in the script

1.5   Adjustments in the script & Tooltypes

The settings will be checked in the following order:
  1) Read in the Tooltypes if started from Wb
  2) Analyse the settings in the lines 3 to 9
  3) Set defaults if 1) or 2) failed

If You start the program by double clicking, the icon's Tooltype entries
will be analysed. Actually all Tooltypes are commented-out by brackets (so
inactivated). At the right margin examples are listed, showing how those
entries may look like. ON/OFF variables are turned to on state by YES or
ON as well, any other value (NO, OFF, 0, etc.) turns to off.
You will probably have to edit the entries in lines 3 to 9 of the script
to make them fit to Your local settings. If You delete those lines the
settings which are remarked in brackets will take place.
If You change the pathes the new ones must exist.

Not existing entries in the script or the Tooltypes are marked with --- at
the corresponding position.

---   PUBSCREEN=DOPUS.1
will use Directory Opus' PubScreen. If the given PubScreen doesn't exist
the system will use the Workbench automagically, so there's no point in
setting a default in the script. Please pay attention: PubScreen names are
case-sensitive; capital and small letters will be distinguished.

Line 3 "editor"   ("Ed")   EDITOR=CED:Ed
Path and filename of Your texteditor.

Line 4 "sourcepath" ("PureBasic:")   SOURCEPATH=PureBasic:Projects/
This is the path to Your source directory. When a script is to be loaded,
the requester will start from this path on.

Line 5 "quickhelp"   (0)   QUICKHELP=1
If the bubble help support for GUI elements (like buttons, string gadgets,
etc.) should appear, leave this value to 1. Otherwise set it to 0 or kill
this line.

Line 6 "usesettings" (0)   USESETTINGS=1
If this variable is set to 1 the compiler settings (options, priority and
file names for Executable and CrateResident) will be loaded with the
source file, as well, and saved at compiler start respectively.

Line 7 "forgetwin"   (0)   FORGETWIN=1
If this variable is set to 1 the GUI will forget the positions of the nor-

mal and zoomed window after quitting. At the next start the GUI window is
centered on the screen.

Line 8 "mviewpath" ("SYS:Utilities/MultiView")   ---
Path and filename of MultiView. This program is required to view the Pure-
Basic help or this file.

Line 9 "createicon" (0)   CREATEICON=1
If this variable is set to 1, "PureBasic/Compilers/Default_Icon.info" as
the default icon will be added to the created executable. By this a Work-
bench start is possible.

1.6 Usage

The script can be started from CLI/Shell and Workbench.
CLI: "rx PureBasic:Extras/CygnusEd/PB_GetSyntax.ced".
Workbench: Start by double clicking the icon.
If You are using an "AppLauncher" like ToolManager f. e., the program can
be started by a button.

A description of the GUI elements You'll find here .

CLI:

If started from CLI a PubScreen name can be supplied as an argument, where
PBCompiler-GUI should open its window on. Otherwise, or if the given Pub-
Screen doesn't exist, the window will be opened on the Workbench.

CLI and Workbench:

A possibly existing environment variable "ENV:PureBasic_SourceName" will
be checked. It should contain the complete path and filename of the last
saved source file and is inserted in the text field "Sourcefile". So, if
You are using a text editor different from PureEditor, You'll have the
possibility to supply the GUI with the source file's name from the text
editor. This requires a programmable editor (ARexx, i.e.). You should take
care of the variable to be fed with the path/filename before the GUI is
launched and to be erased after the GUI is quitted.
If started from a text editor the "Edit Src" button is disabled.

When starting the compiler it is possible to save the selected settings.
When the source file is re-selected for compiling the settings can be
loaded automatically. By this You save to remember the conditions of the
last compiling Yourself.
The "Use Settings" check button will switch this feature on. If the vari-
able "usesettings" (see Changes in the script) is set to "1" this but-
ton is checked at start of the GUI.
Saved are: all checkmark options, priority and the file names "Executable"
and "CreateResident" for compiler call.
Tech: At compiler start in the source directory a file is created with the
extension ".§§" instead of ".pb", like "test.§§" for "test.pb". When the
source file is re-selected in the GUI (and "Use Settings" is switched to
ON) the created file will be loaded and the settings will be restored.

After quitting the GUI the check button "Forget Window" causes the normal

and zoomed window positions to be forgotten. If this switch is OFF the
window opens at the old position and the zoomed position is saved as well.
If the switch is ON the normal window opens at the screen's centre and the
zoomed window's position will be the upper left corner of the normal win-
dow accordingly.
Tech: After the window is closed Triton saves its positions in the envi-
ronment variable "ENV:Triton/PBCompiler-GUI.win.1". If the check button is
ON the variable is deleted immediately. Triton doesn't copy this variable
to ENVARC:, therefore the window will be centered after a reboot.

With the Help key a PureBasic help ("PureBasic:Help/Reference.guide") can
be called, as known from PureEditor. MultiView is used for that. The help
can be opened continuosly because it's opened on an own screen and it is
not attached to a possibly opened CLI. In conjunction with a Shift key
this file ("PureBasic:GUI/PBCompiler-GUI.guide") will be displayed.

The check button "Create Icon" causes the icon file "PureBasic:Compilers/
Default_Icon.info" to be copied to the created executable after compiling.
By this a Workbench start is possible. In this case You should take care
of the fact that an entry "WBStartup()" (at the start of the source code)
is added. If the icon already exists a requester will open up asking if
it should be overwritten. If no (new) executable is created the switch is
ignored.

The text field "Stack Size" enables directly entering of the stack size |
for "Create Icon" in the GUI. So, if Your program needs a higher value, |
You won't have to change it with Wb-Info. If an icon already exists the |
stack size will be read in at setting the executable's name. The button |
right to the text field simplifies the setting to the standard value of |
4096 bytes. |
Please pay attention that You will have to take care of correctly values. |
There's just an error message if the entry couldn't be written or if the |
value isn't integer or contains non-numeric characters. So, if You enter |
"10", this value will be written. |

Workbench:

If starting from Wb, please pay attention to the Tooltypes .

1.7 GUI elements

The GUI elements can be activated / toggled by the keys shown in enclosed
angle brackets. <S>, <X> and <R> will activate a filerequester to select
or enter the according filename.

Compiler options

Sourcefile   <S>
The source file to be compiled.

Executable   <X>
The path and filename the executable (created by the compiler) should be
saved to.

CreateRes.   <R>

Creates a resident and a resident-struct file from the source code. Here
You enter / select path and filename of the resident file; die struct file
will be put to the same directory, but with the extension ".Struct".

Priority   <P>, <Shift P>
The priority the compiler should run with. With the "P"-key the value will
be increased and decreased in combination with Shift. You can use the
slider to set the value directly. The value is displayed to the left of
the slider.

0   <0>
The button to the right of the slider (or the "0"-key) sets the compilers
priority to 0.

Optimizations <O>
turns on the compiler optimizations. By this the executables get faster
and shorter.

MC68020   <2>
This switch enables optimizations for 020 processors (and up).

Debugger   <D>
turns on the compilers debugging option.

NoComment   <M>
The assembler file will be created without comments, so the compiling time
decreases.

AmigaOS   <A>
will load the AmigaOS libraries support.

PowerPC   <W>
enables compilation for PowerPC (WarpOS).

NoResident   <N>
disables the loading of the residents.

GUI controls

Use Settings <U>
This switch determines if the GUI settings (options, priority, etc.) will
be used. They will be saved at compiler start and loaded at selection of
the sourcefile, respectively.

Forget Window <F>
Causes the GUI to forget the windows positions (normal and zoomed) after
quitting, at next start the window opens centered on the screen again.

Create Icon   <I>
Causes the icon file "PureBasic:Compilers/Default_Icon.info" to be copied
to the created executable after compiling. By this a Workbench start is
possible.

Stack Size   <Z> |
The value entered here will be used for the executable's icon if "Create |
Icon" is activated. If You need a value differing from the standard value |
You can change it from here without having to call Workbench-Info. |

```
4096          <4>                                                           |
With a single click You can reset the stack to the  standard value of 4096 |
bytes.                                                                      |

<Help>, <Shift Help>
These functions can only be reached via the given keys.
With <Help> "PureBasic:Help/Reference.guide" will be displayed.
With <Shift Help> "PureBasic:GUI/PBCompiler-GUI.guide" will be displayed.

Compile!      <C>
starts the compiler with the selected options. If no source file is selec-
ted, an error message will appear.

Fake          <F>
With this button the  command line for the compiler will be shown, instaed
of starting the compiler itself. This might be useful if the question "Why
did this go wrong?" comes up...

Edit Src      <E>
starts the texteditor with the selected source file.

Quit          <Esc>
quits the Graphical User Interface (GUI).

For a more  exactly  description of the  compiler options  please read the
PureBasic documentation.
```

1.8 History

```
v1.2   19-Nov-2000   * Bug fix:  Faulty  call for  copying the icon to the |
                       executable caused an early program exit.            |
                     * Creating  an icon for  the executable  enables  the |
                       stack size to be changed from the GUI.              |

v1.1   02-Oct-2000   * Bug fix: Extended  the time of  displaying an error
                       message in the compiler's output window.
                     * Added  the  analysing  of the  environment variable
                       "PureBasic_SourceName".
                     * Compiler settings can be saved and loaded.
                     * The  actual windows  positions can be saved or for-
                       gotten.
                     * Added help functions.
                     * The  default icon in the  "Compilers" directory can
                       be copied to the executable.
                     * Update of this Guide.

v1.0   09-Sep-2000   * Initial version
```

1.9 Hints

After installing the triton.library, You'll have a Triton-Preferences tool
in the "Prefs" directory of Your Workbench: partition. With it You can
change many aspects of the PBCompiler-GUI (background, fonts, representa-
tion of the elements, etc.) to make it fit to Your imaginations. Simply
select the entry "PBCompiler-GUI..." from the ListView and select the
property to be changed at the right side.

1.10 Legal Stuff

PBCompiler-GUI.rexx is Freeware. Do with it whatever You want, but You are
not allowed to make profit with it.
Although I have tested it on my system (A1200, KS 3.0, Bliizzard II w/24MB
RAM) I am not responsible for GURUs or data loss caused by usage of this
program – You use it at Your own risk.

1.11 Thanks

Best thanx to the PureBasic team (Frédéric Laboureur, Richard Andersson
and Andre Beer) for building up such a mighty, fast and small-executables-
creating Basic compiler. Without PureBasic this program wouldn't have been
needed ever ;-)

My thanks also have to go to Stefan Zeiger for his triton.library and to
Jürgen Kohrmeyer for his tritonrexx.library and rexxtricks.library, with-
out their development this program wouldn't have been possible as well.

1.12 Author

If You use and like (or hate) this program, please send me a message. I'd
like to receive bug reports, suggestions for improvement or just a "hello"
(Hi, Anders) at:

eMail   Axel.Greve@icn.siemens.de
              (no private eMail, so please keep the Netequette :-)

Snail mail   Axel Greve
              Hochfeld 26
              D-22607 Hamburg
              Germany

Please send flames, bombs, etc. >NIL:
_____

Happy & successful programming,
Axel

                              --- Let's keep the Amiga spirit alive !!! ---