

\*\*\*\*\*Default\*\*\*\*\*  
Steps to compile a program that will take in binary and create a file of type.  
08/18/21  
\*\*\*\*\*Default\*\*\*\*\*

My branch at github

This branch is even with ultibohub:master.

git clone https://github.com/develone/Tools.git

cd Tools/Bin2Type/

cp -R ~/Tools/Bin2Type/ ~/Ultibo\_Projects/bin2type/newlinux/

cd ~/Ultibo\_Projects/bin2type/newlinux/Bin2Type

~/ultibo/core/lazbuild --os=linux Bin2Type.lpi

using config file /home/devel/ultibo/core/lazarus.cfg

Hint: (lazarus) [RunTool] /home/devel/ultibo/core/fpc/bin/fpc "-iWTOTP" "-Tlinux"

Hint: (lazarus) [RunTool] /home/devel/ultibo/core/fpc/bin/fpc "-va" "-Tlinux" "compilertest.pas"

TProject.DoLoadStateFile Statefile not found:

/home/devel/Tools/Bin2Type/lib/arm-linux/Bin2Type.compiled

Info: (lazarus) Execute Title="Compile Project, Mode: Default, Target: lib/arm-linux/Bin2Type"

Info: (lazarus) Working Directory="/home/devel/Tools/Bin2Type/"

Info: (lazarus) Executable="/home/devel/ultibo/core/fpc/bin/fpc"

Info: (lazarus) Param[0]="-B"

Info: (lazarus) Param[1]="-Tlinux"

Info: (lazarus) Param[2]="-Parm"

Info: (lazarus) Param[3]="-MDelphi"

Info: (lazarus) Param[4]="-Scghi"

Info: (lazarus) Param[5]="-CX"

Info: (lazarus) Param[6]="-O2"

Info: (lazarus) Param[7]="-XX"

Info: (lazarus) Param[8]="-l"

Info: (lazarus) Param[9]="-vewnhibq"

Info: (lazarus) Param[10]="-Fi/home/devel/Tools/Bin2Type/lib/arm-linux"

Info: (lazarus) Param[11]="-Fl/opt/gnome/lib"

Info: (lazarus) Param[12]="-Fu/home/devel/ultibo/core/lcl/units/arm-linux/gtk2"

Info: (lazarus) Param[13]="-Fu/home/devel/ultibo/core/lcl/units/arm-linux"

Info: (lazarus) Param[14]="-Fu/home/devel/ultibo/core/components/lazutils/lib/arm-linux"

Info: (lazarus) Param[15]="-Fu/home/devel/ultibo/core/packager/units/arm-linux"

Info: (lazarus) Param[16]="-Fu/home/devel/Tools/Bin2Type/"

Info: (lazarus) Param[17]="-FU/home/devel/Tools/Bin2Type/lib/arm-linux/"

Info: (lazarus) Param[18]="-FE/home/devel/Tools/Bin2Type/lib/arm-linux/"

Info: (lazarus) Param[19]="-dLCL"

Info: (lazarus) Param[20]="-dLCLgtk2"

Info: (lazarus) Param[21]="-dBorland"

Info: (lazarus) Param[22]="-dVer150"

Info: (lazarus) Param[23]="-dDelphi7"

Info: (lazarus) Param[24]="-dCompiler6\_Up"

Info: (lazarus) Param[25]="-dPUREPASCAL"

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Info: (lazarus) Param[26]="Bin2Type.lpr"
Hint: (11030) Start of reading config file /home/devel/ultibo/core/fpc/etc/fpc.cfg
Hint: (11031) End of reading config file /home/devel/ultibo/core/fpc/etc/fpc.cfg
Free Pascal Compiler version 3.1.1 [2021/08/10] for arm
Copyright (c) 1993-2015 by Florian Klaempfl and others
(1002) Target OS: Linux for ARMHF
(3104) Compiling Bin2Type.lpr
(3104) Compiling Main.pas
/home/devel/Tools/Bin2Type/Main.pas(183,38) Hint: (5057) Local variable "WorkByte" does not
seem to be initialized
/home/devel/Tools/Bin2Type/Main.pas(78,26) Hint: (5024) Parameter "Sender" not used
/home/devel/Tools/Bin2Type/Main.pas(79,27) Hint: (5024) Parameter "Sender" not used
/home/devel/Tools/Bin2Type/Main.pas(266,2) Note: (5027) Local variable "Scale" is assigned but
never used
/home/devel/Tools/Bin2Type/Main.pas(80,24) Hint: (5024) Parameter "Sender" not used
/home/devel/Tools/Bin2Type/Main.pas(81,24) Hint: (5024) Parameter "Sender" not used
/home/devel/Tools/Bin2Type/Main.pas(82,25) Hint: (5024) Parameter "Sender" not used
/home/devel/Tools/Bin2Type/Main.pas(82,46) Hint: (5024) Parameter "Action" not used
/home/devel/Tools/Bin2Type/Main.pas(83,31) Hint: (5024) Parameter "Sender" not used
/home/devel/Tools/Bin2Type/Main.pas(84,30) Hint: (5024) Parameter "Sender" not used
/home/devel/Tools/Bin2Type/Main.pas(85,29) Hint: (5024) Parameter "Sender" not used
/home/devel/Tools/Bin2Type/Main.pas(86,28) Hint: (5024) Parameter "Sender" not used
/home/devel/Tools/Bin2Type/Main.pas(91,29) Hint: (5024) Parameter "Sender" not used
/home/devel/Tools/Bin2Type/Main.pas(87,31) Hint: (5024) Parameter "Sender" not used
/home/devel/Tools/Bin2Type/Main.pas(88,29) Hint: (5024) Parameter "Sender" not used
/home/devel/Tools/Bin2Type/Main.pas(89,31) Hint: (5024) Parameter "Sender" not used
/home/devel/Tools/Bin2Type/Main.pas(90,28) Hint: (5024) Parameter "Sender" not used
/home/devel/Tools/Bin2Type/Main.pas(49,3) Hint: (5023) Unit "LMessages" not used in Main
/home/devel/Tools/Bin2Type/Main.pas(50,3) Hint: (5023) Unit "Messages" not used in Main
(9022) Compiling resource /home/devel/Tools/Bin2Type/lib/arm-linux/Bin2Type.or
(9015) Linking /home/devel/Tools/Bin2Type/lib/arm-linux/Bin2Type
/home/devel/Tools/Bin2Type/Bin2Type.lpr(60,1) Warning: (9034) "crtbegin.o" not found, this will
probably cause a linking failure
/home/devel/Tools/Bin2Type/Bin2Type.lpr(60,1) Warning: (9034) "crtend.o" not found, this will
probably cause a linking failure
(1008) 543 lines compiled, 5.0 sec
(1021) 2 warning(s) issued
(1022) 20 hint(s) issued
(1023) 1 note(s) issued

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cd lib/arm-linux/
ls -la
total 2220
drwxr-xr-x 2 devel devel  4096 Aug 17 07:23 .
drwxr-xr-x 3 devel devel  4096 Aug 17 07:23 ..
-rwxr-xr-x 1 devel devel 2060360 Aug 17 07:23 Bin2Type
-rw-r--r-- 1 devel devel   803 Aug 17 07:23 Bin2Type.compiled
-rw-r--r-- 1 devel devel  9536 Aug 17 07:23 Bin2Type.o
-rw-r--r-- 1 devel devel 29112 Aug 17 07:23 Bin2Type.or
-rw-r--r-- 1 devel devel  3980 Aug 17 07:23 Bin2Type.res
-rw-r--r-- 1 devel devel  3034 Aug 17 07:23 Main.lfm
-rw-r--r-- 1 devel devel 41772 Aug 17 07:23 Main.o

```

-rw-r--r-- 1 devel devel 95602 Aug 17 07:23 Main.ppu

./Bin2Type

The screenshot shows the Bin2Type application window. It has a light gray background. At the top, there are two input fields: "Source File" and "Destination File", each followed by a small button with three dots. Below these is a "Type Name" field containing the text "BinaryData". Underneath that is a "Starting Offset" field containing "0". Then there is a "Conversion Length" field containing "0", followed by the text "(0 = Convert All)". At the bottom right, there are two buttons: "Convert" and "Exit".

This screenshot shows the Bin2Type application window after some input. The "Source File" field now contains "lena\_rgb\_256.png". The "Destination File" field contains "MyData.pas". The "Type Name" field still contains "BinaryData". The "Starting Offset" field still contains "0". The "Conversion Length" field still contains "0", with the text "(0 = Convert All)" next to it. The "Convert" and "Exit" buttons are still at the bottom right.

Depress Convert. This will create a file MyData.pas 7835 lines

This gets pasted in **"fcltest.lpr"**.

type

TBinaryData = array[0..125261] of Byte;

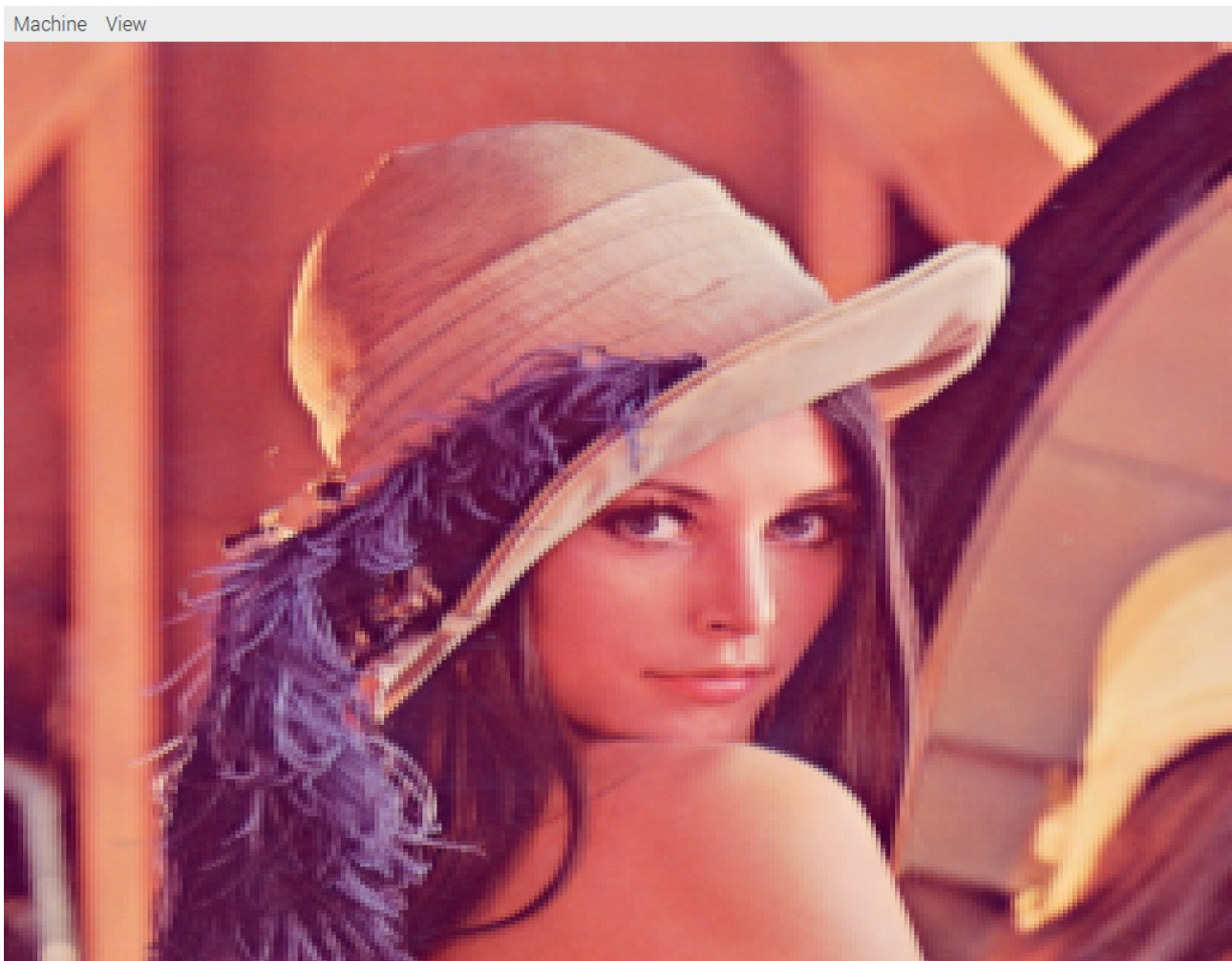
var

BinaryData:TBinaryData = (  
\$89,\$50,\$4E,\$47,\$0D,\$0A,\$1A,\$0A,\$00,\$00,\$00,\$0D,\$49,\$48,\$44,\$52,  
\$00,\$00,\$01,\$00,\$00,\$00,\$01,\$00,\$08,\$02,\$00,\$00,\$00,\$D3,\$10,\$3F,  
\$31,\$00,\$00,\$00,\$09,\$70,\$48,\$59,\$73,\$00,\$00,\$0B,\$13,\$00,\$00,\$0B,  
\$13,\$01,\$00,\$9A,\$9C,\$18,\$00,\$00,\$00,\$07,\$74,\$49,\$4D,\$45,\$07,\$E5,

.  
.  
,

\$59,\$F6,\$E6,\$6B,\$6D,\$F3,\$E2,\$97,\$BB,\$C3,\$AA,\$CD,\$00,\$56,\$B5,\$7E,  
\$28,\$A8,\$42,\$1C,\$42,\$C5,\$28,\$51,\$85,\$6E,\$28,\$0C,\$D8,\$15,\$92,\$9E,  
\$41,\$01,\$62,\$F1,\$28,\$CD,\$B4,\$CE,\$3A,\$9B,\$CF,\$57,\$B7,\$D7,\$BB,\$05,  
\$A9,\$77,\$40,\$AD,\$ED,\$2E,\$D3,\$E8,\$13,\$6F,\$8F,\$CE,\$FA,\$CD,\$78,\$72,  
\$BC,\$3D,\$EE,\$28,\$59,\$DD,\$F4,\$FC,\$FF,\$01,\$53,\$DC,\$33,\$CD,\$EA,\$8B,  
\$69,\$FB,\$00,\$00,\$00,\$00,\$49,\$45,\$4E,\$44,\$AE,\$42,\$60,\$82  
);

**~/Ultibo\_Projects/bin2type/QEMU \$ ./startqemu.sh**



**Using a smaller window and a smaller image 128 x 128 instead of 256 x 256.**

Ultibo Core (Release: Beetroot Version: 2.1.099 Date: 4 August 2021)

15:37:39

TFTP Demo.

