Lazarus on Windows and Linux(Ubuntu)

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What is Free Pascal?
What is Lazarus?

Lazarus Supported Platforms

- For Development

  - Linux (32/64 bits), Mac OS X and Windows (32/64 bits)

- For Deployment

  - Linux (32/64 bits), Mac OS X, Windows (32/64 bits) and Windows CE.

- FPC supports 15+ platforms

Delphi x Lazarus

- Lazarus is <u>not</u> an 'open source Delphi clone'. So don't expect 100% compatibility

- Lazarus is completely open source.

- Lazarus is still work in progress.

- Delphi has VCL, Lazaruz has LCL

- Lazarus has Unicode support - uses UTF-8

Opening Delphi Projects in Lazarus

- Lazarus also includes a built in "Convert Delphi unit to Lazarus unit" which will do the following for you:

  - Fixes the case of include filenames and uses sections.

  - Converts .dfm file to .lfm file (currently without content check, just format)

  - Creates an empty .lrs file (the content will be created later)

Opening Delphi Projects in Lazarus

- Adds{$mode delphi} directive

- Replaces windows unit with LCLIntf

- Adds LResources unit if needed

- Removes variants unit

- Removes {$R *.dfm} directive

- Adds initialization section and {$i unit.lrs} directive

Delphi / Kylix file equivalents in Lazarus

Delphi / Kylix	Description	Lazarus	Description
.pas	Delphi Source File,	.pas, .pp	Pascal unit file,
.dfm/.xfm,	Delphi Form,	.lfm,	Form data file,
.dcu/.dpu,	Delphi Compiled Unit,	.o,	Compiled unit file,
.dpr(main project file),	Delphi Project,	.lpr	Project file,
.res,	Windows Resource File,	---	Resource file,
.dof/.kof	Delphi Option File	---	Project options file,
---		.lrs,	Lazarus resource file,
---		.lpi(main project file),	Lazarus project information file,
---		.ppu	FPC unit description file

Lazarus Compiler Mode

- Lazarus supports 5 different pascal modes
  - FPC mode
  - TP mode
  - Delphi mode
  - GPC mode
  - OBJFPC mode
  - MAC mode
- Lazarus prefers the OBJFPC

Installing Lazarus on Windows

- As simple as obtaining the installation file and run it.

Installing Lazarus on Ubuntu

- Well...

  #!/bin/sh

  gpg --keyserver hkp://pgp.mit.edu:11371 --recv-keys 6A11800F

  gpg --export 6A11800F | apt-key add - echo "deb http://www.hu.freepascal.org/lazarus/ lazarus-stable universe" \

  >/etc/apt/sources.list.d/lazarus.list

  apt-get update

  apt-get install lazarus

Installing Lazarus on Ubuntu

- Correct permissions issues

    - Create the user group Lazarus - or whatever and add yourself to the group.

    - Change permissions for the folder /usr/lib/lazarus by issuing the following command:

        sudo chown -R :lazarus /usr/lib/lazarus

    - and the allow the group to r w and x

        sudo chmod -R g+xrw /usr/lib/lazarus

Resources

- http://www.freepascal.org

- http://lazarus.freepascal.org

- http://lazarus-ccr.sourceforge.net