



Lazarus

Ondřej Suchý

Write once, compile anywhere!

Co je Lazarus

- ž Vývojové prostředí (IDE), podobné Delphi
- ž Používá Free Pascal kompilátor (FPC)
 - › Různé dialekty Pascalu, Object Pascalu, včetně Delphi
- ž Multiplatformní
 - › Win32/Win64, Linux (Gtk1/2), FreeBSD a MacOS
- ž Licence
 - › GPL (IDE), LGPL (Knihovny)
- ž Používá Lazarus Component Library (LCL)



- ProjectVersionInfoOptions
 - VersionInfoGroupBox: T
 - MajorVersionLabel: T
 - MinorVersionLabel: T
 - RevisionLabel: TLabel
 - BuildLabel: TLabel
 - MajorVersionSpinEdit
 - MinorVersionSpinEdit
 - RevisionSpinEdit: TSp
 - AutomaticallyIncras
 - BuildSpinEdit: TSpinE
 - UseVersionInfoCheckBo
 - LanguageSettingsGroup
 - LanguageSelectionLa
 - CharacterSetLabel: TL

Properties Events Favorite

Align	alNone
▶ Anchors	[akTop
AutoScroll	False
AutoSize	False
BiDiMode	bdLeft
▶ BorderSpacing	(TCont
▶ ChildSizing	(TCont
Color	<input type="checkbox"/> clID
▶ Constraints	(TSizeC
Cursor	crDefa
DockSite	False
DragCursor	crDrag
DragKind	dkDra
DragMode	dmMa
Enabled	True
▶ Font	(TFont
Height	428

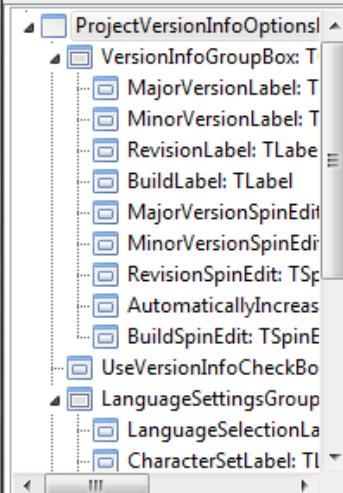
Lazarus project_versioninfo_options W32VersionInfo Main Project Compiler InfoBuild ProjectResources

```
110 // Show splashform
111 if ShowSplashScreen then begin
112     SplashForm := TSplashForm.Create(nil);
113     SplashForm.Show;
114     Application.ProcessMessages; // process splash paint message
115 CleanupPIDIFile;
116 FreeThenNil(SplashForm);
```



121: 14 INS C:\Users\Ondra-ProBook\lazarus_svn\ide\lazarus.pp

Source Editor Design Editor Package Viewer



Properties Events Favorite

Align	alNone
▶ Anchors	[akTop
AutoScroll	False
AutoSize	False
BiDiMode	bdLeft
▶ BorderSpacing	(TCont
▶ ChildSizing	(TCont
Color	<input type="checkbox"/> clD
▶ Constraints	(TSizeC
Cursor	crDefa
DockSite	False
DragCursor	crDrag
DragKind	dkDra
DragMode	dmMa
Enabled	True
▶ Font	(TFont
Height	428

Lazarus project_versioninfo_options W32VersionInfo Main Project Compiler InfoBuild ProjectResources

```

.   □ // Show splashform
110 □ if ShowSplashScreen then begin
.       SplashForm := TSplashForm.Create(nil);
.       SplashForm.Show;
.       Application.ProcessMessages; // process splash paint message
.   end;
115
.   TMainIDE.Create(Application);
.   if not Application.Terminated then
.   begin
.       MainIDE.CreateOftenUsedForms;
120   try
121       MainIDE.StartIDE;
.   except
.       Application.HandleException(MainIDE);
.   end;
125   {$IFDEF IDE_MEM_CHECK}CheckHeapWrtMemCnt('lazarus.pp: TMainIDE created');{$ENDIF}
.
.   try
.       Application.Run;
.   except
130   debugLn('lazarus.pp - unhandled exception');
.       CleanupPIDFile;
.       Halt;
.   end;
.   end;
135 CleanupPIDFile;
.   FreeThenNil(SplashForm);

```

121: 14

INS

C:\Users\Ondra-ProBook\lazarus_svn\ide\lazarus.pp

Source Editor Design Editor Package Viewer



ProjectVersionInfoOptionsFrame

- VersionInfoGroupBox: TVersionInfoGroupBox
 - MajorVersionLabel: TLabel
 - MinorVersionLabel: TLabel
 - RevisionLabel: TLabel
 - BuildLabel: TLabel
 - MajorVersionSpinEdit: TSpinEdit
 - MinorVersionSpinEdit: TSpinEdit
 - RevisionSpinEdit: TSpinEdit
 - AutomaticallyIncreaseBuild: TCheckBox
 - BuildSpinEdit: TSpinEdit
- UseVersionInfoCheckBox: TCheckBox
- LanguageSettingsGroup: TLanguageSettingsGroup
 - LanguageSelectionLabel: TLabel
 - CharacterSetLabel: TLabel

Properties Events Favorite

Align	alNone
▶ Anchors	[akTop]
AutoScroll	False
AutoSize	False
BiDiMode	bdLeft
▶ BorderSpacing	(TCont)
▶ ChildSizing	(TCont)
Color	clDefault
▶ Constraints	(TSizeC)
Cursor	crDefault
DockSite	False
DragCursor	crDrag
DragKind	dkDrag
DragMode	dmManual
Enabled	True
▶ Font	(TFont)
Height	428

Find component... Standard Additional Common Controls Dialogs Data Controls System Misc Data Access SynEdit

ProjectVersionInfoOptionsFrame

Include Version Info in executable

Version Numbering

Major version: 0 Minor version: 0 Revision: 0 Build: 0

Automatically increase Build

AttributesGroupBox

Language Options

Language Selection: [Dropdown]

Character Set: [Dropdown]

Other Info

Key	Value

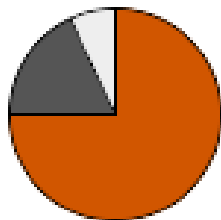
Source Editor Design Editor Package Viewer





Source Editor area (currently empty)

Historie projektu

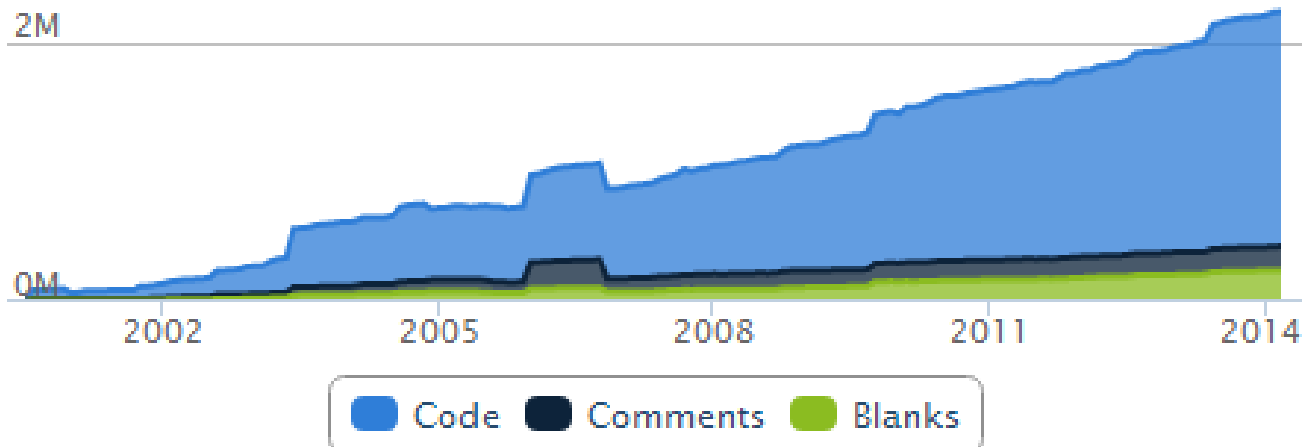
- ž Projekt zahájen v roce 1999, po skončení projektu Megido (klon Delphi pro Linux)
- ž První verze 0.0.5 v roce 2001
- ž Podpora Mac OS X
 - › PPC od roku 2005
 - › Intel od roku 2007
- ž V roce 2012 verze 1.0
- ž Březen 2014 verze 1.2

Languages



 Pascal	75%	 XML	18%
 Make	7%	 9 Other	<1%

Lines of Code



Komunikace

- ž Správa zdrojových kódů – Subversion
 - › <http://svn.freepascal.org/svn/lazarus/trunk>
- ž Mantis Bug Tracker
 - › <http://bugs.freepascal.org/>
- ž Wiki
 - › <http://wiki.freepascal.org/>

(filter)



- Project Options
 - Application
 - Forms
 - FDoc Editor
 - Session
 - Version Info**
 - i18n
 - Miscellaneous
- Compiler Options
 - Paths
 - Build Modes
 - Parsing
 - Code Generation
 - Linking
 - Verbosity
 - Messages
 - Other
 - IDE Macros
 - Inherited
 - Compilation

Include version info in executable

Version numbering

Major version:

1

Minor version:

3

Revision:

0

Build:

0

Automatically increase build number

Language options

Language selection:

English - United States

Character set:

Unicode

Other info

Key	Value
ProductName	Lazarus IDE
ProductVersion	
Comments	
CompanyName	
FileDescription	
FileVersion	1.3.0.0

Use these compiler options as default for new projects

Help

Show Options

Test

...

OK

Cancel

Zdroje:

- ž <http://cs.wikipedia.org/wiki/Lazarus>
- ž [http://en.wikipedia.org/wiki/Lazarus_\(IDE\)](http://en.wikipedia.org/wiki/Lazarus_(IDE))
- ž <http://forum.lazarus.freepascal.org/index.php/page,7.html>