#### Important Note:

A)Please remove previous versions before installing a new version.

B)Installation path containing "SPACE" char's does not work.

## What is LazToApk?

To build a piece of software which can be installed on an android device, you need Java JDK, Android SDK, Android NDK, ANT and laz4android.

LazToApk is a software which will help you to configure all these needed 3<sup>rd</sup>-Party Tools.

### What's new?

See changes file .\changes.txt

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## Requirements

- Windows (I tested on Win10)
- At least 9GByte free disk space.
- A quick internet connection, because 1.3GByte needs to be downloaded.
- Recommended: a real Android Device (Smartphone or Tablet) because the Android Emluator is very slow!

Note: The whole installation may take 30 minutes!

# Setup the tools to create an Android App with Lazarus/Free Pascal

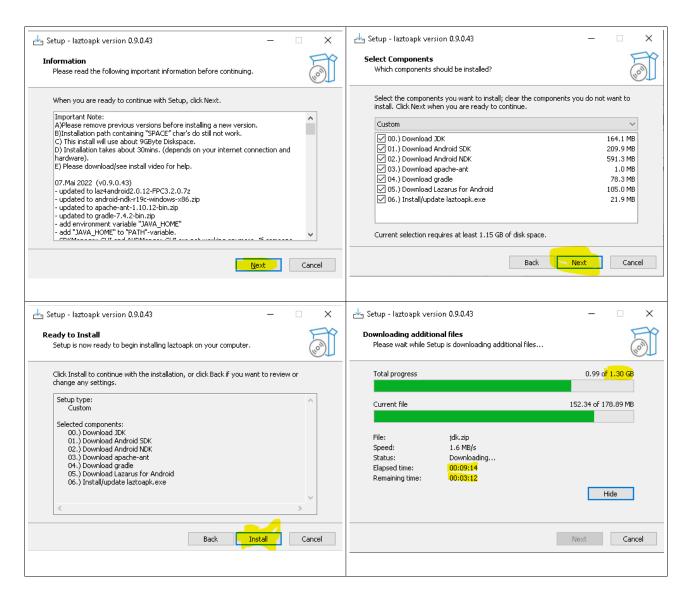
Please follow **exactly** this instructions, otherwise the chance is very high that your final app will not work!

I tested on windows 10.

## Step 01: Download&Install LazToApk

LazToApk → <u>Download the setup from here.</u> (sourceforge.net)

Run the setup.



You can now go for a coffee! No user-action is required the next 20 minutes. The download took on my machine about 16 Minutes. After the download, the files will be un-zipped automatically. This will take another 2 minutes.



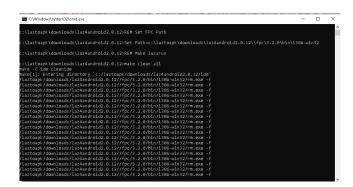
After unzipping the file, some more SDK stuff is downloaded.

Here the user has to confirm the licence agreement. Type  $\langle y \rangle$  and press  $\langle ENTER \rangle$ .



The download of this additional SDK stuff takes another 5 minutes.

At the end of setup the batch-file <build.bat> gets automatically started.  $\rightarrow$  laz4android get's compiled. This may take a while and look's something like this.



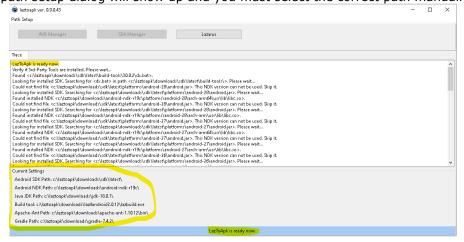
## Step 02: Start&Configure LazToApk for the first time

The application  $\langle LazToApk \rangle$  will be started.

LazToApk will verify if the folder's for JDK,SDK,NDK,ANT,GRADLE and the tool lazbuild.exe is available.

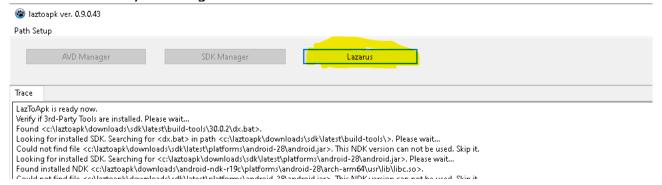
If everything went fine, it should look like this:

(If not, then a path setup dialog will show up and you must select the correct path manually.)

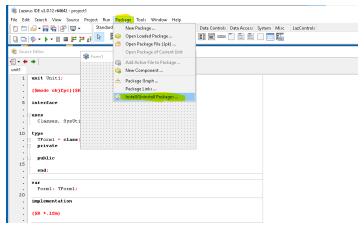


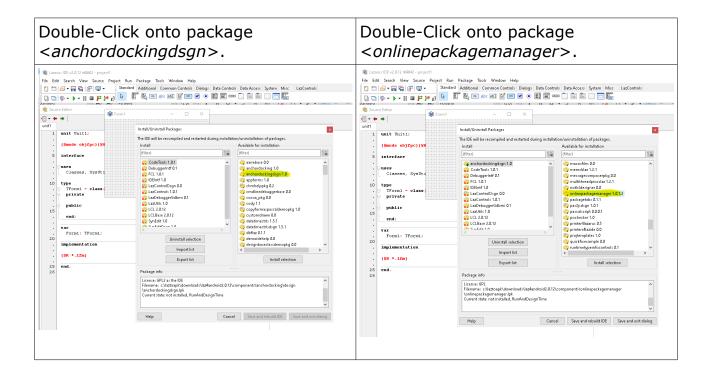
## Step 03: Start Lazarus and install packages.

Start Lazarus by clicking onto Button < Lazarus > .



The Lazarus IDE should show up. Choose < Package>, < Install/Uninstall Packages>.





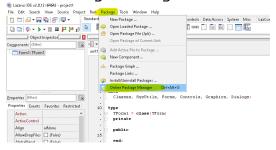
#### Press Button < Save and Rebuild IDE>



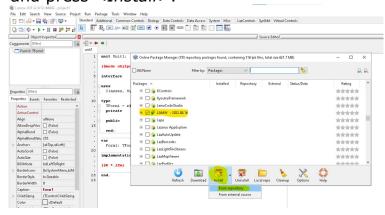
The Lazarus IDE gets rebuilt and restarted. This may take a while.

## **Step 04: Install LAMW (Lazarus Android Module Wizard)**

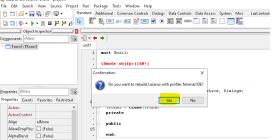
Choose < Package > < Online Package Manager >



Select < LAMW > and press < Install > .



The package get's downloaded and installed. After a while the following dialoge pops up. Press < Yes>.



The Lazarus IDE gets rebuilt and should now have new component-tabs.



## Step 05: Restart LazToApk

Close Lazarus. Close LazToApk. Close the setup.

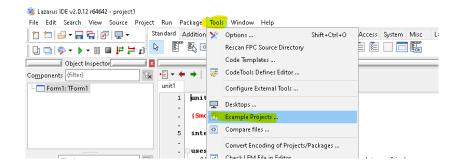


Start LazToApk again by clicking on the icon on your desktop.

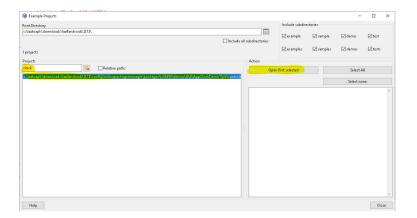


## Step 06: Build your first Android App

Choose < Tools> < Example Projects>.



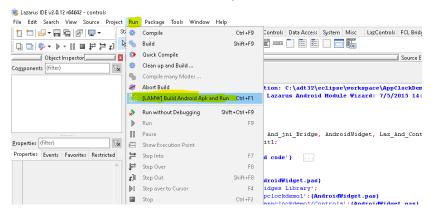
Type <*clock*> and select the entry, then press <*Open first selected*>.



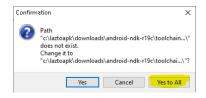
#### Press < OK >.



#### Choose <Run> <[LAMW] Build Android Apk and Run>



#### Press < Yes to All>.



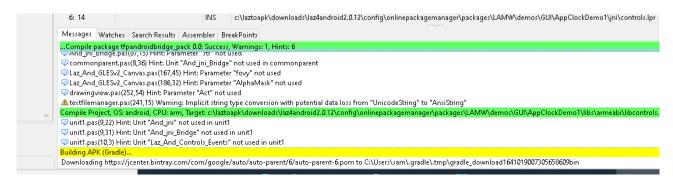
#### Press < Create it > .



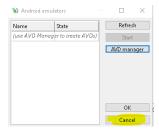
And again press < Create it>.



Because this is the first build, Gradle will download some more stuff. This takes a while. Be patient...



After a while, the following dialoge will show up. Press <*Cancel*>.



The application is finished.



You can copy now the apk-file onto your device and install it.

