Creating Installer

<u>This is a short tutorial</u> on how to create simple IzPack based installation solution on windows platform with all standard features like: desktop shortcut, start menu item shortcut, copying libraries, folders, documentation into one of the ProgramFiles folder on the windows machine.

- 1. First download and install IzPack itself from: izpack website
- 2. Prepare the application you want to make installable. We end up with SomeApp.jar file. Navigate to the desktop module and execute the following command:

mvn assembly:assembly

This will create "jar spellbook-version-jar-with-dependencies.jar".

- 3. Now, once we have all the main ingredients (our application and installer) we need to connect it together. Create the folder anywhere on your machine, and call it for example 'softwarepassion'.
- 4. Put your jar file into the 'softwarepassion' catalog.
- 5. Now we need to add some native libraries for Izpack to be able to add windows shortcuts on the desktop and start menu. Create 'bin' folder under the 'softwarepassion' folder and copy whole 'native' content found in your izpack installation into the 'bin' folder of your root 'softwarepassion' catalog.

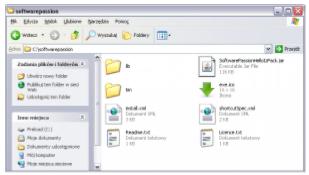
You can find the native folder inside your IzPack installation directory, normally under: `C:\Program Files\IzPack\bin'

- 6. Create your application icon file and add it to your 'softwarepasison' catalog. I call mine 'exe.ico'.
- 7. Now comes the hardest part to get initially but after you build your first installer it all gets clear and easy

We need to prepare two separate xml files: one called 'install.xml' and another one called 'shortcutSpec.xml'.

Shortcuts> INF/MANIFEST.MF > http://www.herongyang.com/Java-Tools/jar-Add-Manifest-to-JAR-Files.html

- 8. Example installation script contains both Readme.txt and Licence.txt which you can add to your 'softwarepassion' folder.
- 9. Once you have it all in one place, you should have a structure like in the following screenshot:



10. Now assuming that your 'softwarepassion' folder has been placed directly on the c: drive, execute the following command:

C:\Program Files\IzPack\bin>compile c:\softwarepassion\install.xml -

b c:\softwarepassion

Assuming that IzPack itself was installed at: C:\Program Files\IzPack This will produce install.jar file which is your installer.

11. If you don't want your end users to click on the 'jar' file as not everybody knows they can do that, you can add executable wrappers for Windows and Mac.

Windows > http://www.javalobby.org/articles/izpack/

Preparing the files

First of all, you will need to install 7-Zip properly on your machine. In particular, you will need to tweak you Windows environment variables (in the My Computer->Advanced tab) so that the path to 7z.exe is available in the PATH variable. If you have installed 7-Zip without having changed the default installation folder, this should be C:\Program Files\7-Zip (take care of adding double quotes around it since there is a space in the path). You can make sure that your installation is fine by running 7-Zip from the command-line and typing 7z in a command shell.

Once this is done, you will need to get the IzPack Installer as well as the IzPack Native Launcher from the IzPack homepage. Now follow these steps:

- 1. Create yourself a working folder.
- 2. Extract the IzPack Native Launcher files in a different folder.
- 3. Copy all the files of the dist folder into the working folder plus the launcher.ini file from the src directory.
- 4. Copy the IzPack installer in the working folder.
- 5. Create a jre folder in the working folder and put a JRE installer in it.

The working folder now contains the installer, the native launcher with its various files (translations and parameters) and a JRE to be installed in case there is no one on the target

working-files Fichier Edition Affichage Favoris Outils ? Rechercher Possiers ∨ 🔁 ок Adresse C:\Documents and Settings\Julien\Mes documents\Devel\IzPack-Win32-SFX-Tutorial\yvorking-files IzPack-install-3.7.0.jar (2) Gestion des fichiers Executable Jar File Créer un nouveau dossier Publier ce dossier sur le Web Partager ce dossier (2) **Autres emplacements** IzPack-Win32-SFX-Tutorial Mes documents Documents partagés Poste de travail launcher-Win32.exe.manifest Favoris réseau ncher-Win32.exe Fichier MANIFEST * launcher.ini Détails Paramètres de configuration

system. It should look like on the following illustration:

Setting up the launcher

The IzPack Native Launcher uses a very simple configuration file that is based on the INI format. Open launcher.ini with you favorite text editor. There are 3 different keys available:

- 1. one to specify the Jar to launch: jar
- 2. one to specify the JRE download URL: download
- 3. one to specify the relative path to a JRE installer program or script: jre.

These keys are defined globally but can be tweaked in operating system specific groups, for instance [win32]. In our case, we provide a JRE for Windows, so we will define the jar and download keys globally while the jre key will be defined for the [win32] group. The file should look like this:

Global entries, can be overridden by specific ones. jar = IzPack-install-3.7.0.jar download = http://www.java.com/

Win32 specific entries [win32] $jre = jre/jre-1_5_0_01$ -windows-i586-p.exe To make sure that the configuration file is working, run launcher-Win32.exe. You can also try it without any JRE or JDK installed to make sure that it will work as intended.

Making the SFX

We first need to prepare a configuration file for 7-Zip. It has to be encoded in UTF-8, so check your editor settings. We will name this file config.txt and put the following text inside:

```
;!@Install@!UTF-8!

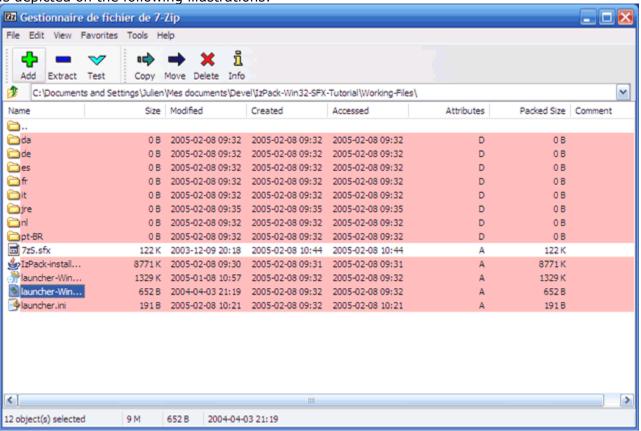
Title="IzPack 3.7.0"

BeginPrompt="Do you want to install IzPack 3.7.0 ?"

RunProgram="launcher-Win32.exe"

;!@InstallEnd@!
```

We then need to get the file 7zS.sfx from the 7-Zip installation folder and copy it in our working directory. Once this is done, we can create a 7z archive (files.7z) of the files to package in the SFX. This can be done either from the command-line or from the 7-Zip files manager. We need to include the launcher files and the IzPack installer. The graphical way is depicted on the following illustrations:





The SFX can be created by concatenating the .sfx file, the config file and the archive file. To do that, open a command-line shell and go to your working directory. Now type: copy /B 7zS.sfx + config.txt + files.7z IzPack-3.7.0-sfx-bundle.exe

You can now have a working SFX! Run it and you will see the IzPack installer pop-up unless there is no JRE on your system. In this case the native launcher will first offer you to fix that

12. Database > http://izpack.org/community/berlios-lists-archives/izpack-users/2006-September/000874.html

Solution java > http://www.trustice.com/java/tar/ and http://www.kohsuke.org/bzip2/
Like this http://www.java2s.com/Tutorial/Java/0180 File/UgzipusingGZIPInputStream.htm
and this http://stackoverflow.com/questions/938958/how-should-i-extract-compressedfolders-in-java

Linux >http://marc.info/?l=linux-java&m=94631165025901&w=2

http://www.roseindia.net/java/example/java/io/

modal progress dialog java