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C:\Users\wengerf\Desktop\Xamarin\Bugs_Resources_Android.docx

1 Introduction

From time to time, I had problems, when I have added images to the Android-project of my Xamarin.Forms Shared project. VS then was hanging and after a few minutes patience, I had to shut down VS in task-manager and restart VS (sometimes a few times!)
The last time I added an Image, **I further have lost some of my newly added code** because of the shut-down-and-restart-process. Additionally - in worst case - the project can be destroyed by doing this or VS ask you If you want to restore some (in my case stone-old) versions to some of the code-files - if you then say yes (to this silly question), you will have a nice problem ☺
So.. it should not be necessary in general, to shutdown and restart VS for any reason!

This problem is discussed in this thread:
http://forums.xamarin.com/discussion/comment/130622#Comment_130622

Raphael Schindler has find out, that the manual adding of the resource in the .csproj-file works (thanks to Raphael once again, for sharing this information).

I now have investigated the problem in detail and (think), I have find out the reason of the problem. My findings are documented in this document (I will post it in some forum-thread's and also fill a bug in bugzilla).

2 Conclusion for users (for now)
Don't use VS (Xamarin intergration software) to add a new image / change the name of an already added Image.
- **Instead do it manually:**
  - Close VS
  - Copy the new image-file manually (file-explorer) in the \resources\-directory in the Android-project
  - Open the Android.csproj file manually
  - Add the entry for the image-file manually
  - Store the csproj-file
  - Open VS
  - Work…
  - ➢ **Further details see chapter "My investigation / findings"**

- **If you want to change the name of an Image in the project, do it also <u>manually</u> in the .csproj-file (like adding described above, simply open the file, change the filename and store the changes)**

3 Conclusion for Xamarin(for now)

It seems, as:

- over VS added Images are stored **false** in the .csproj.File, what then causes the problem, that VS hangs
  - ➢ Details see chapter "**My investigation / findings"**
- the renaming of images over VS also don't work correct, what then also causes the problem, that VS hangs and further also causes an additionally inconsistence then (Image in filesystem is renamed, but entry in -.csproj.file **not**)
  - Details see chapter "**My investigation / findings"**

I have no understanding for such bugs.
This has worked in earlier versions (must be a new bug in some newer versions).

➢ *Please fix this ASAP (should be easy to fix) and inform us, when it is fixed.*

➢ *And… please change the "detailed" Error-message "Aapt.exe was terminated with Code 1" (when there is a problem with the resources) to something meaningful, like "file xx-yyy.png not found" or - better "file xx-yyy.png contains illegal characters" when possible*
- *I'm sure, that this error-message has cost your (according your marketing) one million developers together month of time to search the problem..*

Thanks!

4 My investigation / findings

IS-version: **3.11.586.0** (XF-Version: 1.4.3.6358-pre-2)

According to Raphael's hint (see "Introduction") I have opened my Android.csproj-File and inspected it:

```
C#  MatrixGuide.Android.csproj
</ItemGroup>
<ItemGroup>
    <AndroidResource  Include="Resources\Drawable\Icon.png" />        (2)  Added a while ago
</ItemGroup>
<ItemGroup>
    <AndroidResource Include="Resources\Drawable\Logo.png" />         Added over VS (add ressource over context-menu)
    <EmbeddedResource Include="Embedded\SymbolFrau.jpg" />            => in csproj added under (new) Tag: <ItemGroup>
    <EmbeddedResource Include="Embedded\SymbolMann.jpg" />            (3)  Last added .png
    <Content Include="Properties\AndroidManifest.xml">
      <SubType>Designer</SubType>
    </Content>
    <AndroidResource Include="Resources\Drawable\Home.png" />
    <AndroidResource Include="Resources\Drawable\AndroidSplashScreen.png" />
    <AndroidResource Include="Resources\Drawable\SplashScreen.xml">
      <SubType>Designer</SubType>
</AndroidResource>
    <AndroidResource Include="Resources\Drawable\Suchen.png" />
    <AndroidResource Include="Resources\Drawable\Magisch.png" />
    <AndroidResource Include="Resources\Drawable\FreizeitGuide.png" />    (1)
    <AndroidResource Include="Resources\Drawable\BeautyGuide.png" />
```
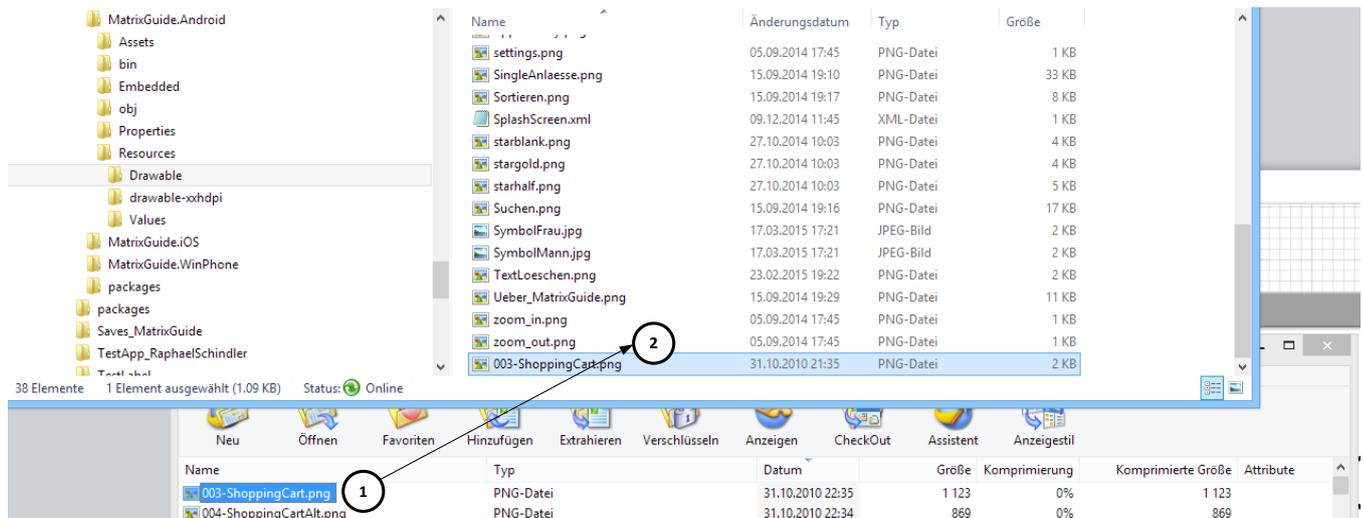
Other Resources (without problems, added earlier) => in .csproj under Tag </AndroidResource>

- My in the past (without problems) added images **(1)** are stored under the tag **</AndroidResource>**
- An other Image added a while ago, but never used in the app **(2)** was added in an additional tag <ItemGroup>
- My last (with the latest IS-Version) added Image (that I use in the app and had caused the VS-hang and shut-down VS and loose of some work) was added under the tag <ItemGroup> **(3)**

Bug's in Xamarin VS-Integration-Software
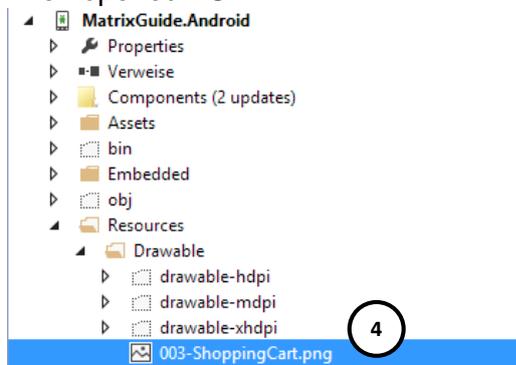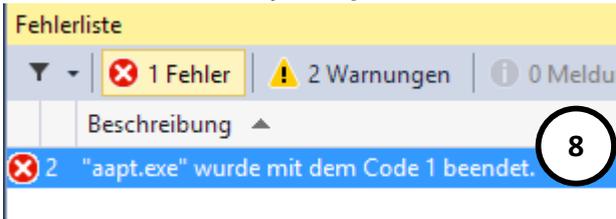
In then have done a **test** and:

- Closed VS
- Copied a new image ("003-ShoppingCart.png") from a .zip-file **(1)** to the Resources/Drawable-directory of the project **(2)** and added it manually in the editor **(3)**

- Then opened VS:

- The manually added Image was showed correct **(4)**

- Then closed VS and **correct** the entry to the active used Image **(5)**

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Autor: Fredy Wenger
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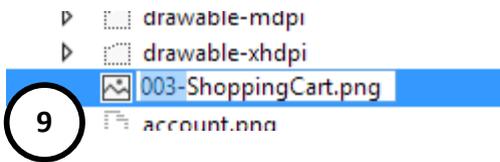Stand vom 10.06.15

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- Then reopened VS and **cleaned (6)** and **build (7)** the project (as I think, that some of the .csproj-entries may be cached from VS):

- Then I had the "lovely" **"aapt.exe was terminated with Code 1"** error-message **(8)**

- As I already have spent day's in the past to battle this "meaningful" error-message, I had in mind, that it is raised, if a file-name contains some special-characters and/or images with the same name are stored in multiples directories
- Therefore I wanted to change the filename of the test-image from "003-ShoppingCart.png" to only "ShoppingCart.png" (as I know (now), **that the "-" character is not allowed in Android**)

- I have changed the name in the **project by the context menu** and **removed the "003-" (9)**

- The result was a **hanging VS (10)** so that I had to kill VS once again in the task-manager

- I have seen then, that **the filename (11) was changed**, but **not** the entry in the csproj.file **(12)**

- I then have edited the .csproj.file once again manually and done the correction of the filename myself **(13)**

```
    </AndroidResource>
    <AndroidResource Include="Resources\Drawable\Logo.png" />
    <AndroidResource Include="Resources\Drawable\ShoppingCart.png" /
    <AndroidResource Include="Resources\Drawable\Suchen.png" />      (13)
    <AndroidResource Include="Resources\Drawable\Magisch.png" />
```

- After that, I was able to build without problems and also the access to the image at runtime works without problems.