

Nero – Innovation Project

Nero 360 VR is an 360° Panorama Viewer native application written in .NET and Windows Presentation Foundation by Nero AG. As this is a new application in Nero's ecosystem the customer wanted to extend reach so we decided to convert this as UWP app.

The core team for this project was:

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Customer profile

[Nero AG](#) creates software applications and platforms that help consumers simply enjoy their photos, videos and music. Its Nero MediaHome platform enables consumers to access, enhance and share their digital content across PCs, smart phones, tablets and online social networks. Nero also produces a top-selling multimedia software suite, which contains powerful applications for media management, video editing, video converting, file back-up, content syncing and disc burning.

Headquartered in Karlsruhe, Germany, Nero maintains regional offices in Karlsruhe, Germany; Glendale, Calif., USA; Yokohama, Japan; and Hangzhou, China.

Nero 360 VR wasn't released so far, but the companies history on successful products made it a great choice to bring this to the Windows Store.

Problem statement

Nero AG wants to leverage the benefits the Windows Store brings application developer to reach more customers and have a streamlined easy global distribution mechanism for their applications.

Solution, steps, and delivery

With the Desktop Bridge, the team migrated Nero 360 VR to UWP with no further issues. Here are the steps taken.

Step 1: Set up

Download the [Desktop App Converter](#) tool from the Windows Store.

Download the [Desktop App Converter base images](#) (*.wim).

Run Desktop App Converter as administrator.

From the tool console window, run `Set-ExecutionPolicy bypass`.

Set up the converter by running `DesktopAppConverter.exe -Setup -BaseImage .\BaseImage-14393.wim -Verbose`.

Reboot.

The base image file should be matched with the build of Windows 10 on the host computer. In this case, the team chose BaselImage-14393.wim for Windows 10 build 14393.

Step 2: Convert

Copy all the game files to a separate directory.

From the tool console window, create the Windows 10 app package by running the following command:

```
DesktopAppConverter.exe -Installer c:\work\nero\base -Destination c:\work\nero\output -  
PackageName "FFFFFFFF.FFFFFFFFFFFFFFFF" -Publisher "CN=Nero AG, O=Nero AG, L=Karlsruhe,  
S=Baden Wuerttemberg, C=DE" -Version 1.0.0.0 -appid "Nero360VR" -makeappx -  
AppExecutable NeroPanoramaViewer.exe -packagearch x86
```

We get an AppX package and two directories for log files and package resources at the end of conversion.

Step 3: Import to Advanced Installer

The customer Nero AG is using Advanced Installer which has pretty great support for handling .appx packages. The steps involved to import the created UWP package are described in this [How to import desktop bridge applications into Advanced Installer](#)

Advanced Installer is creating a stub hooking as startup executable before the original app. With that Advanced Installer can offer all their services. This is described in the AppxManifest.xml

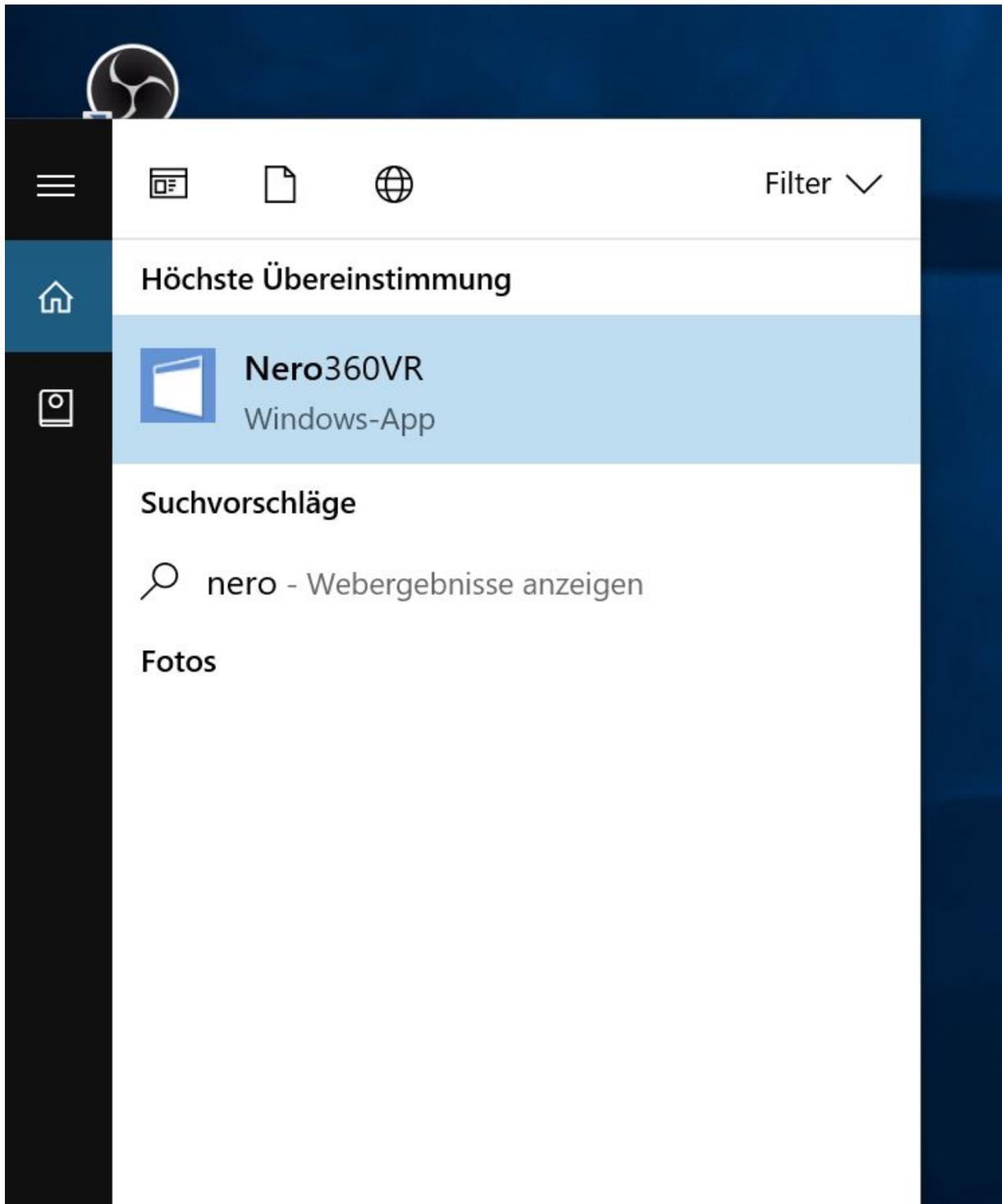
```
<Application Id="Nero360VR" Executable="AI_STUBS\AiStub.exe"  
EntryPoint="Windows.FullTrustApplication">
```

Step 4: Leveraging the Advanced Installer

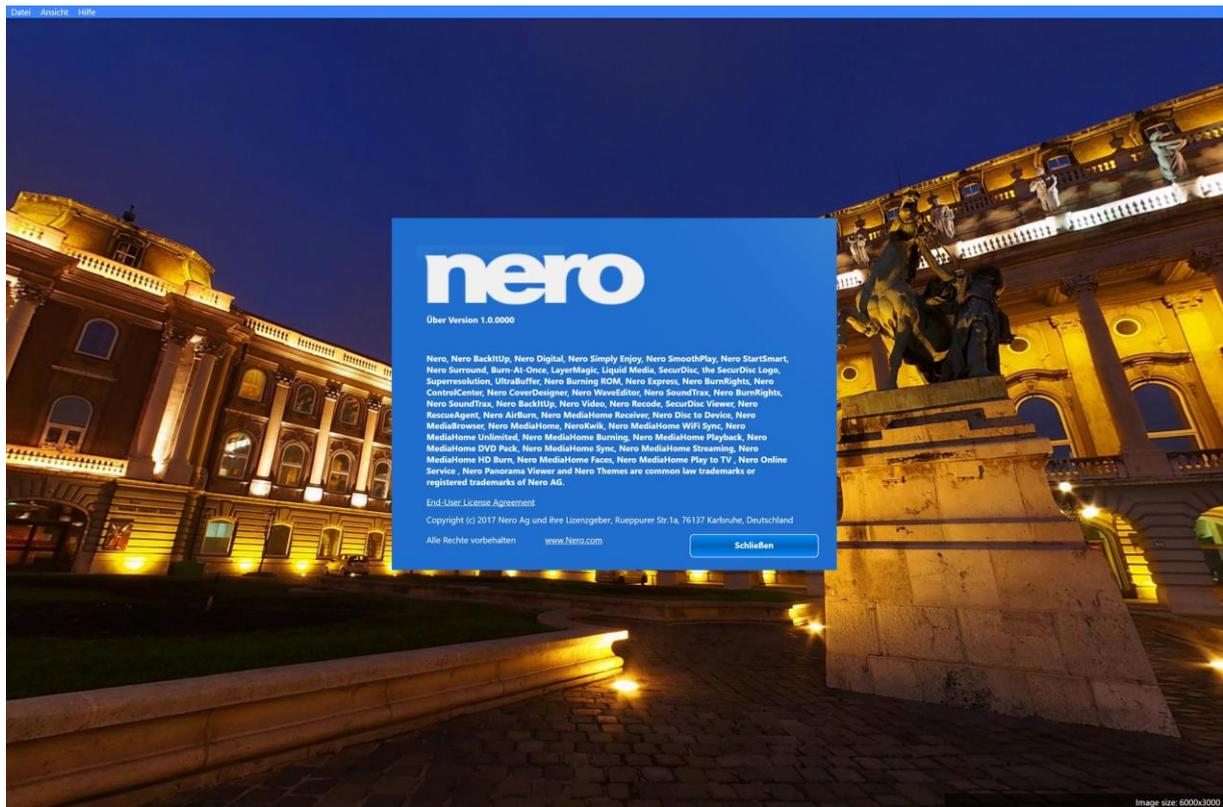
From now on the customer was able to use their already implemented flow in creating installer packages and also be able to use the features Advanced Installer offers them together with their UWP support.

Step 5: Test the application

For testing the application was sideloaded on various Windows 10 machines to test the application. From the start menu the application was launched



and one of the example panorama images was loaded and tested



Conclusion

With the Desktop Bridge the team could pretty easily package the WPF app into a .appx package to make it available to the Windows Store. With that the customer has the advantage on using a new distribution way to sell his app and broaden the already huge user base.