

[dnaspider@live.com](mailto:dnaspider@live.com)  
DesktopAppConverter Notes (dna.appx)

Download test .cer (info.txt):

[https://1drv.ms/f/s!Ahtlv\\_yZlgKi9xXTt4ZAJasNnqWd](https://1drv.ms/f/s!Ahtlv_yZlgKi9xXTt4ZAJasNnqWd)

DesktopAppConverter link:

<https://msdn.microsoft.com/en-us/windows/uwp/porting/desktop-to-uwp-run-desktop-app-converter>

- Download desktopappconverter (desktop app converter) store app
- Download Baselmage-xxxxxx.wim matching version xxxxx
- To Find version: press Win key type `System information`, enter, on second line where it says version, Build xxxxx. Match with Baselmage-xxxxxx.wim download from link above
- Create folder in downloads named `desktopappconverter`
- Drag .wim in there
- Create these folders in desktopappconverter: `installer`, `dna`
- Drag dna\_setup.msi into c:/users/dziez/downloads/desktopappconverte/installer and dna.exe into c:/dna
- Right click desktopappconverter app and run as administrator
- (First run setup: copy bullet press enter)
- cd c:/users/dziez/downloads/desktopappconverter
- Set-ExecutionPolicy bypass
- DesktopAppConverter.exe -Setup -Baselmage .\Baselmage-14393.wim -Verbose
- Y + enter when finished to restart
- Let the operation run (takes some time)
- Close dac and reopen in administrator
- cd c:/users/dziez/downloads/desktopappconverter
- DesktopAppConverter.exe -Installer .\installer\dna\_setup.msi -InstallerArguments "/passive" -Destination .\dna -PackageName "dna" -Publisher "CN=dnaspider@live.com" -Version 2.2.4.2 -AppExecutable "c:\dna\dna.exe" -Verbose

////////////////////////////////////

From link and from store:

download desktopappconverter.zip\*,  
download desktopappconverter store app,  
download baseimage matching version xxxxx (win key `System information`, version, Build xxxxx |  
"about" to see os build),  
extract zip,  
move base image to extracted folder (Baselmage-14393.wim),  
make new folder "installer",  
drag your apps .msi setup package in there

First run setup (.zip):

start menu -> right click desktopappconverter run as admin

cd c:/users/dziez/downloads/desktopappconverter

Set-ExecutionPolicy bypass

.\DesktopAppConverter.ps1 -Setup -BaseImage .\BaseImage-14393.wim -Verbose

(restart computer if it tells you then reopen DAC in admin)

Already setup:

DesktopAppConverter

cd c:/users/dziez/downloads/desktopappconverter

.\DesktopAppConverter.ps1 -Installer .\installer\dna\_setup.msi -InstallerArguments "/passive" -Destination .\dna -PackageName "dna" -Publisher "CN=dnaspider@live.com" -Version 2.2.1.0 -AppExecutable "c:\dna2\dna.exe" -sign -MakeAppx -Verbose

v2

-Extract DAC to downloads (C:\Users\\_\\_Downloads\DesktopAppConverter)

-Create folder (C:\Users\\_\\_Downloads\installer)

-Drag setup.msi to installer folder

-Create folder (C:\Users\\_\\_Downloads\dna) or make sure its empty

-Folders and files should exist if not create them:

c:\cert\mykey0.cer (see create certificate)

c:\dna2\dna.exe ?

C:\Users\\_\\_Desktop\dnaout

C:\Users\\_\\_Desktop\dnaout\PackageFiles

-Open DAC as administrator *and* run commands:

cd c:/users/dziez/downloads/desktopappconverter (press enter)

.\DesktopAppConverter.ps1 -Installer .\installer\dna\_setup.msi -InstallerArguments "/passive" -Destination .\dna -PackageName "dna" -Publisher "CN=dnaspider@live.com" -Version 2.2.1.0 -AppExecutable "c:\dna2\dna.exe" -Verbose

-From contents from C:\Users\\_\\_Downloads\DesktopAppConverter\dnadownloads\dna to C:\Users\\_\\_Desktop\dnaout\PackageFiles (so everything sits in there).

-Make changes to Assets (edit .png files) and AppxManifest.xml

-New AppxManifest.xml:

<?xml version="1.0" encoding="utf-8"?>

<Package xmlns="http://schemas.microsoft.com/appx/manifest/foundation/windows10"

xmlns:uap="http://schemas.microsoft.com/appx/manifest/uap/windows10"

xmlns:uap2="http://schemas.microsoft.com/appx/manifest/uap/windows10/2"

xmlns:uap3="http://schemas.microsoft.com/appx/manifest/uap/windows10/3"

xmlns:rescap="http://schemas.microsoft.com/appx/manifest/foundation/windows10/restrictive"


```


dcapabilities"
xmlns:desktop="http://schemas.microsoft.com/appx/manifest/desktop/windows10">
  <Identity Name="dna" ProcessorArchitecture="x64" Publisher="CN=dnaspider@live.com"
Version="2.2.4.4" />
  <Properties>
    <DisplayName>dna</DisplayName>
    <PublisherDisplayName>dnaspider@live.com</PublisherDisplayName>
    <Logo>Assets\dna.50x50.png</Logo>
  </Properties>
  <Resources>
    <Resource Language="en-us" />
  </Resources>
  <Dependencies>
    <TargetDeviceFamily Name="Windows.Desktop" MinVersion="10.0.14393.0"
MaxVersionTested="10.0.14393.0" />
  </Dependencies>
  <Capabilities>
    <rescap:Capability Name="runFullTrust" />
  </Capabilities>
  <Applications>
    <Application Id="dna" Executable="VFS\dna\dna.exe"
EntryPoint="Windows.FullTrustApplication">
      <uap:VisualElements DisplayName="dna" Description="dnaspider"
BackgroundColor="#000000" Square150x150Logo="Assets\dna.150x150.png"
Square44x44Logo="Assets\dna.44x44.png" />
      <Extensions />
    </Application>
  </Applications>
</Package>


```


-Create then Run pack.bat:

-Create pack.bat (right click on the desktop, New, Text Document and name it pack.bat and paste following contents. Might have to adjust folder options to show file name extensions. Win+E, Alt, V, HF, or View tab, Check file name extensions.)

 32PackageFiles

 64PackageFiles

 32.bat

 64.bat

---

```
cd c:\users\?_?_desktop\dnaout\64PackageFiles
```

```
del dna.appx
```

```
cd C:\Program Files (x86)\Windows Kits\10\bin\x64
```

```
makeappx.exe pack -d c:\users\?_?_desktop\dnaout\64PackageFiles -p
c:\users\?_?_desktop\dnaout\64PackageFiles\dna.appx
```

**SignTool sign /fd SHA256 /a /f C:\CERT\dnaspider.pfx  
C:\Users\?\\_?\Desktop\dnaout\64PackageFiles\dna.appx**

**explorer C:\Users\?\\_?\Desktop\dnaout\64PackageFiles**

**pause**

-Install certificate c:\cert\mycert.cer (see Install certificate.cer):  
-Install appx (click dna.appx)

//v2

After first setup:

Drag newly created PackageFiles folder to desktop folder dnaout

Update Assets:

Add dna.44x44.png, dna.50x50.png, dna150x150.png images to dnaout -> Assets folder

Update AppxManifest.xml:

Replace (ctrl + h) SampleAppx with dna  
Update Version="2.2.3.0" number

Create new certificate:

cd c:\

md CERT

CD C:\Program Files (x86)\Windows Kits\10\bin\x64

MakeCert /n "[cn=dnaspider@live.com](mailto:cn=dnaspider@live.com)" /r /h 0 /eku "1.3.6.1.5.5.7.3.3,1.3.6.1.4.1.311.10.3.13" /e  
10/12/2017 /sv "C:\CERT\MyKey.pvk" "C:\CERT\MyKey.cer"

Pvk2Pfx /pvk c:\cert\MyKey.pvk /spc c:\cert\MyKey.cer /pfx c:\cert\MyKey.pfx

Pvk2Pfx:

// Pvk2Pfx /pvk c:\cert\MyKey.pvk /pi thePassword /spc c:\cert\MyKey.cer /pfx c:\cert\MyKey.pfx  
// no pw:  
//Pvk2Pfx /pvk c:\cert\MyKey.pvk /spc c:\cert\MyKey.cer /pfx c:\cert\MyKey.pfx  
// SignTool sign /fd SHA256 /a /f C:\CERT\MyKey0.pfx  
C:\Users\?\\_?\Downloads\DesktopAppConverter\dna\dna.appx

Install Certificate:

Install MyKey.cer to local, trusted root cetertfication authority to install new .appx

Install certificate.cer:

Click MyKey.cer file  
Install Certificate...  
Local Machine

Next  
Yes  
Place all certificates in the following store  
Browse  
Trusted Root Certification Authorities or Trusted People  
Ok

Make new appx:

Run pac.bat from desktop or  
create new .txt file on desktop named pac.bat  
Right click edit pac.bat in notepad and place following contents:

```
cd c:\users\?_\desktop\dnaout\PackageFiles

del dna.appx

cd C:\Program Files (x86)\Windows Kits\10\bin\x64

makeappx.exe pack -d c:\users\?_\desktop\dnaout\PackageFiles -p
c:\users\dziez\desktop\dnaout\PackageFiles\dna.appx

SignTool sign /fd SHA256 /a /f C:\CERT\MyKey0.pfx
C:\Users\?_\Desktop\dnaout\packagefiles\dna.appx

pause
```

Pac.bat notes:

Files on desktop:  
pack.bat  
dnaout (folder)

Cert folder in c:/  
cert > key.pfx

Make new appx:

If pac.bat success, and (click) mykey.cer from c:\cert is installed to local, certification authorities  
then new .appx install in dnaout is ready to install

Misc.

```
// install auto-generated.cer -> local user -> trusted root certification authorities
// install .appx
```

//x86 package

- In Visual studio 2017 in Product.wxs change <Directory Id="ProgramFilesx86Folder"> to <Directory Id="ProgramFilesFolder"> and <File Source="C:\Users\?\_\Documents\dnaspider\bin\release\dna.exe" (or debug)
- In Visual studio 2017, Solution Explorer, My Project, Compile, Target CPU, AnyCPU (x86)
- In Visual studio 2017, Solution Explorer, dna\_setup, Build

- In Visual studio 2017, bin\Release\dna\_setup.msi (move .msi to DesktopAppConverter\installer\dna\_setup.msi)
- Move new dna.exe to c:/dna2.exe
- Run DAC in administrator
- DAC
- cd c:/users/\_?\_/downloads/desktopappconverter
- .\DesktopAppConverter.ps1 -Installer .\installer\dna\_setup.msi -InstallerArguments "/passive" -Destination .\dna -PackageName "dna" -Publisher "[CN=dnaspider@live.com](mailto:CN=dnaspider@live.com)" -Version 2.2.1.0 -AppExecutable "c:\dna2\dna.exe" -Verbose

```

Administrator: DesktopAppConverter

Use "DesktopAppConverter.exe -?" or visit http://go.microsoft.com/fwlink/?LinkID=785434 for more information on arguments supported by this tool.

EXAMPLES

1. Setup converter environment using a base image
   C:\> DesktopAppConverter.exe -Setup -BaseImage C:\BaseImage\BaseImage-<version>.wim

2. Convert an installer for a desktop app (MSI or EXE) to a UWP package (AppX)
   C:\> DesktopAppConverter.exe -Installer C:\MySetup.MSI -Destination C:\MyAppxFolder -PackageName "MyApp" -Publisher "CN=<publisher_name>" -Version 1.0.0.0 -MakeAppx

PS C:\Windows\system32> cd c:/users/dziez/downloads/desktopappconverter

PS C:\users\dziez\downloads\desktopappconverter> .\DesktopAppConverter.ps1 -Installer .\installer\dna_setup.msi -InstallerArguments "/passive" -Destination .\dna -PackageName "dna" -Publisher "CN=dnaspider@live.com" -Version 2.2.4.2 -AppExecutable "c:\dna\dna.exe" -Verbose^C

```

- In Desktop\dnaout\PackageFiles delete VFS, dna.appx, Registry.dat
- From DesktopAppConverter\dna copy VFS and Registry.dat to Desktop\dnaout\PackageFiles
- Desktop\dnaout\PackageFiles\AppxManifest.xml = AppxManifest from above
- Update Assets:



- AppxManifest.xml ProcessorArchitecture="x86" (change x64 to x86)
- Desktop\dnaout\PackageFiles\VFS\dna\dna.exe (add dna folder and dna.exe)
- Run new pack\_x86.bat (**32.bat**):  
cd c:\users\\_?\_\desktop\dnaout\PackageFiles

del dna.appx

```
cd C:\Program Files (x86)\Windows Kits\10\bin\x86
```

```
makeappx.exe pack -d c:\users\?\_desktop\dnaout\PackageFiles -p  
c:\users\?\_desktop\dnaout\PackageFiles\dna.appx
```

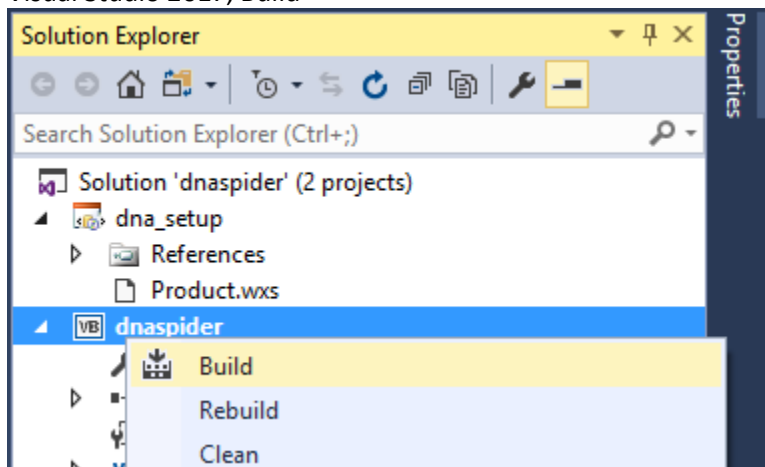
```
SignTool sign /fd SHA256 /a /f C:\CERT\MyKey0.pfx  
C:\Users\?\_Desktop\dnaout\packagefiles\dna.appx
```

```
explorer C:\Users\?\_Desktop\dnaout\32PackageFiles
```

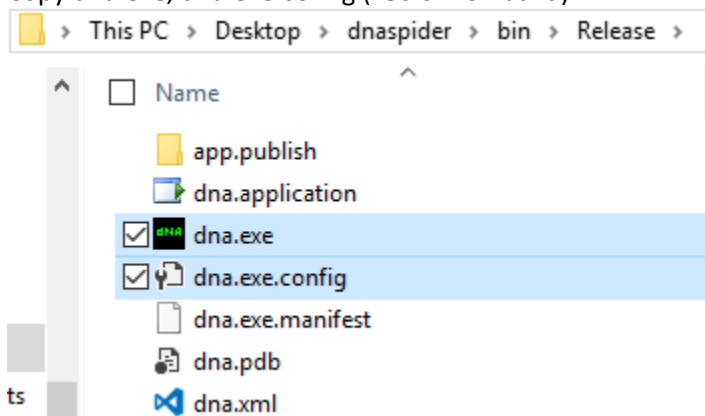
//x86 package

//Update x86 or x64 dna.appx from dnaout (small package size)

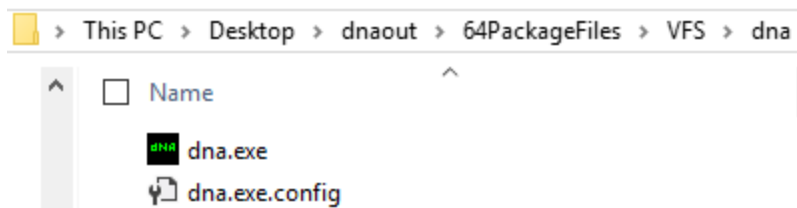
Visual Studio 2017, Build



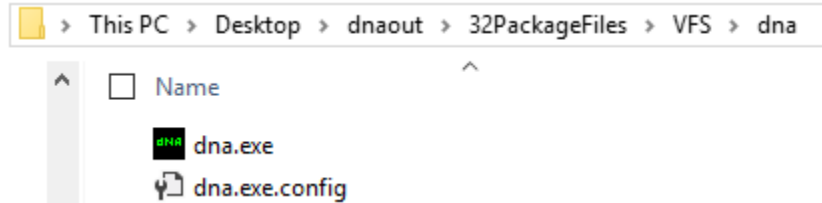
Copy dna.exe, dna.exe.config (x86 or x64 build)



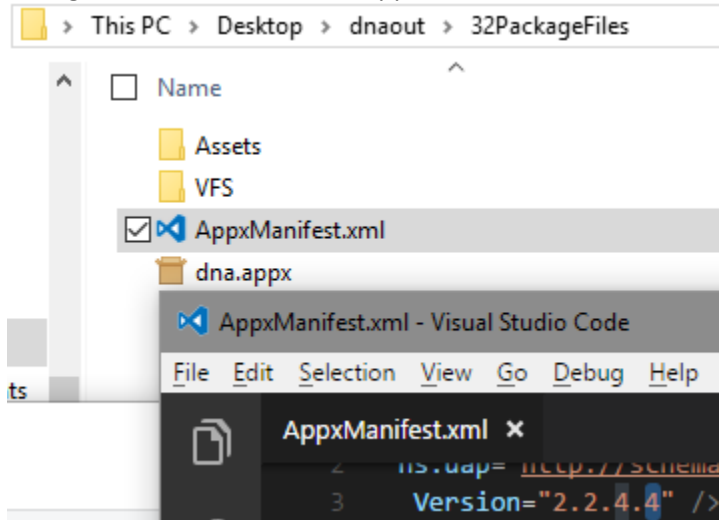
Paste to dnaout folder (64PackageFiles/VFS/dna)



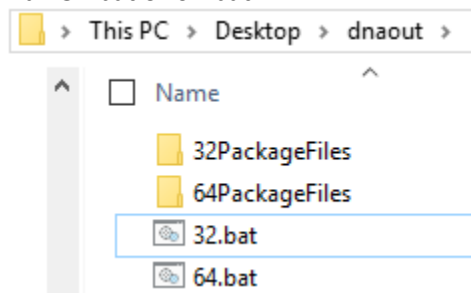
Paste to dnaout folder (32PackageFiles/VFS/dna)



Change version number from AppxManifest.xml



Run 32.bat or 64.bat



//

.appx smallest package:

- dnaout: keep only Assets, and AppxManifest.xml
- VFS: keep only dna/dna.exe & dna/dna.exe.config
- Exclude all other files

Links and setup:

- win + break, change product key, Windows 10 Pro



-win, developer, for developer settings, developer mode

-Outlook.com, create new account

<https://docs.microsoft.com/en-us/windows/uwp/publish/opening-a-developer-account>

Download and install:

-<https://www.visualstudio.com/vs/>

-<https://developer.microsoft.com/en-US/windows/downloads/windows-10-sdk>

x-<https://www.xamarin.com/download>

-<http://wixtoolset.org/releases/>

<https://wix.codeplex.com/releases/view/624906>

Windows 10 (1607 Anniversary Update) DAC

-Windows store: search and download 'desktop app converter'

-<https://www.microsoft.com/en-us/download/details.aspx?id=51691> (download 'Desktop App Converter Preview (Project Centennial)' from here also)

-aka.ms/converterimages (download .wim image)

<https://www.microsoft.com/en-us/download/details.aspx?id=54758>

BaseImage-14393.wim (Anniversary Update)

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