Win10XPE - How To Quick Start Guide

Download the XPE Project File and extract the file...

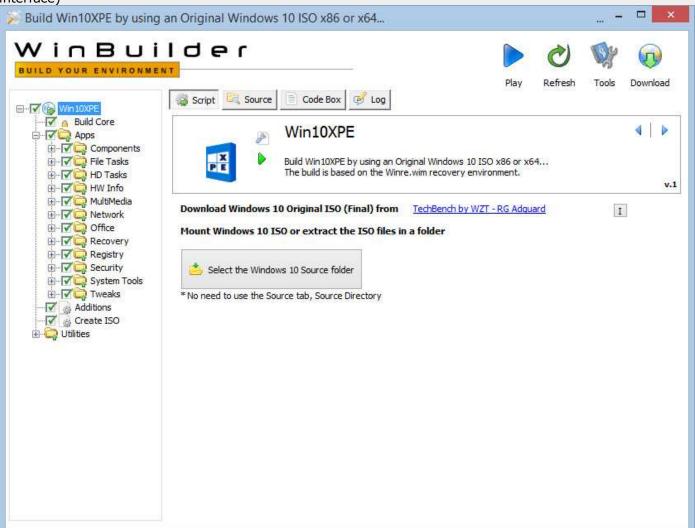
Copy Win10XPE folder to your Data Drive. (I prefer to use my D drive rather then my C Drive as to keep away from OS..

If using Windows 10 as your Host OS - you will need to allow a Windows Defender "Exception" for the Win10XPE folder (I would suggest the same exception for any A/V software) in order to allow the program exe's to run without being blocked....

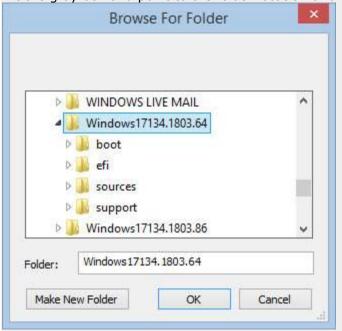
Then Mount Your Official Release Windows 10 Setup Media ISO (it is suggested that you copy the contents of the setup media to a folder on your Data Drive and select it as the source) but it is not required..

Note: We do not add support for MS Preview Releases - all projects use Official MS Release Media

When you run the Win10XPE.exe the builder will open (**Note:** A link to Official Media Download is present on interface)



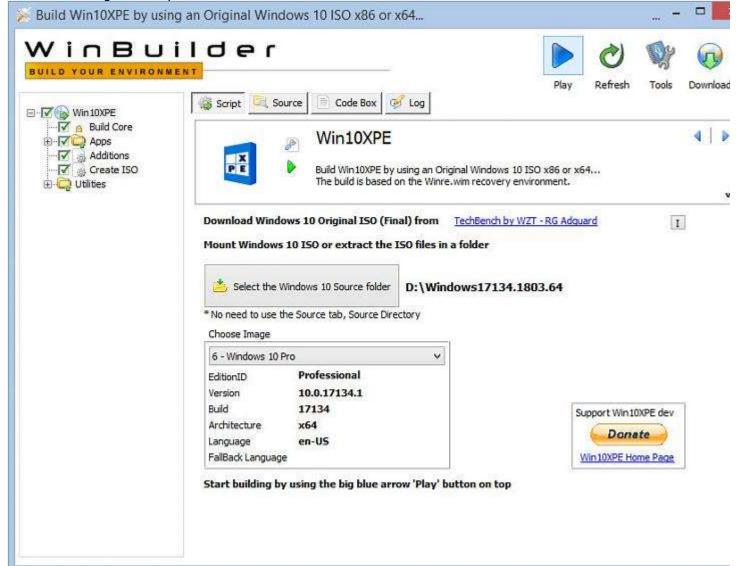
Hit the gray box and point to the folder location or drive letter of the Setup Media..



After it finds the media that main screen will change now listing the Wim Info Build Win10XPE by using an Original Windows 10 ISO x86 or x64... WinBuilder BUILD YOUR ENVIRONMENT Download Script Source Code Box 6 Log ⊟ Vin10XPE - V A Build Core 4 1 Win10XPE Apps - Additions Create ISO Build Win 10XPE by using an Original Windows 10 ISO x86 or x64... The build is based on the Winre, wim recovery environment. v.1 Download Windows 10 Original ISO (Final) from TechBench by WZT - RG Adquard I Mount Windows 10 ISO or extract the ISO files in a folder Select the Windows 10 Source folder D:\Windows17134.1803.64 *No need to use the Source tab, Source Directory Choose Image 1 - Windows 10 Home Core EditionID Version 10.0.17134.1 Build 17134 Support Win 10XPE dev Architecture x64 Donate Language en-US Win 10XPE Home Page FallBack Language Start building by using the big blue arrow 'Play' button on top

You can use the scroll box to select "Pro" or make any other selection..

Then Hit the Big Blue Play Button....



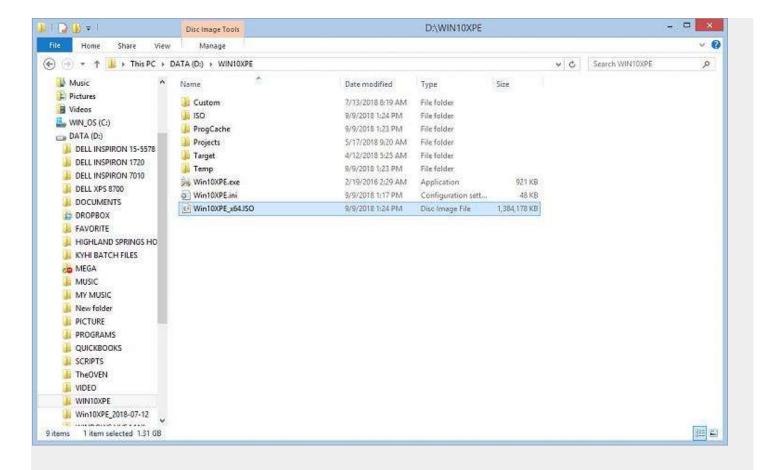
Sit back, watch and relax as the program runs...

It will download several programs and features (Please allow it to do so) these downloads are designed as First Run only.

XPE will open command prompt to extract files, download and run program commands (Please allow it to do so)

After The Builder Finishes you will get an OK message..

Browse to the folder location of Win10XPE and you will find your Custom ISO...

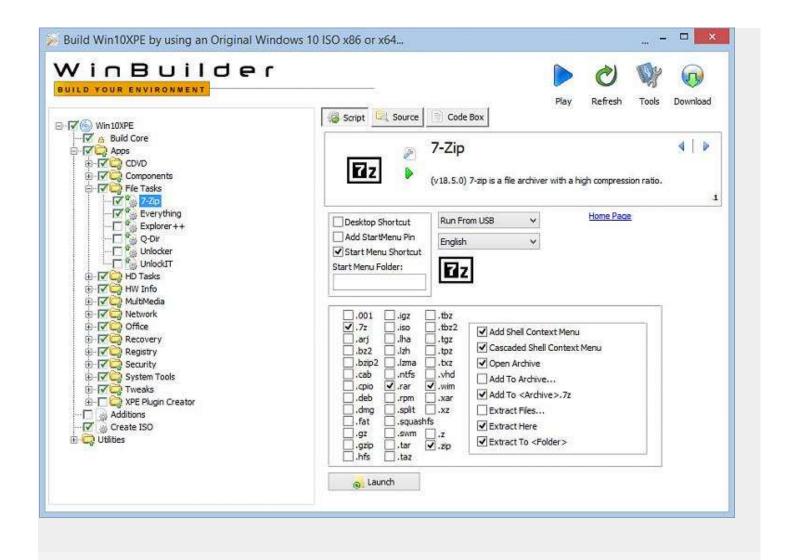


Now that you have created your FIRST custom PE with the default selections..

You can change those selections by checking or unchecking program checkboxes in the left pane..

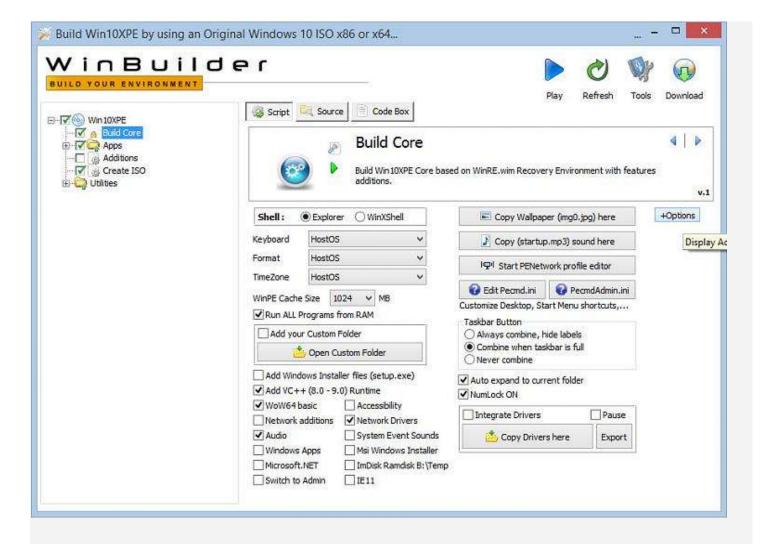
if you click the program name in the left pane - the program interface will display in the right pane.

Each program interface has the ability to select shortcuts and may have other options you can choose from...



Suggested Build Core Default Options

You Can Select From Additional Features and Options



Note: Some Programs May Require Net Framework (Microsoft .Net) or Additional Networking Files (Network Additions)

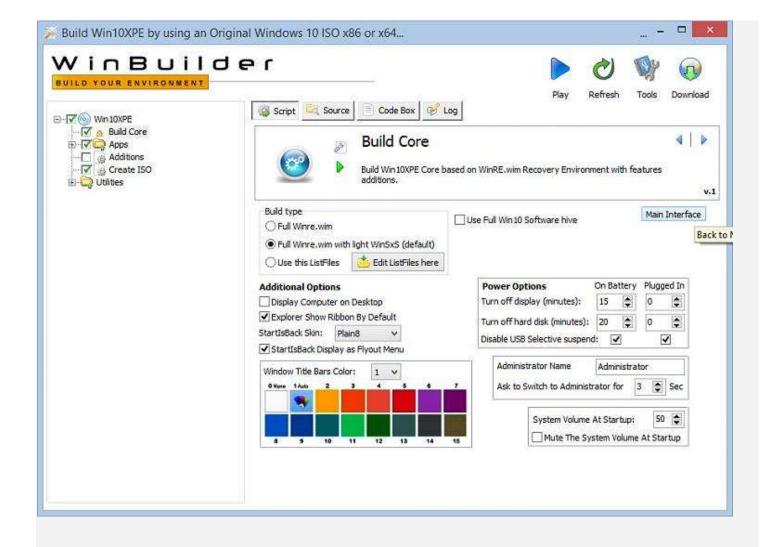
Note: Custom jpg Wallpaper Must Be Renamed To > Img0.jpg

Note: Custom mp3 Startup Sound Must be Renamed to > Startup.mp3

Additional Options Interface

Note: Leave "Build Type" Alone

Select Your Options and Return To Main Interface



Add Custom Drivers

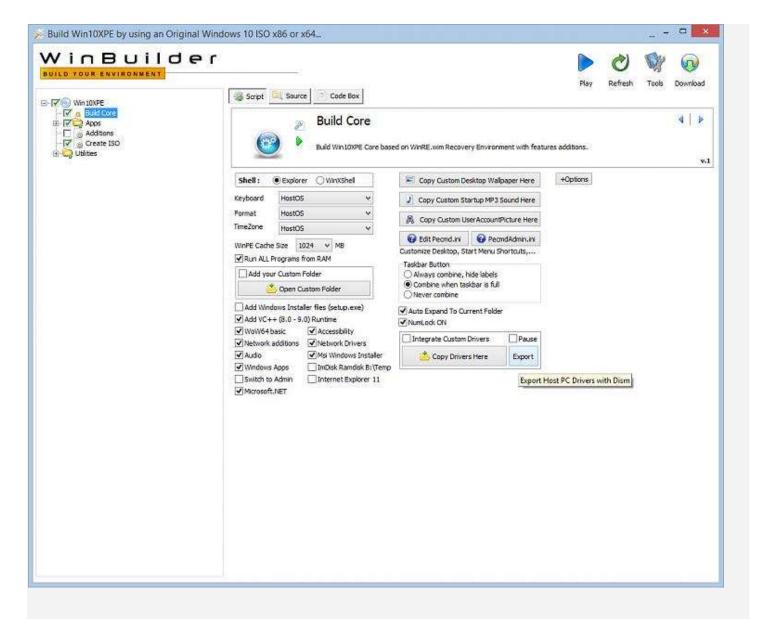
Here is the thing about adding custom "Drivers"

If you can run through windows 10 setup without it asking you for driver files - then most likely you will not need to add them to your XPE...

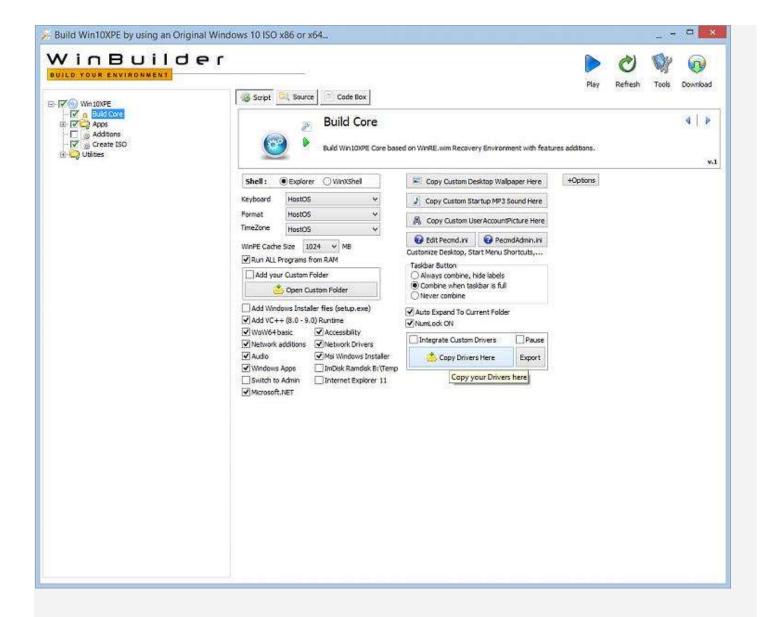
Some Drivers may require a reboot, it is not possible to install those drivers after PE is loaded, so they must be integrated in your XPE build..

I would suggest Booting XPE to test first, before you commit additional drivers...

But Basically You are going to be Exporting those Driver(s) from your Host PC with DISM



You will then Copy the Driver Folders into the Driver Integration Folder in XPE Another Hint To Additional Drivers - Copy Your Macrium Reflect "Drivers" Folder.



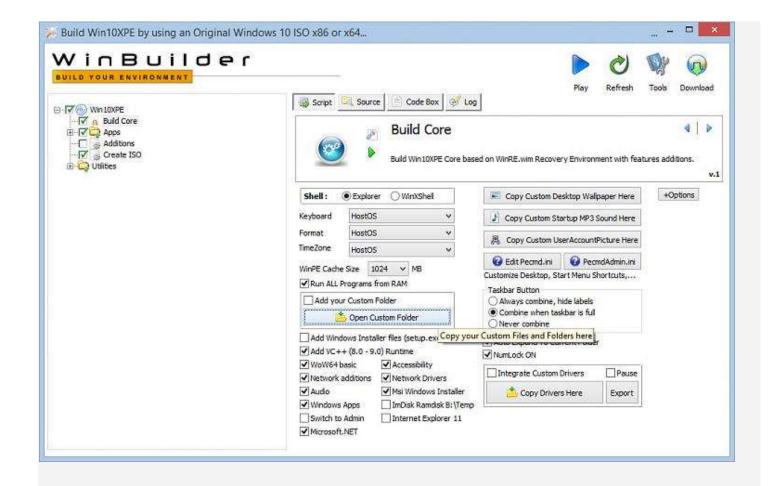
Be sure to check the "Integrate Custom Drivers" Checkbox
The Drivers are sorted by Arch - and Each Driver Folder is Recursed

Note: You Only Need To Load Required/Special Drivers That Are Not Included In WinPE

Additional Folders

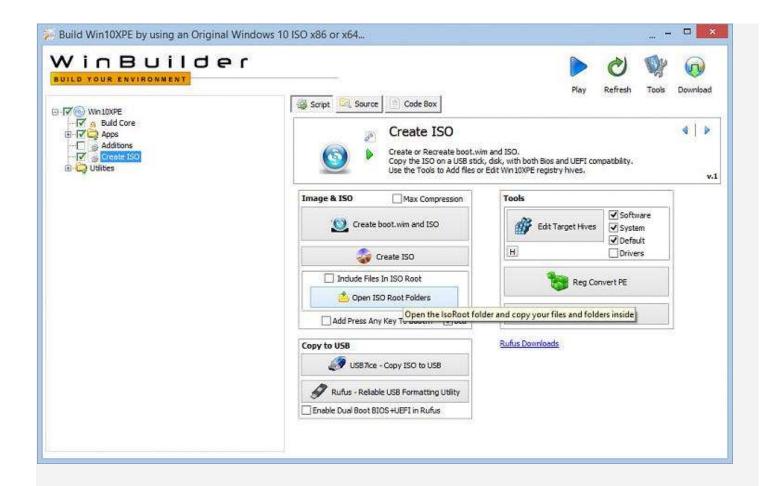
There is a "Custom Folder" So You Can Include Additional Program Files (For Portable Programs or Custom Files/Folders)

To Process Custom Folder - Check The "Add Your Custom Folder" Checkbox



There Is An "ISO Root Folder" where you can place additional files on the root of drive These are files that will be Accessible Without Booting into WinPE

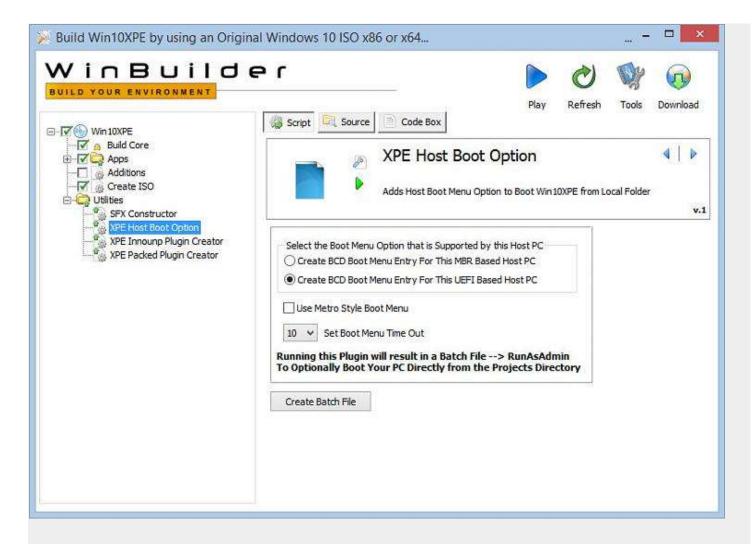
To Process The Root Folder - Check The "Include Files In ISO Root" Checkbox



Add Host Boot Menu Option

I will provide a little hint for you so you can Boot directly from the Win10XPE folder...

Thus no need to keep burning/coping ISO files to USB..



Hit the "Create Batch File" button - that will create a batch file to add the Boot Menu option for XPE to boot from the Win10XPE directory

Note: If your selected build is to USB the Y drive is not created (As Y Drive is the Root of the drive) Selecting the "Run All Programs From Ram" option will work no problem..

To Remove The Host Boot Menu Entry

Open Command Prompt (Admin) or Use "Run" box

Type> msconfig

Select the "Boot" Tab and remove the "XPE Recovery" Option

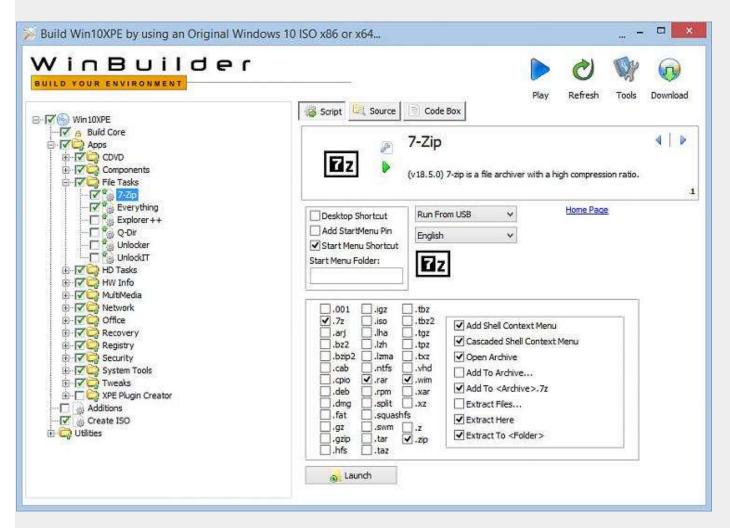
Run All Programs From Ram ??

In the "Above Post" screenshots you will see a "Run all programs from ram" checkbox (Just below the HostOS

boxes) ...

Selecting it will override the use of the Scrollbox on every program interface - by placing all the programs into Ram..

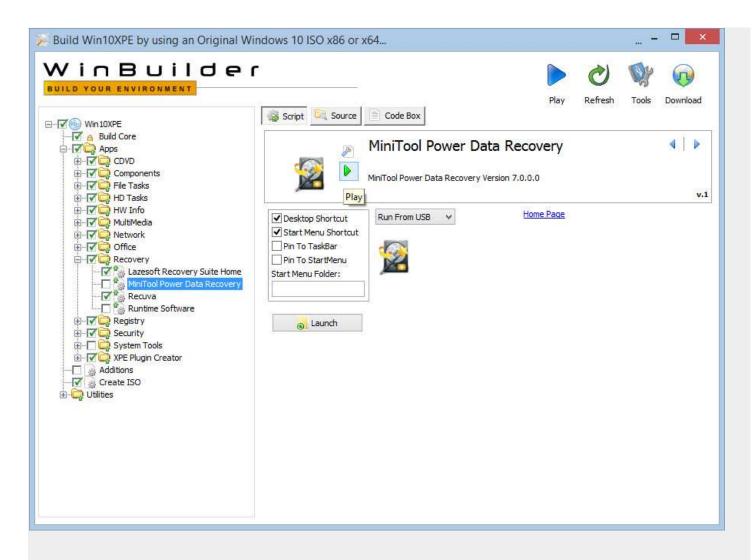
Leaving the "Run all programs from ram" checkbox - unchecked on Build Core Plugin Will allow you to select the programs target location via the program interface.. USB or RAM



Add Additional Plugins or Make Edits To Current Build

There are times when you may want to **Add** Additional Plugins or Make Edits To Your Current Build This can be done without the Need To Process the Complete Build Again.

Select The Plugin You Want to Add and Then Hit The Little Green Play Button on Plugin Interface



After The Additional Plugin(s) are Added To The Build Select The "Create ISO" Plugin from the Left Pane.
On the Interface Hit The "Create Boot.wim and ISO" Button



Build Log - Error Messages - Build Stops Abruptly - Programs Not Found In ISO

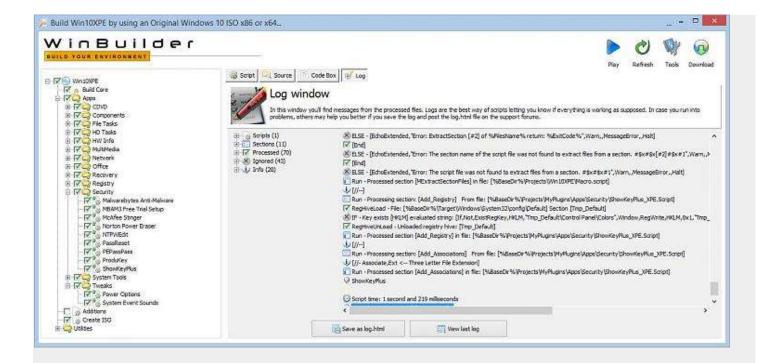
Sometimes Things Go Wrong and Error Messages Appear - Sometimes Things Go Wrong And No Message Appears..

Instead Of Jumping To Make A Complaint Post In This Forum - Use The "LOG" Tab and Investigate The Cause First...

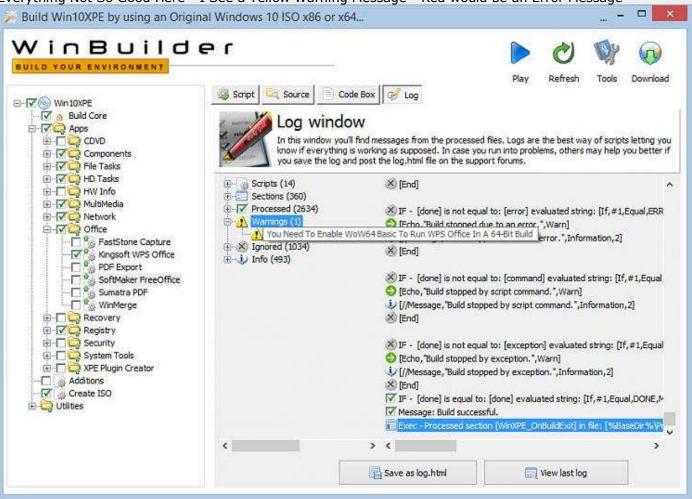
The Build Log is My Best Friend When Creating and Testing Plugins..

Select The "Log" Tab after the Plugin Is Processed - Look For Yellow (Warnings) or Red (Errors) Icons In Pane

Everything Looks Good Here:



Everything Not So Good Here - I See a Yellow Warning Message - Red would be an Error Message



You Can Hover Your Mouse Over The Message to Read it

Ok, Now that you know something went wrong - Single Click The Message To Locate It In The Log Scroll a little past the Message and You Will See The "Script" That Was Processed...

Now, You Have a General Idea of where To Start Looking and You May Be Able To Fix It...

IF

After All Else Fails and You Just Can't Not Figure Out The Cause Post a Report with the Error Message and The Plugin That Caused it

Note: You Can Double-Click The Message To Copy It to Clipboard

(Include in your report post)

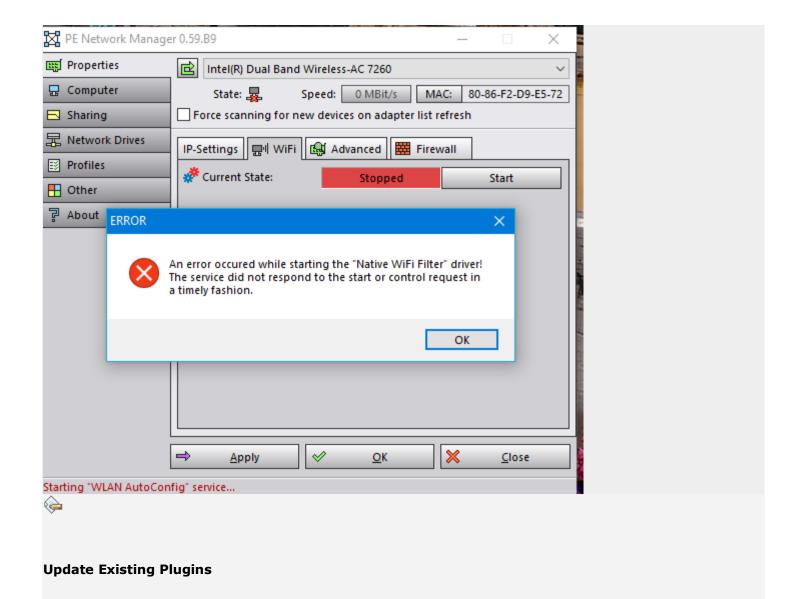
The Project Name - (XPE)
Your Source Arch - (x86 or x64)
The Build Selection - (USB or Ram)
The Source OS - (Win10-1803)

You can also save the complete build log - By Hitting The "Save As Log.Html" Button Then Compress (7z or Zip) and Attach That log File To the Bottom of Your Report Post

Program Error Message(s) In WinPE

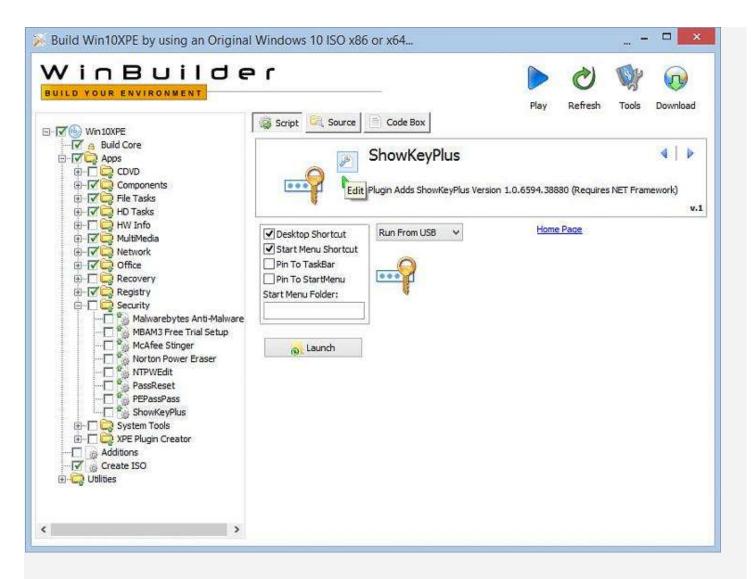
We Create and Test Plugins With Limited Resources and Do Our Best To Prevent Them.. With That Said, Not Every PC Is The Same and Program Error Messages Do Happen...

Take a Screenshot of The Error Message and Attach it to the Bottom of your report post..



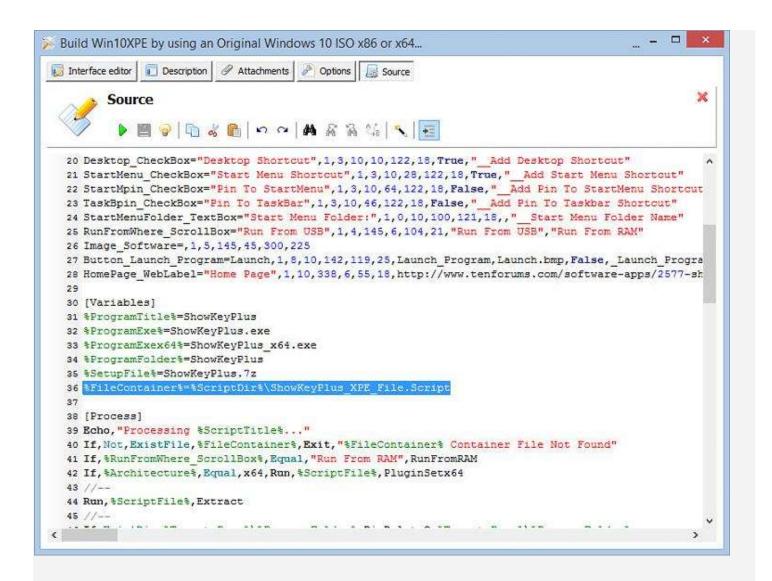
We are going to use the "Edit" Button and the "Source" tab and look for the File Container Script

Let's take for example the ShowkeyPlus Plugin



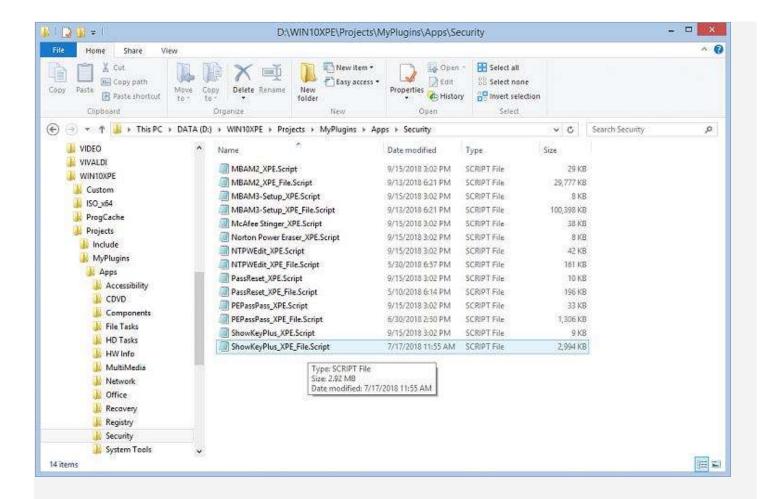
The Plugin Uses a File Container (Most Plugins Do)

Also notice (above highlight) that the > SetupFile=ShowKeyPlus.7z



The File Container is Always Hidden From Builder - So We Must First Unhide It.. Browse to the "\Win10XPE\Projects\MyPlugins\Apps\Security"

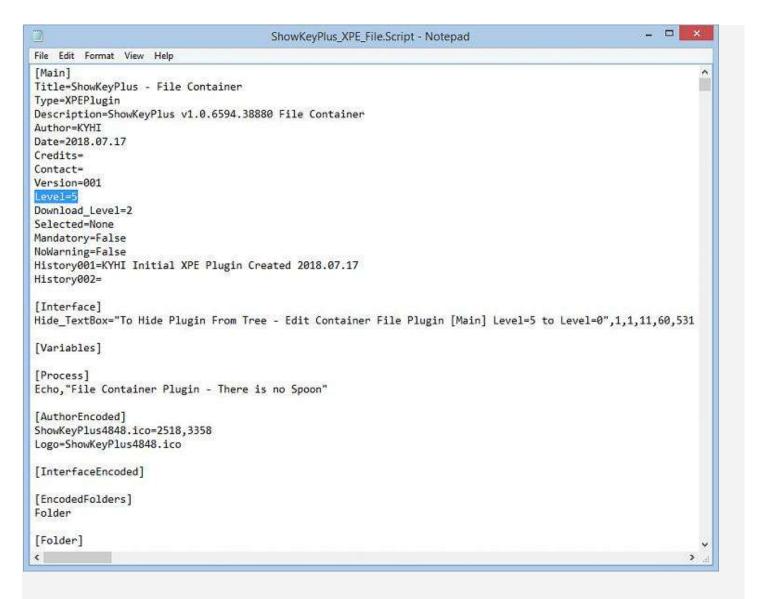
Notice that the "Apps" Folder Follows The Left Pane Structure in Builder



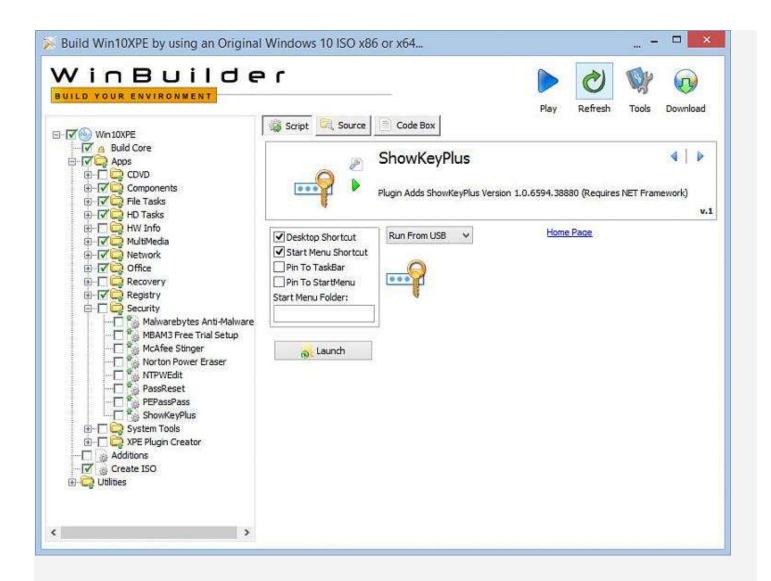
Double-Click The ShowKeyPlus File Container Script and Open with Notepad

To UNHIDE The Container File Plugin Edit in Notepad > Level=0 to Level=5 - Save and Exit

To HIDE The Container File Plugin Edit in Notepad > Level=5 to Level=0 - Save and Exit

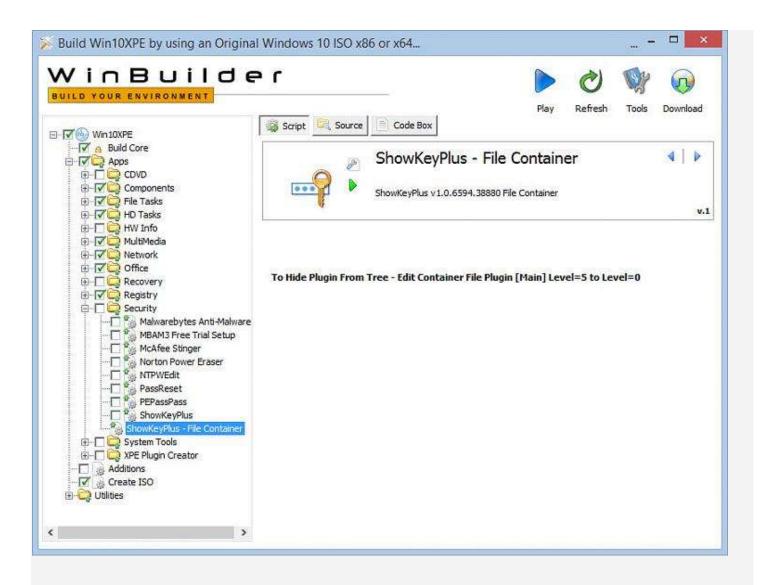


Go Back Into Builder and Hit "Refresh" Button

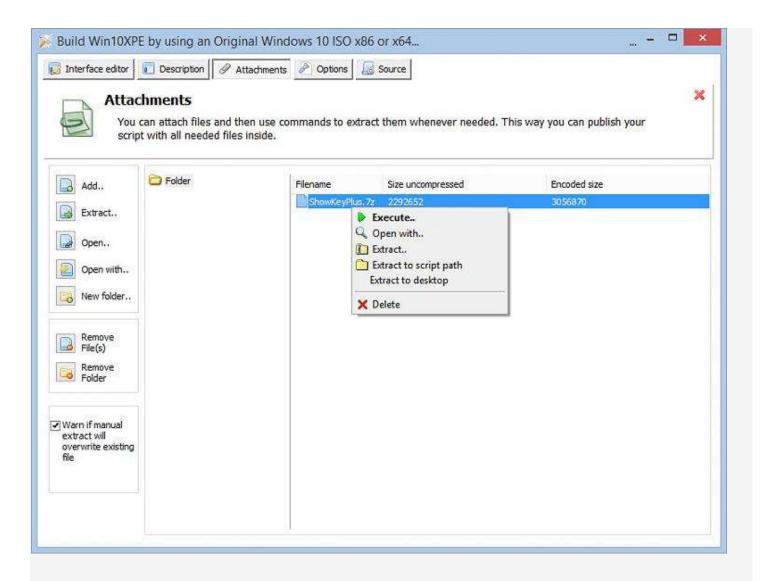


Extract Attachment from Plugin

The Container File Is Now Visible
Select "Edit" Button and Select "Attachments" Tab



Right Click The Setup File and Extract To Desktop



Update/Replace The Program Files Inside the 7z Setup File on your Desktop

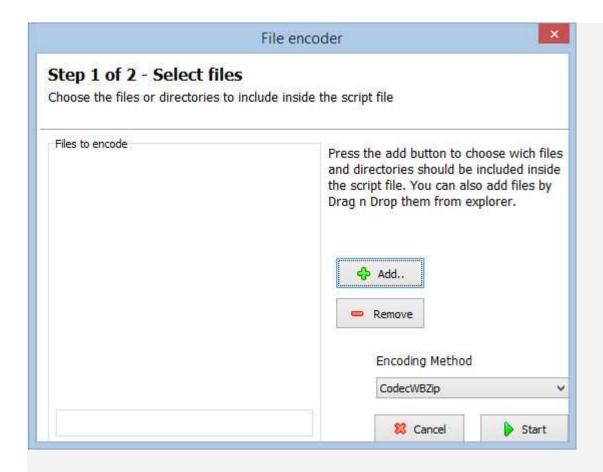
You usually only need to update the existing files - because we usually do not include unneeded files

Encode Attachment To Plugin

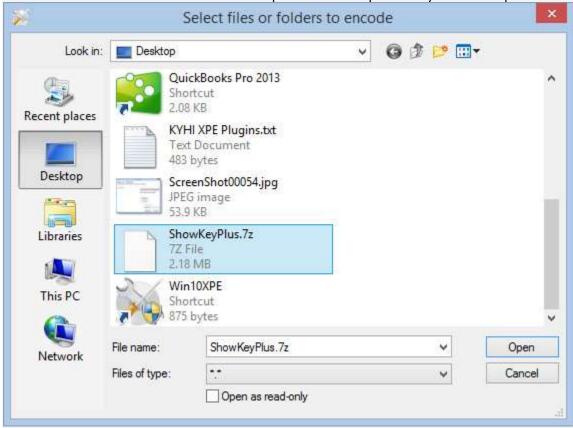
Select the Add.. Button

As seen above in the Upper left Corner of Attachment Interface

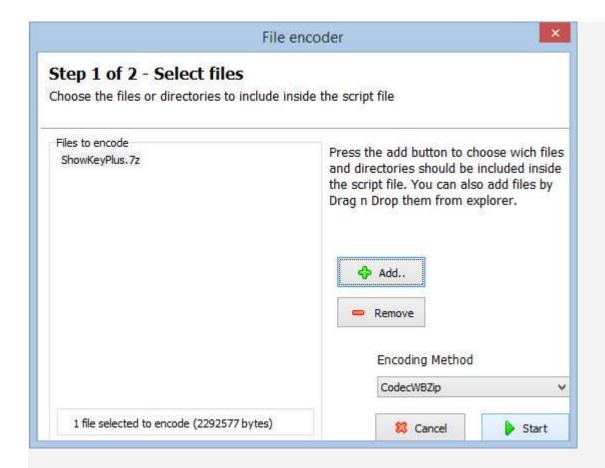
A "File Encoder" Dialog Box will Open



Select the Add.. Button and Point to the Updated 7z Setup File on your Desktop



Notice that the Setup File .7z is shown in the left pane and Then Click "Start" Button



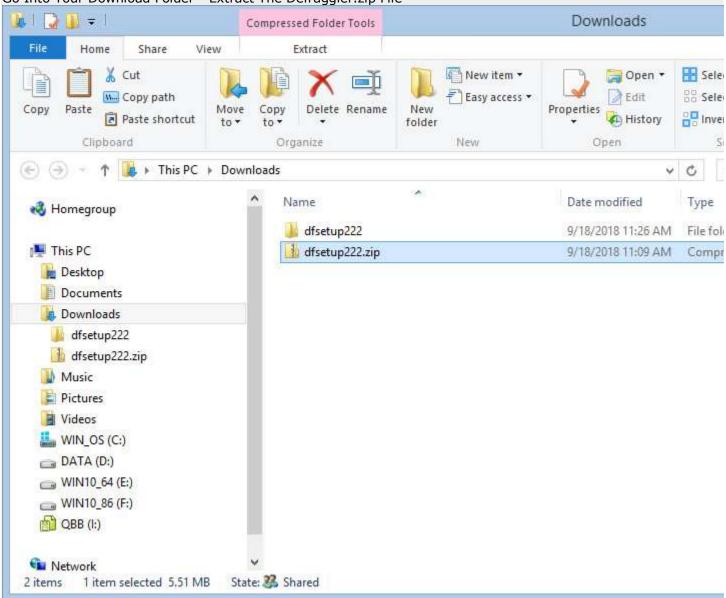
Exit The Attachment Interface By Clicking The Red X in the Upper Right Corner Build Win10XPE by using an Original Windows 10 ISO x86 or x64... × **Attachments** You can attach files and then use commands to extract them whenever needed. This way you can publish your script with all needed Close e files inside. Folder Add.. Filename Encoded size Size uncompressed Extract.. Open.. Open with.. New folder... File(s) Remove ✓ Warn if manual extract will overwrite existing

You Have Just > Extracted, Updated and Encoded A File...

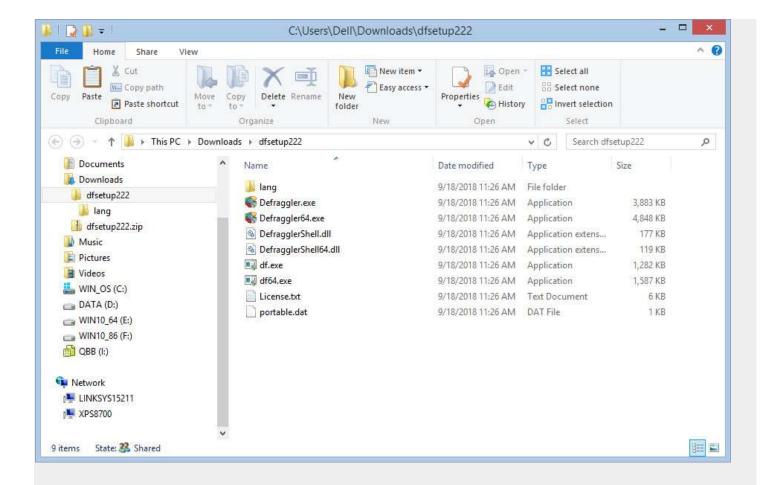
Create Portable App Packed Plugins

For this Example > Download The Portable Version Of CCleaner-Defraggler

Go Into Your Download Folder - Extract The Defraggler.zip File

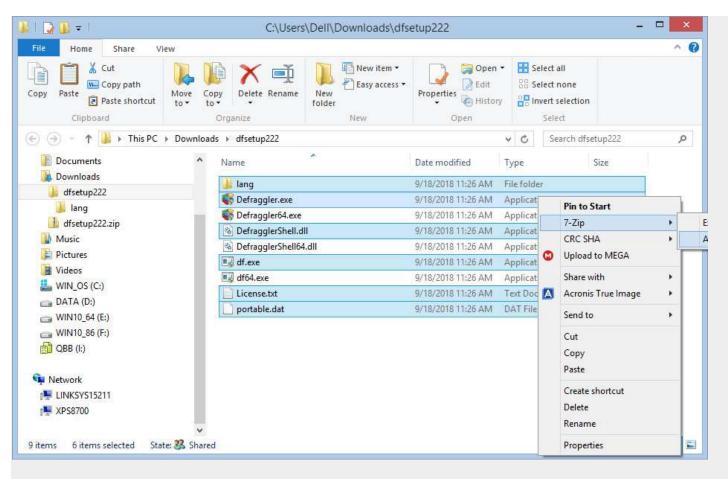


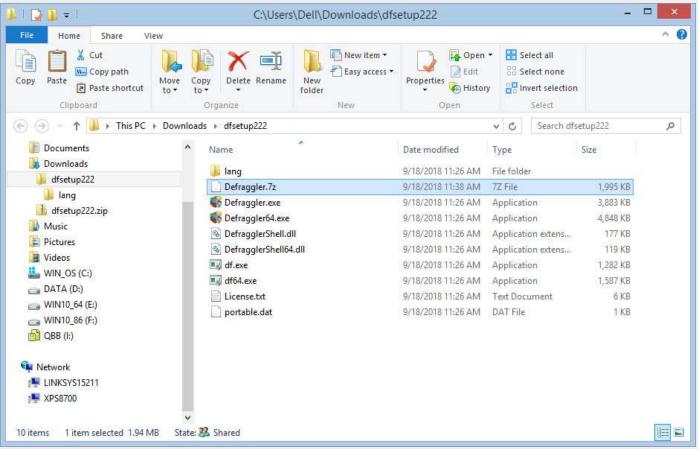
Open The Extracted Folder and View The Contents

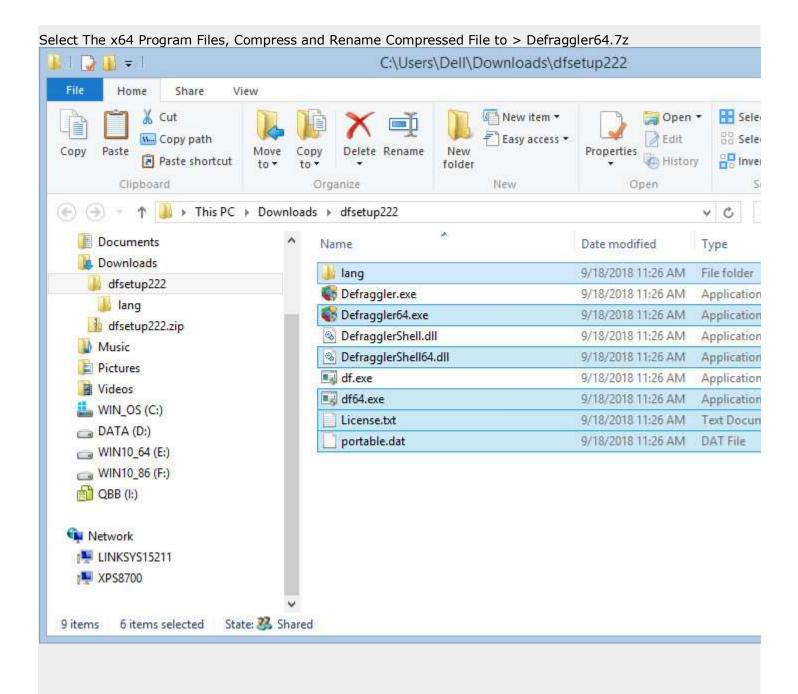


Ok, What We Have Is A Portable Program with Both x86 and X64 Files (Some Websites Have Separate Downloads For x86 and x64 Programs)

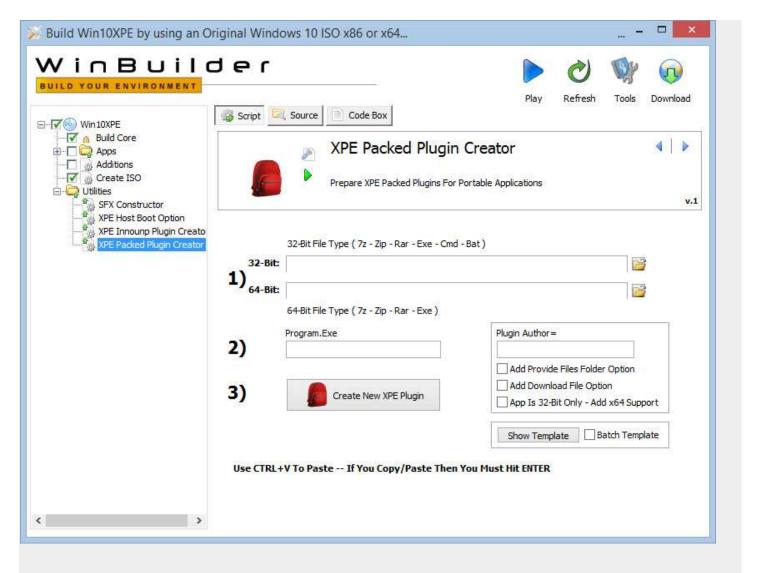
For The Sake Of Argument - We Will Create Two Separate Compressed "Setup Files" One For x86 Program Files Select The x86 Program Files, Compress With 7zip and Rename The New Compressed 7z File To > Defraggler.7z



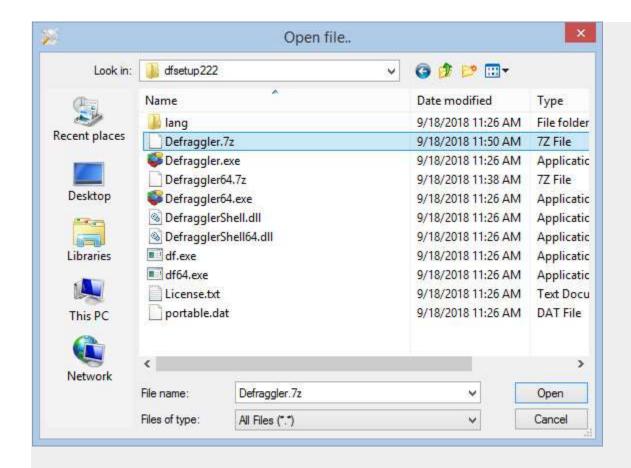




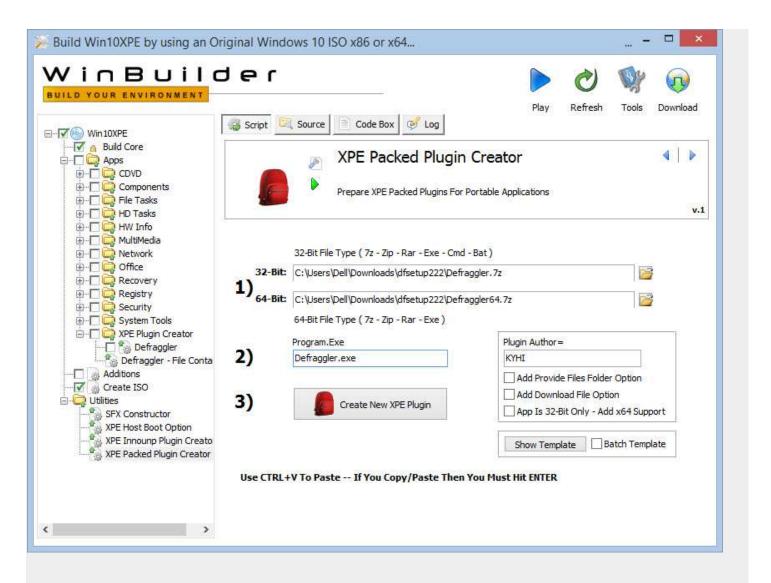
Open Win10XPE - Expand Utilities - Select XPE Packed Plugin Creator



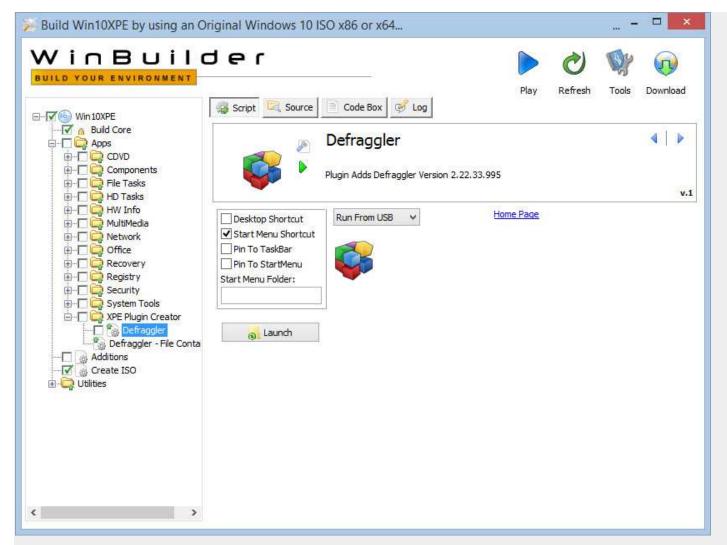
Hit The "Folder" Icon For 32Bit and Point To The Defraggler.7z File You Just Created



Do The Same Thing For The 64Bit Defraggler64.7z File You Just Created Type In the Program.exe - In This Case It Is > Defraggler.exe Type In The Author Name (Usually Your ScreenName)
Hit The "Create New XPE Plugin" Button



You Will Find Your New Plugin For Personal Testing In Left Pane App/XPE Plugin Creator



Hit The "Launch" Button To Open The Program Folder and Test The Program.exe

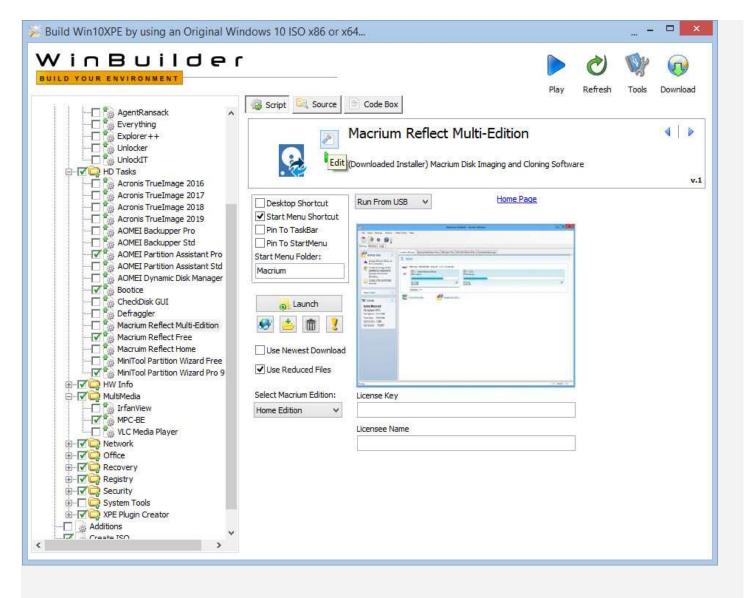
I Purposely Left Something Very Simple Out....

It Is Your Homework To Figure Out What...

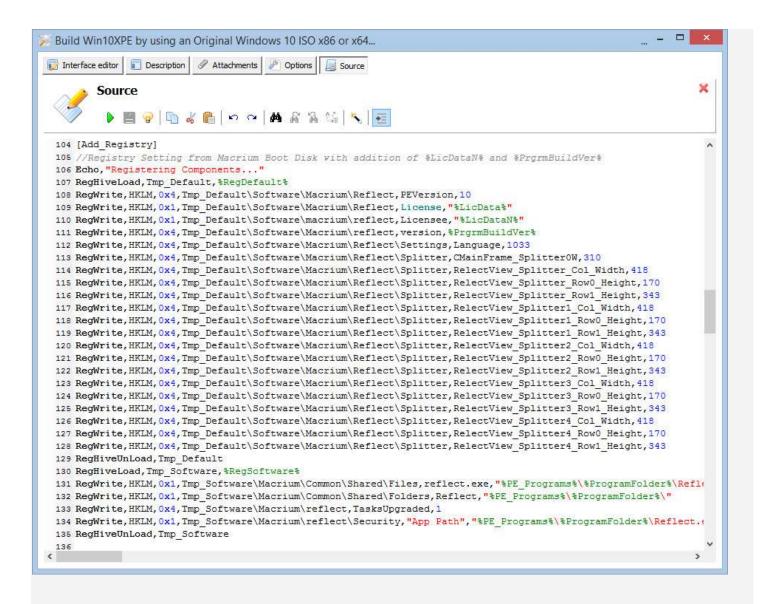
As It Has Already Been Covered In This Quick Start How-To Guide

Option 1) The Easiest Way To Add Registry Settings Is To Cheat

Read other plugins by using the Edit button and Selecting the Source tab....



If you see the registry line(s) you are looking for - Copy them into your Plugin...

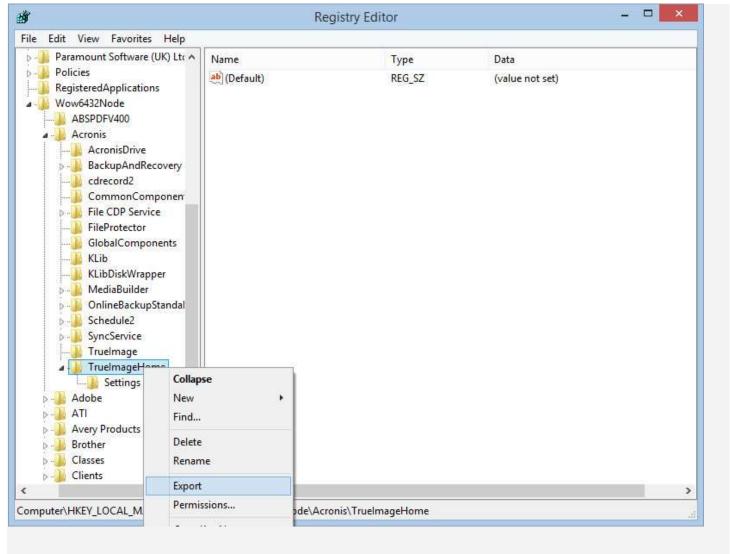


This is where this Game gets Very Tricky and Requires Experience...

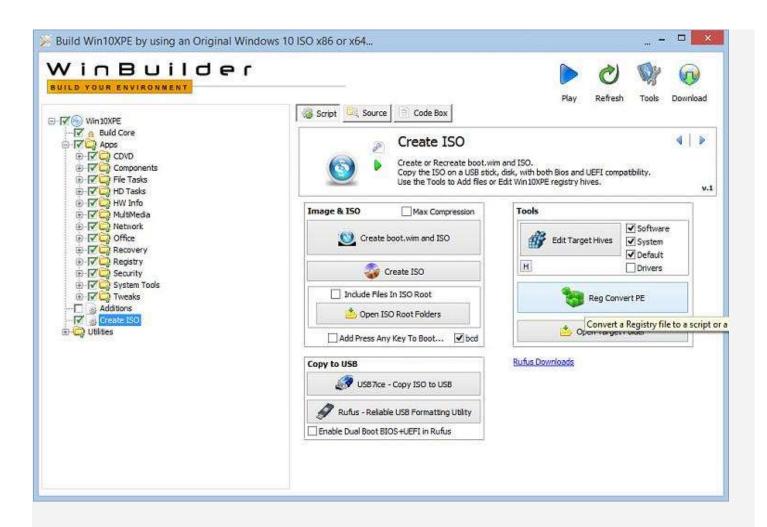
And it will require you to do a lot of Testing with your Plugin Settings
On the Plus Side > it is PE and written to rewritable media
If you screw up - Erase, Rebuild and Test Again

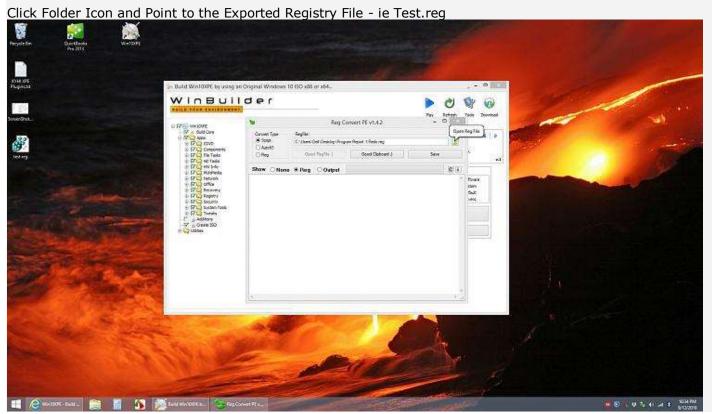
Option 2) Export The Registry Settings

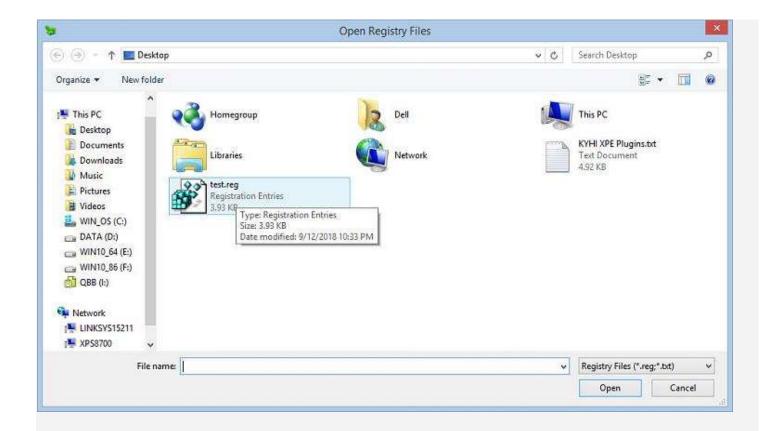
You Can Export the Registry Settings from your Host Registry or PE Registry using RegEdit



Select Create ISO Plugin and on Interface Hit the "Reg Convert PE" Button





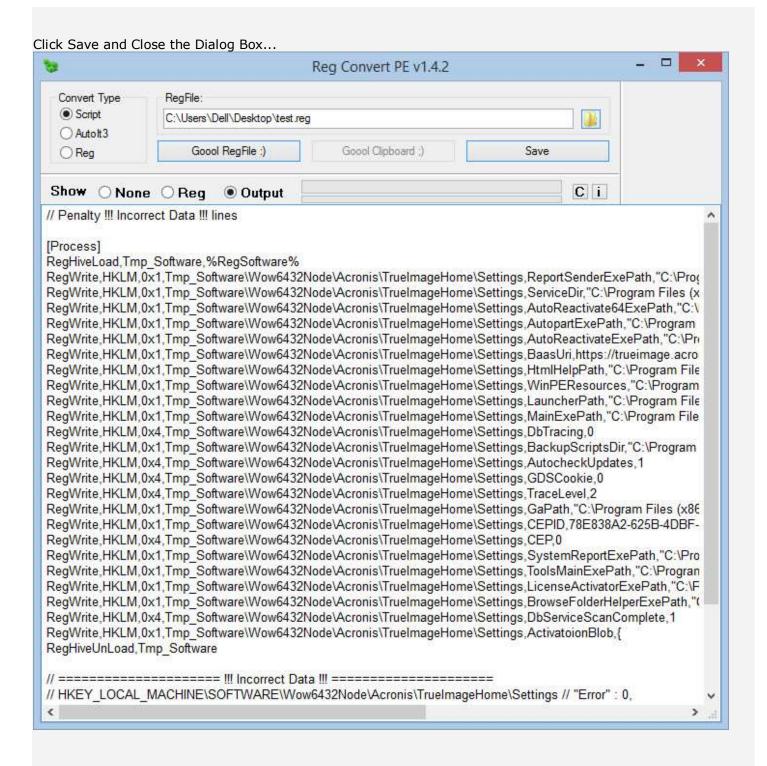


Reg Convert PE v1.4.2 Convert Type ReaFile: Script t.reg Convert Reg File O Autolt3 Goool RegFile:) Goool Clipboard ;) ○ Reg Save Ci Show O None
Req Output Windows Registry Editor Version 5.00 [HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Acronis\TrueImageHome] [HKEY LOCAL MACHINE\SOFTWARE\Wow6432Node\Acronis\TrueImageHome\Settings] "ReportSenderExePath"="C:\\Program Files (x86)\\Common Files\\Acronis\\Home\\report sender.e "ServiceDir"="C:\\Program Files (x86)\\Common Files\\Acronis\\TrueImageHome\\" "AutoReactivate64ExePath"="C:\\Program Files (x86)\\Common Files\\Acronis\\TrueImageHome\\a "AutopartExePath"="C:\\Program Files (x86)\\Common Files\\Acronis\\TrueImageHome\\AutoPart\\ "AutoReactivateExePath"="C:\\Program Files (x86)\\Common Files\\Acronis\\TrueImageHome\\auto "BaasUri"="https://trueimage.acronis.com" "HtmlHelpPath"="C:\\Program Files (x86)\\Acronis\\TruelmageHome\\Help\\" "WinPEResources"="C:\\Program Files (x86)\\Acronis\\TruelmageHome\\WinPE\\winpe resources "LauncherPath"="C:\\Program Files (x86)\\Acronis\\TruelmageHome\\TruelmageLauncher.exe" "MainExePath"="C:\\Program Files (x86)\\Acronis\\TruelmageHome\\Truelmage.exe" "DbTracing"=dword:00000000 "BackupScriptsDir"="C:\\Program Files (x86)\\Common Files\\Acronis\\BackupScripts" "AutocheckUpdates"=dword:00000001 "GDSCookie"=dword:00000000

Select "Gooo Reg File" Button

"TraceLevel"=dword:00000002

<



The Script File Created is the code for adding the registry setting you exported and are going to use in your Plugin

You will not use that Script File [process] but the code for the settings will be copied under [Add-Registry] in your plugin....

Be Very CAREFULL and Read the Settings as they are exported from a different Host and many use different Folder locations

YOU will need to change this information and you may not need to add all the registry settings....

Option 3) Capture The Registry Settings Before and After The Programs Installation Process

Launch or Execute The RegShot2 Program



Hit The "1st Shot" Button and Select "Whole Registry"



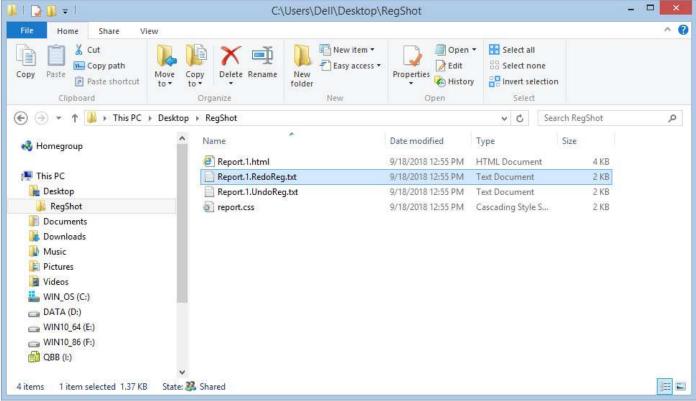
Note: I Changed The Default "Folder For Store Report" To > %UserProfile%\Desktop\RegShot

Run the Installer File That You Want To Capture The Registry Changes For

Then Take "2nd Shot - Whole Registry"

The > Report.*.RedoReg.txt < File Contains The Registry Changes Created By The Installer

Save That Text File and Use "Reg Convert PE" Same As Above - But Point To This Txt File



Find Missing or Required Files

Quote from: muggles

I'm no expert, but a post by ChrisR with the tip to sort on CreateFile allowed success on the few that I tried it on.

Here is my process, I hope this helps and others pitch in with more experience than what I have.

- -Start Process Monitor (Procmon.exe) then Start The Program.
- -Find the Program.exe in the Process Name Column, Right-Click and choose Include "Program.exe".
- -Find the word SUCCESS in the Result Column, Right-Click and choose Exclude "SUCCESS".
- -Find the word CreateFile in the Operation Column, Right-Click and choose Include "CreateFile".

You should see the Required or Missing Files listed with "NAME NOT FOUND" and see the Path The Program Searched for them.

Properly Test Your New Plugin

Deselect all other APPs (uncheck Apps Folder)

Deselect all MS Features from Build Core

Select Just your New Plugin

Select Build Core Plugin

Select Create ISO Plugin

Process The New Build

Test Boot Into XPE WinPE

Test if Program Launches and Runs Without Error

Does it have all required files to run without support from other plugins

Does it open the correct file type for the program

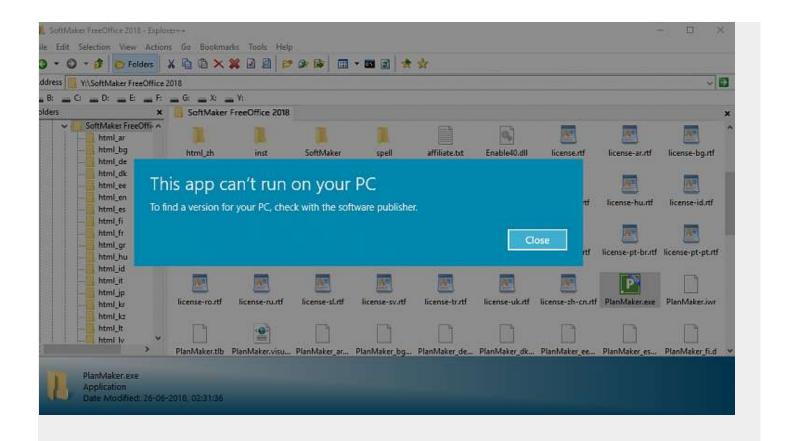
Does it scan properly or create required file

Select the "About" - Usually to test Registry Settings

Etc...

Note: Some Non-Portable Programs' Require MS Files, Need a few Registry Entries and Require Driver Files Copied into System32

Test Your Plugin Using Both x86 and x64 Builds



When You Are Satisfied With Your New Plugin - Please Share It For Other Members To Test

All This Takes A lot Of Time, Testing and Learning To Get Things Right..

That Is What Makes This A Hobby For Us...

And A Great Self Taught Experience That Will Last A Lifetime...

From Me and All The Other Members Here At TheOven Enjoy!!

I use 3 programs consistently when creating Apps..

Process Monitor

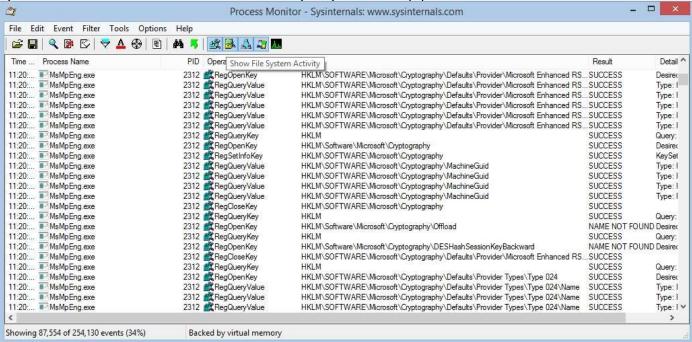
Regshot2

What Changed

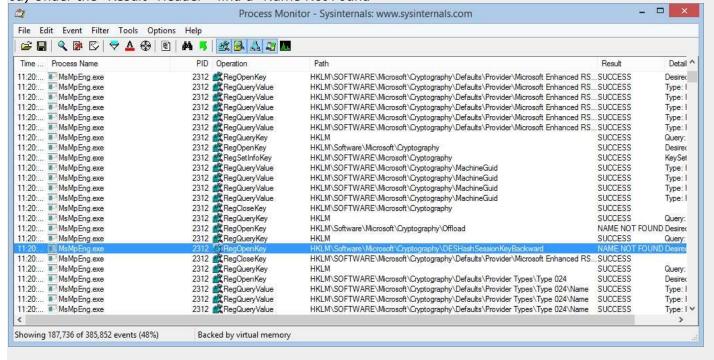
- 1) Download the App Installer
- 2) see if Installer is compressed by using 7zip to open archive
- 3) Create a Base Build of XPE To Ram (No Feature Options and only those 3 Apps)
- 3a) if Installer or Installer Archive has .msi extension add MSI support
- 3b) if x64 Build Add WOW64 Basic Support
- 4) Boot XPE
- 4a) Run What Changed > X: > Take first snapshot

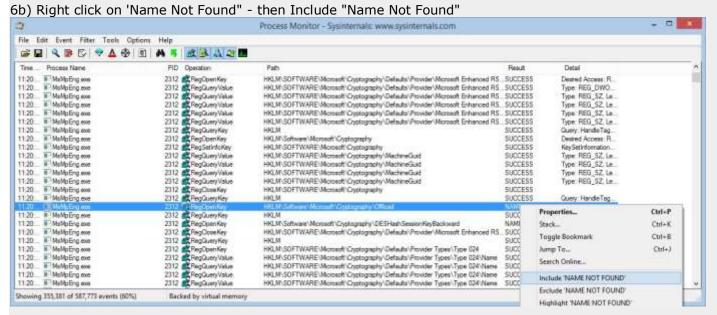
- 4b) Run RegShot2 Take First Shot > Whole Registry
- 5) Run App Installer but do not allow launch of App If No Error continue else may need to add NetFX4 or other support to build
- 5a) Take second snapshot with What Changed report in program folder what changed snapshot2.txt
- 5b) Take second shot with Regshot2 desktop folder reg-redo.txt
- 5c) Save Both txt Files for later use....

6) Run Process Monitor > there are 4 selected (blue) Icons in top pane - deselect all but File Cabinet



6a) Under the "Result" Header - find a "Name Not Found"





Now Process monitor is filtered to look only for files that are not found

- 7) Launch the App and navigate around in the App leave App Minimized or open...
- 8) Go into Process monitor Under "Process Name" Header find the program.exe right click Include

"Program.exe" - 0 Process Monitor - Sysinternals; www.sysinternals.com 3 File Edit Event Filter Tools Options Help **学日 | 久 B B | 学 A | 10 | M | 1 | 2 | 2 | 1 | 1 | 1 |** Process Name FID Operation 2312 KRegOpenKey 2312 KRegGueryValue 2312 KRegGueryValue W MaMpErg exe HKI,M/SOFTWARE/Microsoft/Cyptography/Defaults/Provider/Microsoft Enhanced RS SUCCESS Destred Access: R. # MsMpEng.exe HKLM:SDFTWARE:Microsoft Cryptography: Defaults:Provider Microsoft Enhanced RS. HKLM:SDFTWARE:Microsoft Cryptography:Defaults:Provider Microsoft Enhanced RS. Type REG_DWO. BUCCESS MaMpErg exe Type REG_SZ, Le. # MsMpEng exe 2312 RegQueryValue 2312 RegQueryValue 11:20 HKLM:SOFTWARE Microsoft Cryptography Defaults Provider Microsoft Enhanced RS. HKLM:SOFTWARE Microsoft Cryptography Defaults Provider Microsoft Enhanced RS. SUCCESS Type REG_SZ Le. Type REG_SZ Le MeMpEng exe 2312 RegGueryValue 2312 RegGueryKey 2312 RegCopenKey 2312 RegSetIntoKey MsMpEng exe 11:20: HKLMI-SOFTWARE-Microsoft Cryptography-Defaults Provider Microsoft Enhanced RS. SUCCESS Type REG SZ. Le. MaMpEng exe MaMpEng exe 11:20 SUCCESS HKI,M\Software\Microeoft\Cyptography SUCCESS Desired Access: R. MsMpEng exe HKLM\SOFTWARE\Microsoft\Cryptography 11:20 SUCCESS Key Set Information HKUM/SOFTWARE Microsoft Cryptography Machine Guid MeMpEng exe RegCluery Value 2312 RegGueryValue 2312 RegGueryValue 2312 RegGueryValue 2312 RegGossKey 11:20 MsMpEng eve HKLM\SOFTWARE\Morosoft\Cryptography\MachineGuid SUCCESS Type REG SZ Le MaMpEng.ess MsMpEng.ess HKLM\SOFTWARE\Microsoft\Cryptography\MachineGuid SUCCESS HKLM\SOFTWARE\Morpeoft\Cryptography\MachineGuid 11:20 SUCCESS Type: REG SZ, Let. MaMpEng ex 1.20 HKLM\SOFTWARE\Microsoft\Cyplography SUCCESS 11:20 2312 KRegQueryKey MsMpEng.exe HKLM Query: Hande Tag. # MeMpEng Properties... Ctrl+P № МыМрБу NAME NOT FOUND Desired Access: R. HKLM\Software\Mcrosoft\Cryptography\DESHashSessionKeyBackward Stack... Chil+K 11:20 MaMpEng MaMpEng HKI,M\SOFTWARE\Microsoft\Cyptography\Defaults\Provider\Microsoft Enhanced RS SUCCESS Toggle Bookmark Chil-B SUCCESS Query: HandleTag. HKLM\SOFTWARE\Microsoft\Cyptography\Defauts\Provider\Types\Type\U24 HKLM\SOFTWARE\Microsoft\Cyptography\Defauts\Provider\Types\Type\U24\Name 11:20 III MeMaEn SUCCESS Jump To-MsMpEng Type REG_SZ Le Search Online... 11:20 # MsMpEn HKLM\SDFTWARE\Mcrosoft\Cryptography\Defaults\Provider Types\Type 024\Name **SUCCESS** Type: REG_SZ, Le. # MsMpEng HKLM\SOFTWARE\Morosoft\Criptography\Defaults\Provider Types\Type 024\Name Include MsMpEng.ese # Mulfipling 11.20 HKLM\SDFTWARE\Microsoft\Cryptography\Defaults\Provider Types\Type 024\Nar 5000ESS Type: REG_SZ, Le. Exclude 'MsMpEng.exe'

Now Process Monitor filtered to find only files not found by program exe...

You can create other filters as well (not going to get into that now)
But you are generally looking for System32 and Syswow64 files
right click file name > Copy > Paste to New Txt Document, then save...

With those 3 saved txt files and a compare of the extracted files - you should be able to create a reliable App... That is the challenge and the enjoyment for me..

Hope this helps... Enjoy!