























Metascan Portable USB Creation Step-by-step Guide

What you need to start:

- The ZIP file containing this PDF and our customized Make_PE3
- IP address / hostname of Metascan Server
- Windows 7 32-bit install disk
- OPTIONAL: Any drivers you wish to add

1> Unzip folder to hard drive

Local Disk (C:) > MetascanBootableUSB >				
Library ▾ Share with ▾ Burn New folder				
Name	Date modified	Type	Size	
 addsgtti	7/12/2012 6:42 AM	File folder		
 AIK_Tools	7/12/2012 6:42 AM	File folder		
 GetWaikTools	3/19/2013 12:16 AM	File folder		
 Help_Info	11/25/2013 10:14 ...	File folder		
 IME_support	7/12/2012 6:42 AM	File folder		
 ImgBurn_2580	11/25/2013 11:51 ...	File folder		
 makebt	11/26/2013 1:24 AM	File folder		
 MULTI	8/8/2012 11:55 PM	File folder		
 MULTI_ISO	7/12/2012 6:42 AM	File folder		
 Packages	7/12/2012 6:42 AM	File folder		
 PE3_mod	7/12/2012 6:42 AM	File folder		
 ShutdownPE	3/19/2013 2:56 AM	File folder		
 TestNF20	7/12/2012 6:41 AM	File folder		
 WContig115	11/25/2013 10:24 ...	File folder		
 win7pe_amd64	7/12/2012 6:41 AM	File folder		
 win7pe_ia64	7/12/2012 6:41 AM	File folder		
 win7pe_x86	7/12/2012 6:41 AM	File folder		
 BOOT_IMG.exe	11/26/2013 5:06 AM	Application	763 KB	
 imdiskinst.exe	10/31/2013 6:21 AM	Application	338 KB	
 Make_MULTI_ISO.cmd	2/2/2012 1:29 AM	Windows Comma...	4 KB	
 Make_PE3.cmd	11/26/2013 2:24 AM	Windows Comma...	185 KB	
 Make_PE3.exe	11/26/2013 2:21 AM	Application	817 KB	

2> Navigate to PE3_mod/PE3_add/x86/Program Files/MetascanClient








Local Disk (C:) > MetascanBootableUSB > PE3_mod > PE3_add > x86 > Program Files > MetascanClient

Library ▾

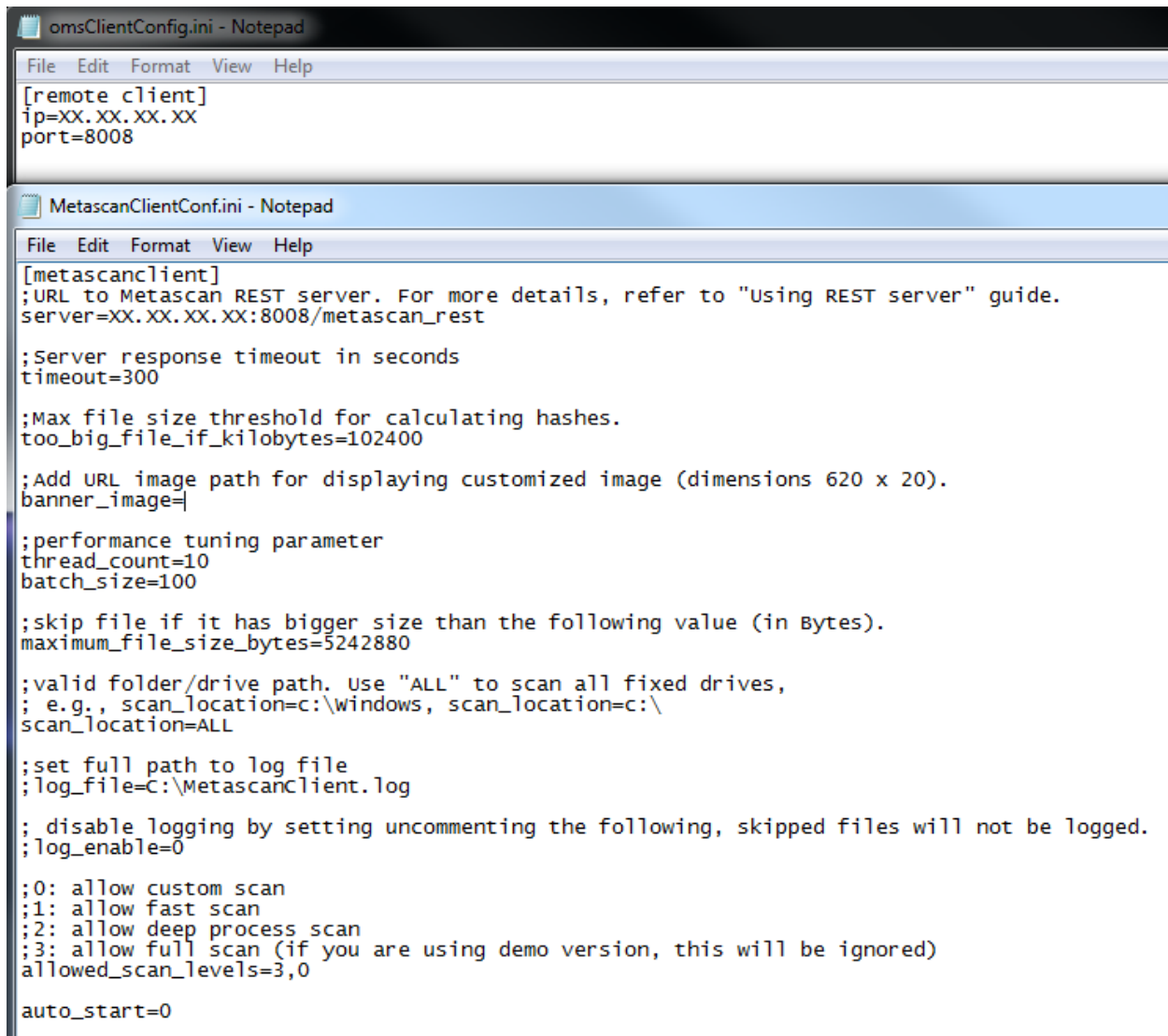
Share with ▾

Burn

New folder

Name	Date modified	Type	Size
 MetascanClient.exe	11/18/2013 5:27 PM	Application	2,542 KB
 MetascanClientConf.ini	12/10/2013 1:24 PM	Configuration sett...	2 KB
 MetascanConnectorContextMenu.bat	12/10/2013 3:39 PM	Windows Batch File	1 KB
 omsClientConfig.ini	12/10/2013 1:25 PM	Configuration sett...	1 KB
 omsRemote.dll	12/10/2013 1:22 PM	Application extens...	270 KB
 omsRemoteCLU.exe	12/10/2013 1:22 PM	Application	454 KB
 omsRemoteCOM.dll	12/10/2013 1:22 PM	Application extens...	99 KB

- 3> Set the Metascan IP address in “MetascanClientConf.ini” and “omsClientConfig.ini”.
OPTIONAL: You may wish to set Metascan Client’s options within
“MetascanClientConf.ini”



```
omsClientConfig.ini - Notepad
File Edit Format View Help
[remote client]
ip=XX.XX.XX.XX
port=8008

MetascanClientConf.ini - Notepad
File Edit Format View Help
[metascanclient]
;URL to Metascan REST server. For more details, refer to "Using REST server" guide.
server=XX.XX.XX.XX:8008/metascan_rest

;Server response timeout in seconds
timeout=300

;Max file size threshold for calculating hashes.
too_big_file_if_kilobytes=102400

;Add URL image path for displaying customized image (dimensions 620 x 20).
banner_image=

;performance tuning parameter
thread_count=10
batch_size=100

;skip file if it has bigger size than the following value (in Bytes).
maximum_file_size_bytes=5242880

;valid folder/drive path. Use "ALL" to scan all fixed drives,
; e.g., scan_location=c:\windows, scan_location=c:\
scan_location=ALL

;set full path to log file
;log_file=C:\MetascanClient.log

; disable logging by setting uncommenting the following, skipped files will not be logged.
;log_enable=0

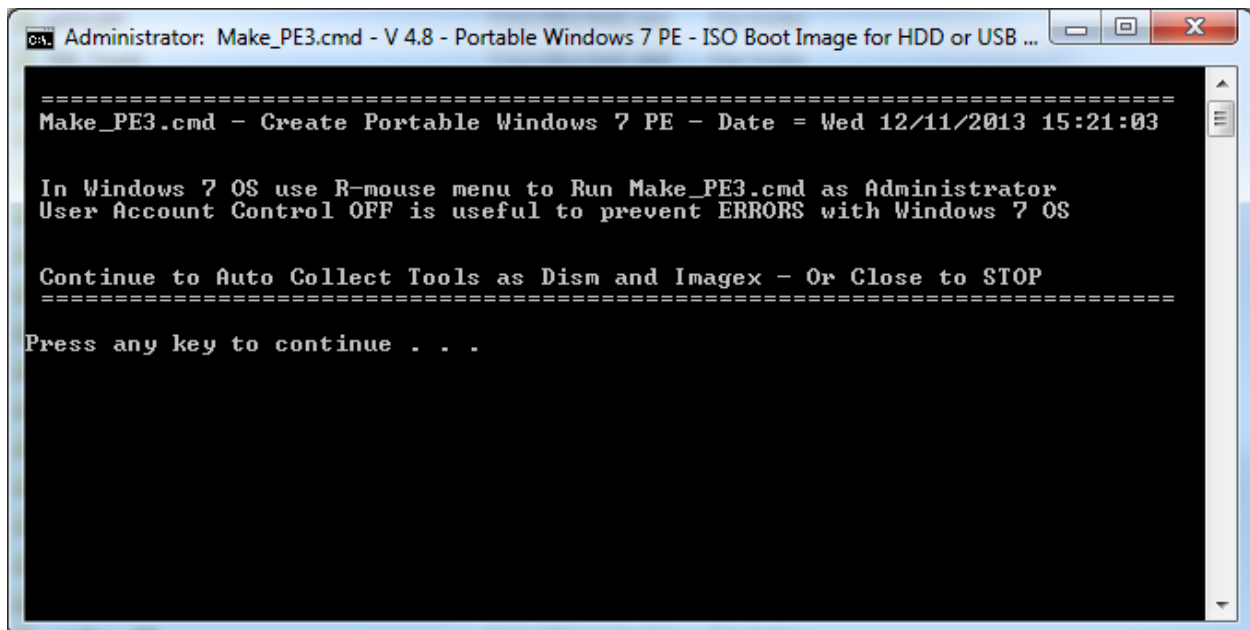
;0: allow custom scan
;1: allow fast scan
;2: allow deep process scan
;3: allow full scan (if you are using demo version, this will be ignored)
allowed_scan_levels=3,0

auto_start=0
```

OPTIONAL: If you wish to add drivers, drag and drop their folders into
\\PE3_mod\\WIN7_drivers\\x86. Additional customization options can be found
in \\PE3_mod\\Customize_Info.txt

4> Save and return to the root folder of the project. Run "Make_PE3.cmd". If UAC is enabled, run as Administrator

5> You should see this screen. Press a key



```
Administrator: Make_PE3.cmd - V 4.8 - Portable Windows 7 PE - ISO Boot Image for HDD or USB ...

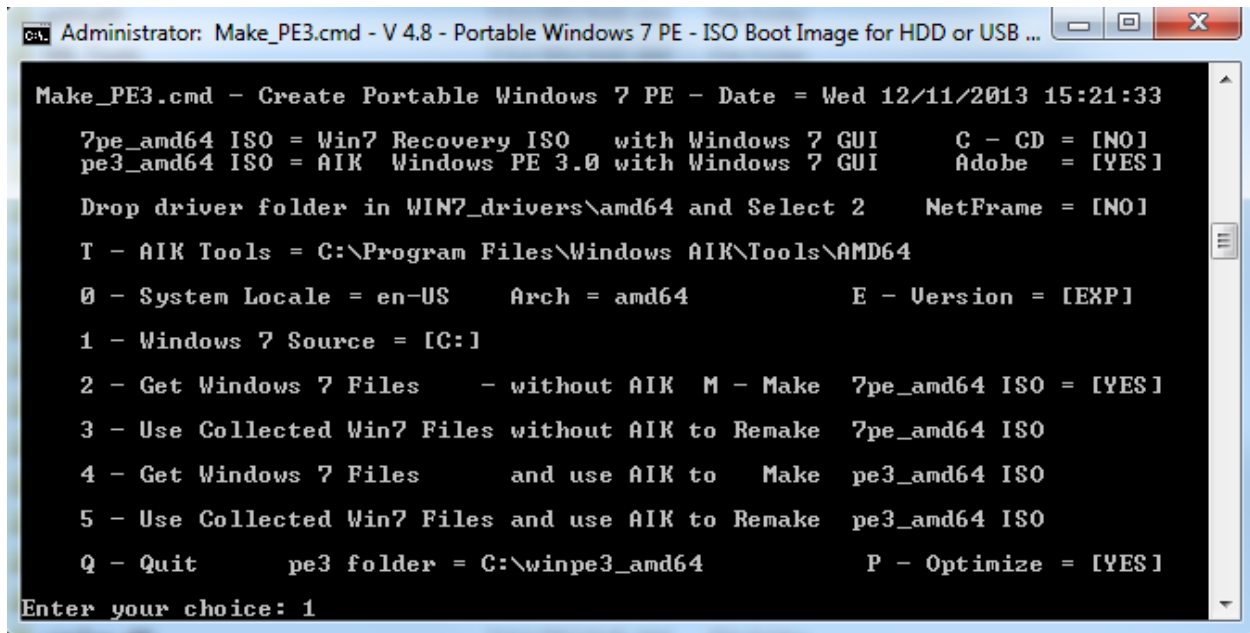
=====
Make_PE3.cmd - Create Portable Windows 7 PE - Date = Wed 12/11/2013 15:21:03

In Windows 7 OS use R-mouse menu to Run Make_PE3.cmd as Administrator
User Account Control OFF is useful to prevent ERRORS with Windows 7 OS

Continue to Auto Collect Tools as Dism and Imagex - Or Close to STOP
=====

Press any key to continue . . .
```

6> Insert a Windows 7 32-bit installation disk. Select option 1



```
Administrator: Make_PE3.cmd - V 4.8 - Portable Windows 7 PE - ISO Boot Image for HDD or USB ...

Make_PE3.cmd - Create Portable Windows 7 PE - Date = Wed 12/11/2013 15:21:33

7pe_amd64 ISO = Win7 Recovery ISO with Windows 7 GUI C - CD = [NO]
pe3_amd64 ISO = AIK Windows PE 3.0 with Windows 7 GUI Adobe = [YES]

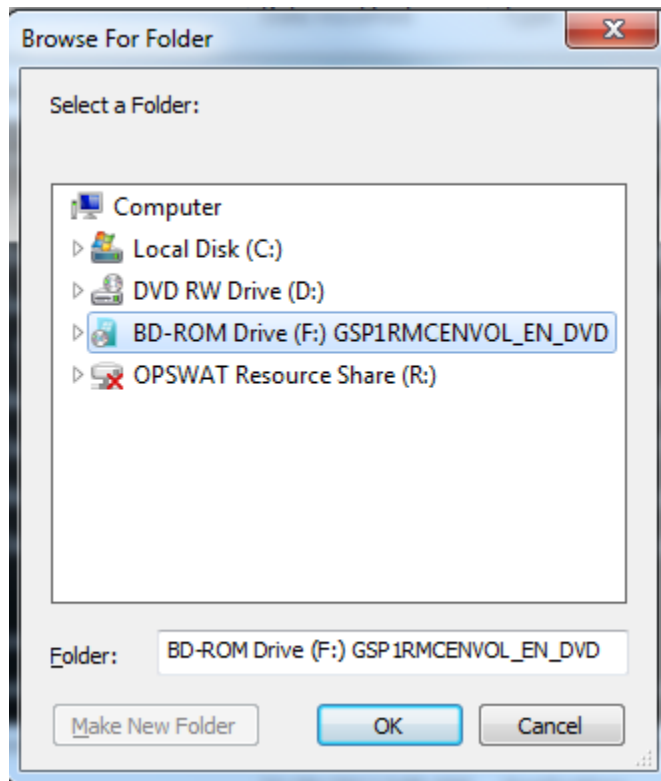
Drop driver folder in WIN7_drivers\amd64 and Select 2 NetFrame = [NO]

T - AIK Tools = C:\Program Files\Windows AIK\Tools\AMD64

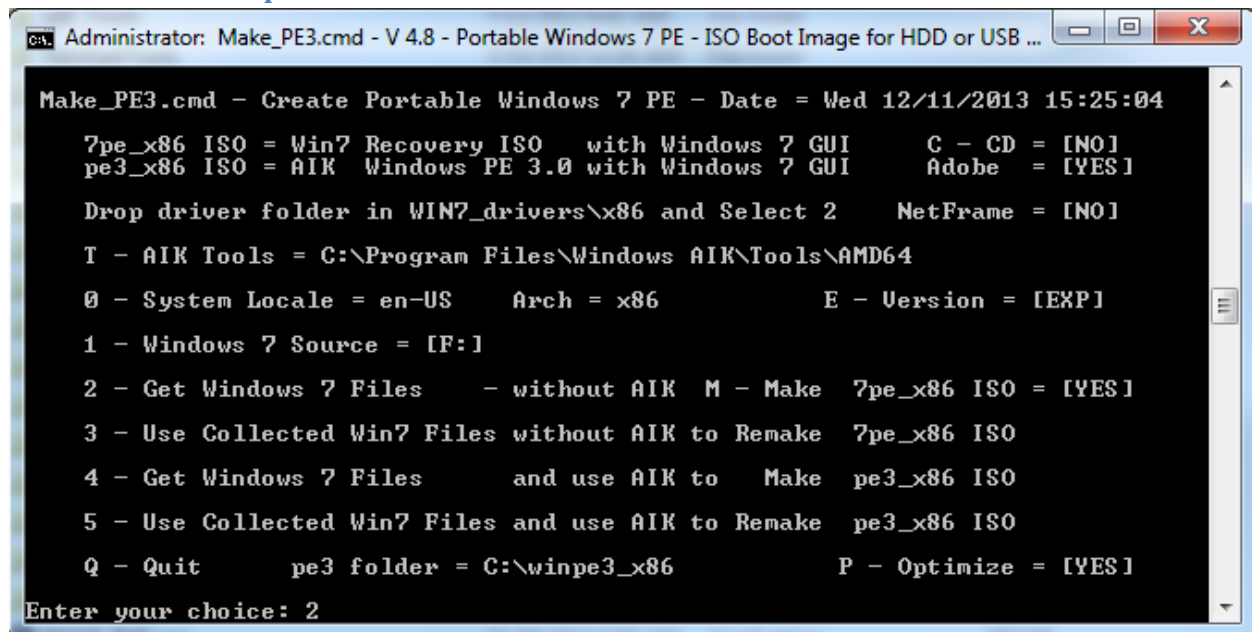
0 - System Locale = en-US Arch = amd64 E - Version = [EXP]
1 - Windows 7 Source = [C:]
2 - Get Windows 7 Files - without AIK M - Make 7pe_amd64 ISO = [YES]
3 - Use Collected Win7 Files without AIK to Remake 7pe_amd64 ISO
4 - Get Windows 7 Files and use AIK to Make pe3_amd64 ISO
5 - Use Collected Win7 Files and use AIK to Remake pe3_amd64 ISO
Q - Quit pe3 folder = C:\winpe3_amd64 P - Optimize = [YES]

Enter your choice: 1
```

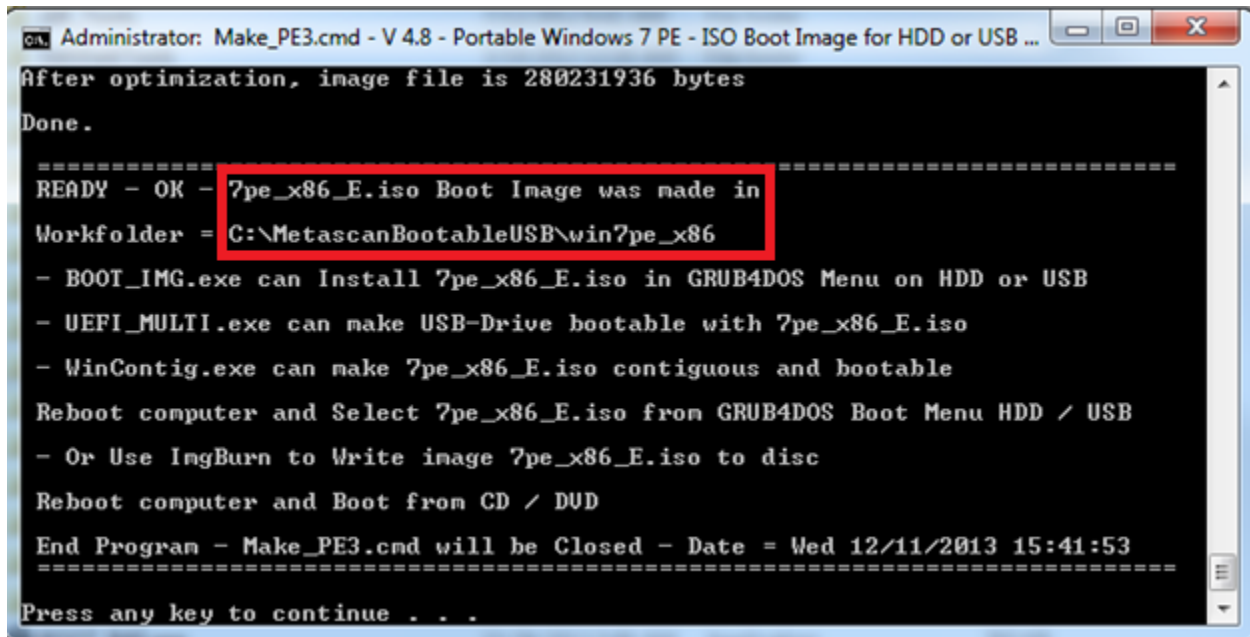
7> Select the drive containing the Windows 7 disk



8> Select option 2. On future runs, option 3 can be selected. This step may take some time to complete



9> Eventually you will reach this screen. The window will tell you where the ISO was created

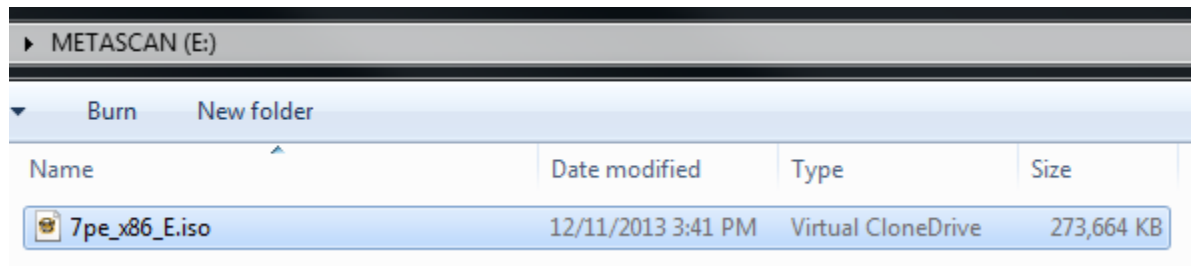


```
Administrator: Make_PE3.cmd - V 4.8 - Portable Windows 7 PE - ISO Boot Image for HDD or USB ...
After optimization, image file is 280231936 bytes
Done.
=====
READY - OK - 7pe_x86_E.iso Boot Image was made in
Workfolder = C:\MetascanBootableUSB\win7pe_x86
- BOOT_IMG.exe can Install 7pe_x86_E.iso in GRUB4DOS Menu on HDD or USB
- UEFI_MULTII.exe can make USB-Drive bootable with 7pe_x86_E.iso
- WinContig.exe can make 7pe_x86_E.iso contiguous and bootable
Reboot computer and Select 7pe_x86_E.iso from GRUB4DOS Boot Menu HDD / USB
- Or Use ImgBurn to Write image 7pe_x86_E.iso to disc
Reboot computer and Boot from CD / DVD
End Program - Make_PE3.cmd will be Closed - Date = Wed 12/11/2013 15:41:53
=====
Press any key to continue . . .
```

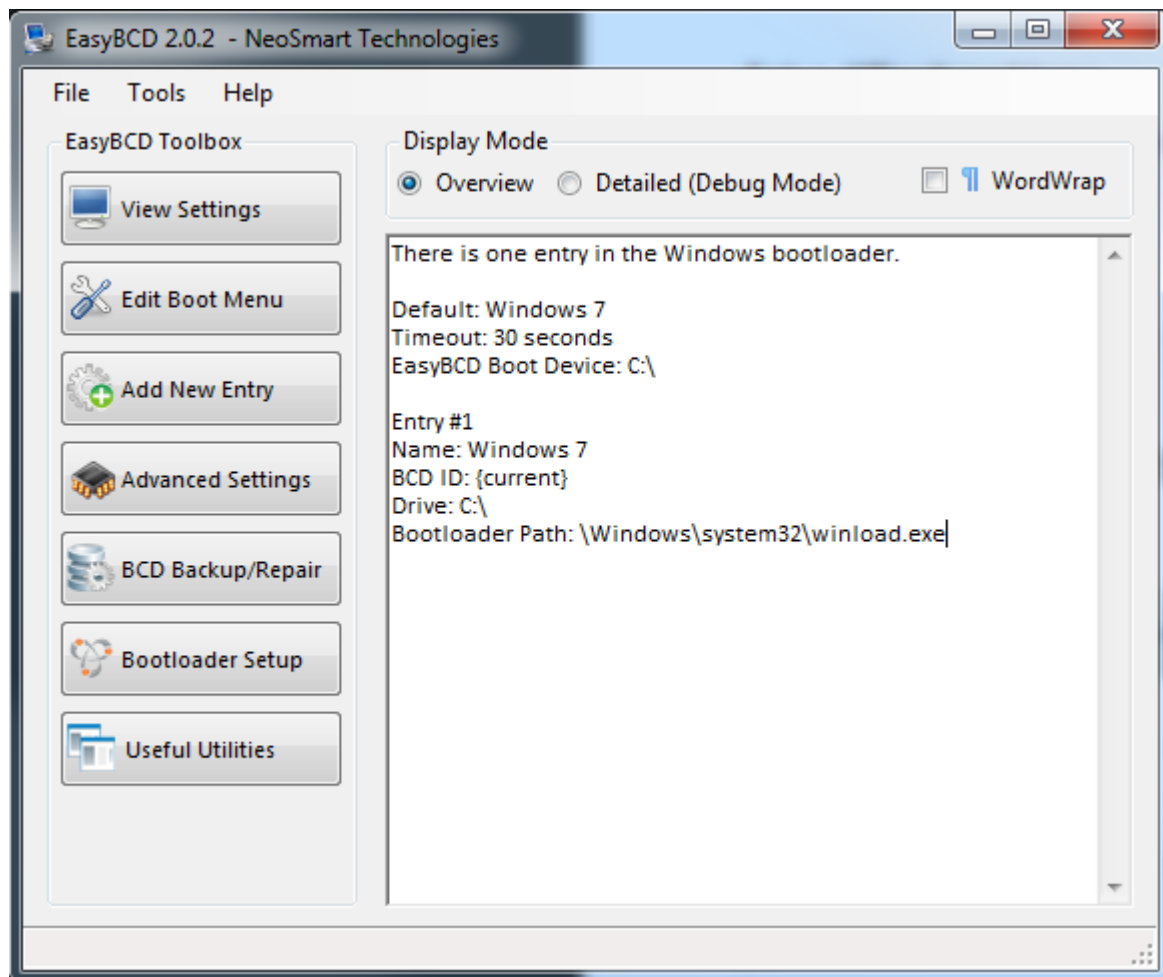
10> At this point, the ISO is ready to be burned onto a disk or can be placed onto a flash drive

- a. There are many tools which can accomplish this. An easy one to use is [EasyBCD](#), which allows the product to run in-memory so the USB can be removed after boot
- b. Instructions on using EasyBCD to set up the ISO are included below

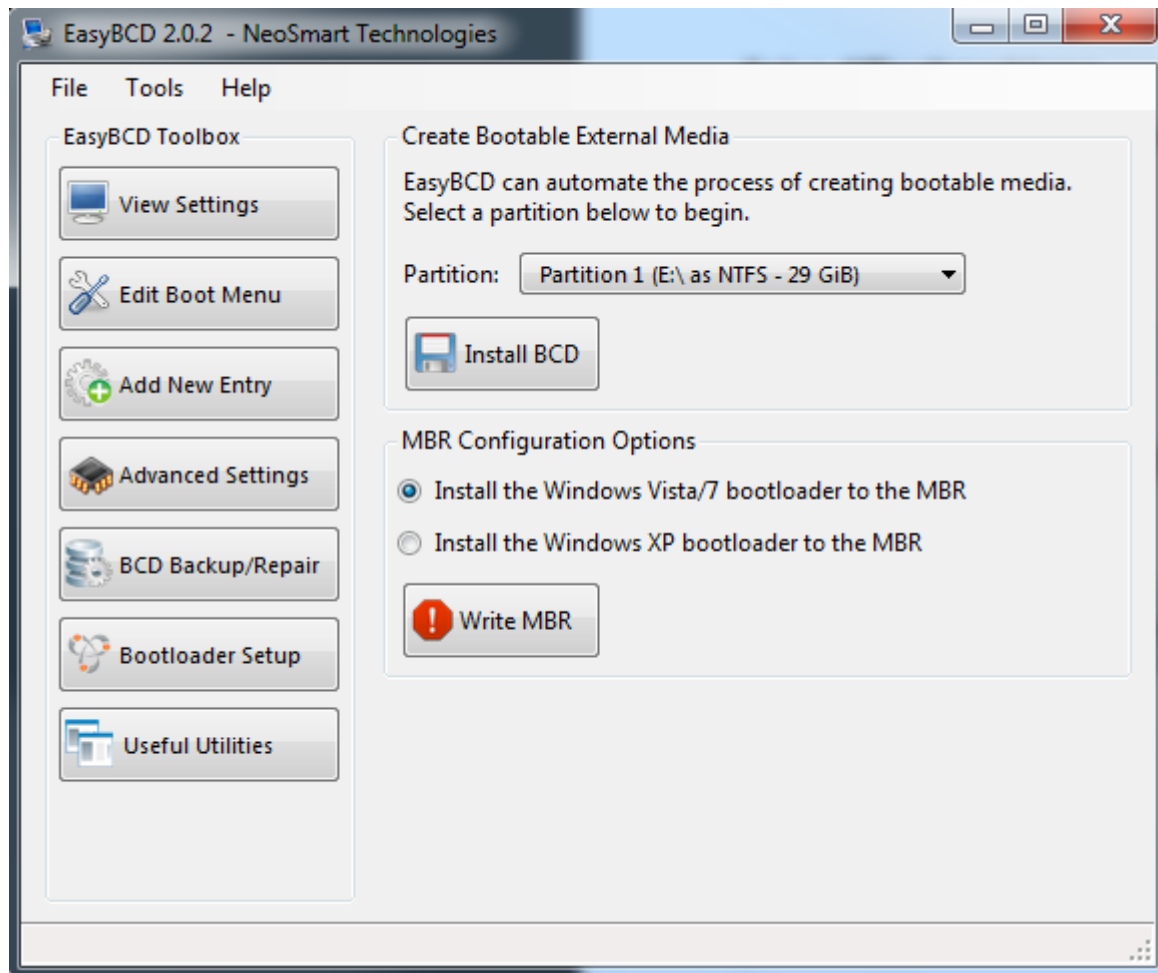
11> Copy the ISO onto the root of your USB drive



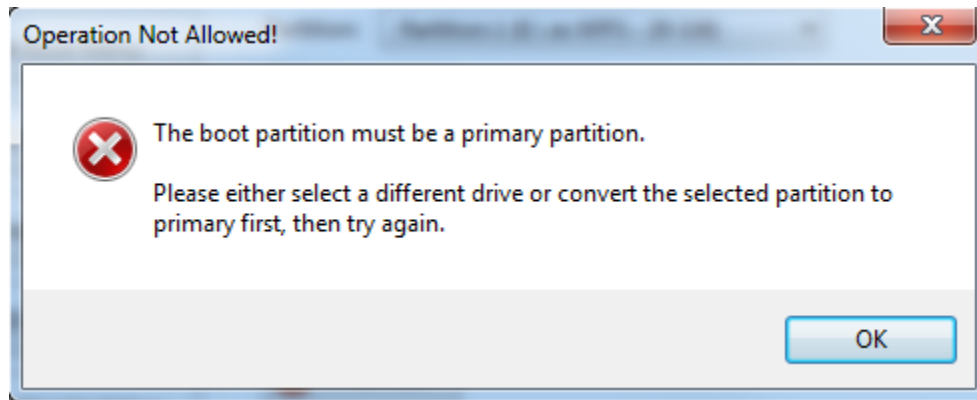
12> Open EasyBCD



- 13> Click “Bootloader Setup”, then select the flash drive from the “Partition” drop-down menu. Click “Install BCD”



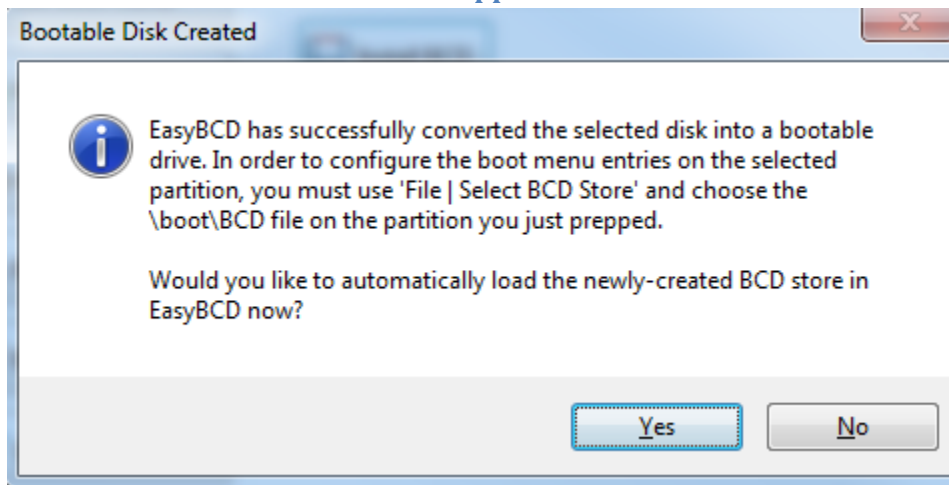
POSSIBLE: You may encounter an error if the first partition is not flagged properly. If you encounter this error, open an elevated command prompt and use the “MbrFix.exe” tool found in \PE3_mod\PE3_add\x86\Windows\System32 and use the “clean” command. This will erase reset the USB device’s partition table



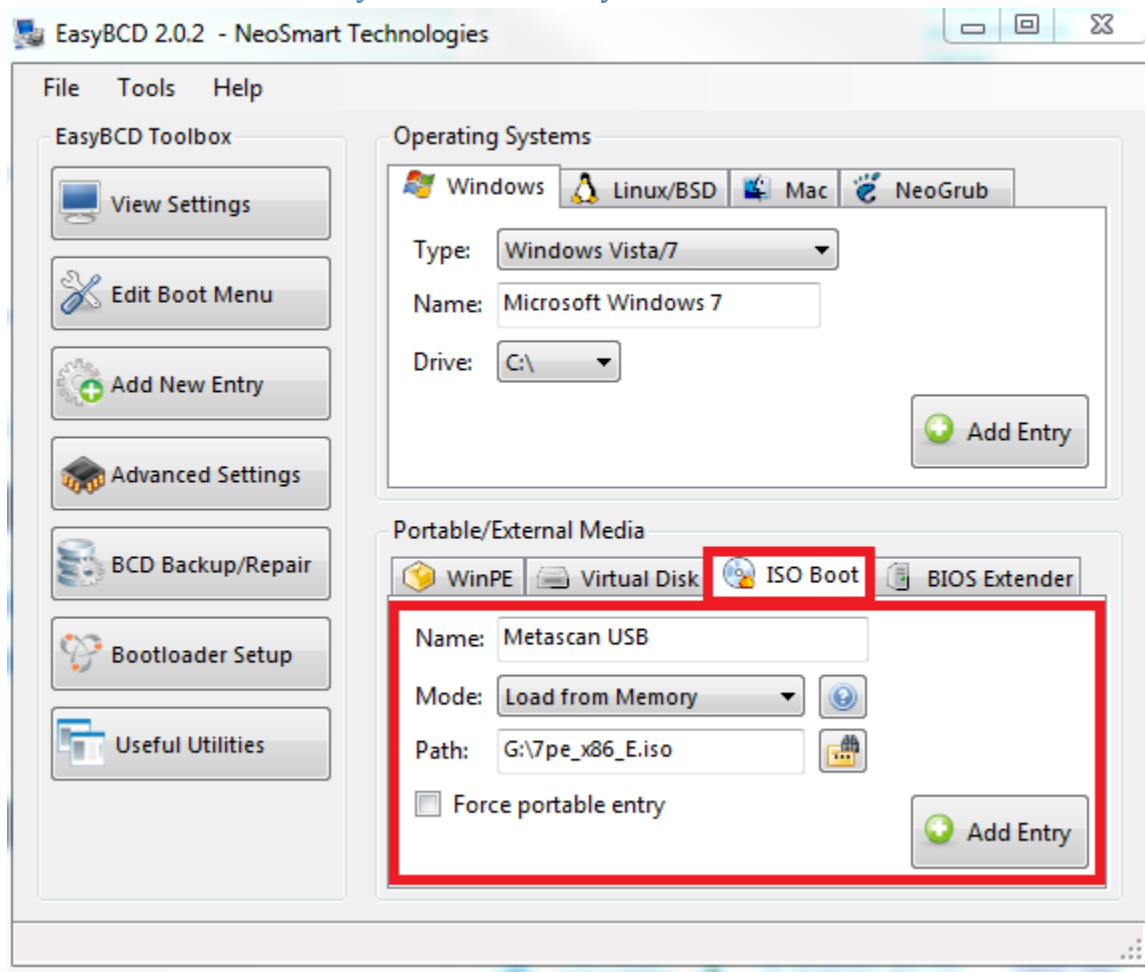
```
PS C:\MetascanBootableUSB\PE3_mod\PE3_add\x86\Windows\System32> .\MbrFix.exe /drive 1 clean
This command deletes all partitions.
You are about to Delete partitions,
are you sure (Y/N)? Y
PS C:\MetascanBootableUSB\PE3_mod\PE3_add\x86\Windows\System32>
```

POSSIBLE CONTINUATION: Remove and re-insert the USB drive. Format it and copy the ISO back onto the drive. Proceed with step 13

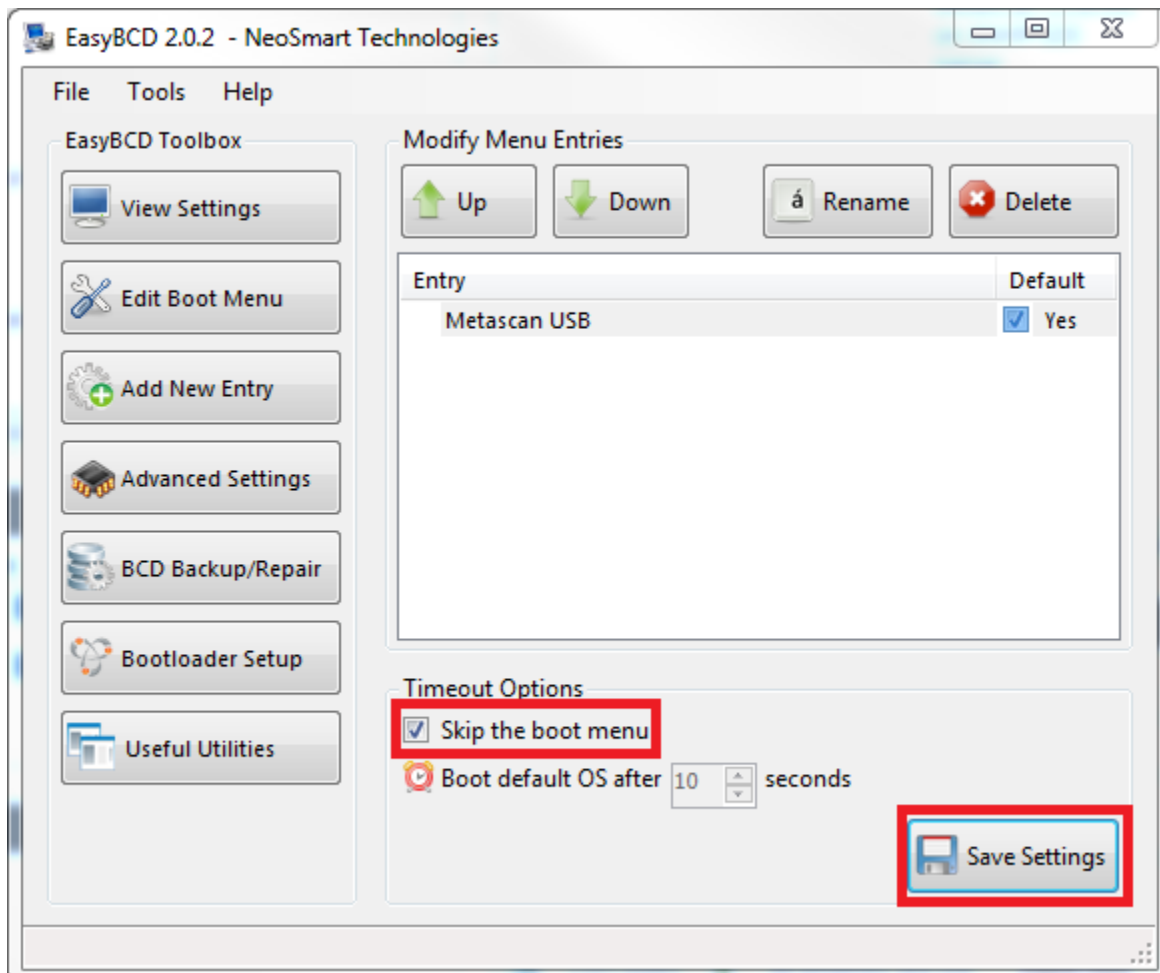
14> This screen should appear. Click “Yes”



15> Go to “Add New Entry”, then “ISO Boot”. Choose the path to the ISO and choose “Load from Memory”. Click “Add Entry”



- 16> Go to “Edit Boot Menu”, then check “Skip the boot menu” and click “Save Settings”



**The USB drive is now bootable and ready for deployment.
Congratulations!**