

Dual Window Grub Bootloader

If Windows update overwrites the Grub bootloader. Simple way to restore is to copy the debian bootloader (grubx64.efi) over the windows bootloader. We do the following steps:

1. Save the bootloader installed by Windows: `copy E:\EFI\Microsoft\Boot\bootmgfw.efi E:\EFI\Microsoft\Boot\bootmgfw.efi.original`
2. Copy the debian grub bootloader over the bootloader installed by Microsoft (bootmgfw.efi). `copy E:\EFI\debian\grubx64.efi E:\EFI\Microsoft\Boot\bootmgfw.efi`
3. Add an entry in Grub boot menu to start the original windows loader.

Correct within Windows

Open CMD prompt as "Administrator" and mount the EFT partition as E: drive with:

```
mountvol E: /S

E:\EFI>dir
Volume in drive E has no label.
Volume Serial Number is 502B-5BC6

Directory of E:\EFI

06-12-2016  20:05    <DIR>          .
06-12-2016  20:05    <DIR>          ..
06-12-2016  20:05    <DIR>          Microsoft
13-02-2021  19:01    <DIR>          Boot
27-11-2021  20:18    <DIR>          HP
13-02-2021  08:35    <DIR>          debian
               0 File(s)                0 bytes
               6 Dir(s)          160.800.768 bytes free
```

copy the debian grub bootloader over the bootloader installed by Microsoft (bootmgfw.efi).

```
copy E:\EFI\debian\grubx64.efi E:\EFI\Microsoft\Boot\bootmgfw.efi
```

Add Windows entry in grub

Add the following lines to: `/etc/grub.d/40_custom`

```
menuentry 'WIN 10 (on /dev/sda1)' --class windows --class os
$menuentry_id_option 'Win10-efi-502B-5BC6' {
    insmod part_gpt
    insmod fat
    set root='hd0,gpt1'
    if [ x$feature_platform_search_hint = xy ]; then
```

```
    search --no-floppy --fs-uuid --set=root --hint-bios=hd0,gpt1 --
hint-efi=hd0,gpt1 --hint-baremetal=ahci0,gpt1 502B-5BC6
    else
        search --no-floppy --fs-uuid --set=root 502B-5BC6
    fi
    chainloader /EFI/Microsoft/Boot/bootmgfw.efi.original.20221209
}
```

BCDedit

```
C:\WINDOWS\system32>bcdedit

Windows Boot Manager
-----
identifier           {bootmgr}
device               partition=\Device\HarddiskVolume1
path                 \EFI\Microsoft\Boot\bootmgfw.efi
description          Windows Boot Manager
locale               nl-NL
inherit              {globalsettings}
default              {current}
resumeobject         {6beefd36-680a-11eb-ac07-a7444769703e}
displayorder         {current}
toolsdisplayorder    {memdiag}
timeout              0

Windows Boot Loader
-----
identifier           {current}
device               partition=C:
path                 \WINDOWS\system32\winload.efi
description          Windows 10
locale               nl-NL
inherit              {bootloadersettings}
recoverysequence     {5c5834f8-aff6-11e9-ac26-ce270aa00281}
displaymessageoverride Recovery
recoveryenabled      Yes
isolatedcontext      Yes
allowedinmemorysettings 0x15000075
osdevice             partition=C:
systemroot           \WINDOWS
resumeobject         {6beefd36-680a-11eb-ac07-a7444769703e}
nx                   OptIn
bootmenupolicy       Standard

bcdedit /set {bootmgr} path \EFI\debian\grubx64.efi
bcdedit /set {bootmgr} path \EFI\Microsoft\Boot\bootmgfw.efi

bcdedit /enum firmware
```

```
bcdedit /timeout 10  
bcdedit /copy {current} /d "Linux"
```

Windows Boot Manager

```
-----  
identifier           {6beefd39-680a-11eb-ac07-a7444769703e}  
device              partition=\Device\HarddiskVolume1  
path                \EFI\Microsoft\Boot\bootmgfw.efi  
description         Linux  
locale              nl-NL  
inherit             {globalsettings}  
default             {current}  
resumeobject        {6beefd36-680a-11eb-ac07-a7444769703e}  
displayorder        {current}  
toolsdisplayorder  {memdiag}  
timeout             10
```

From:
<https://wiki.oscardegroot.nl/> - HomeWiki

Permanent link:
<https://wiki.oscardegroot.nl/doku.php?id=computing:bootloaders&rev=1670584817>

Last update: **2022/12/09 11:20**

