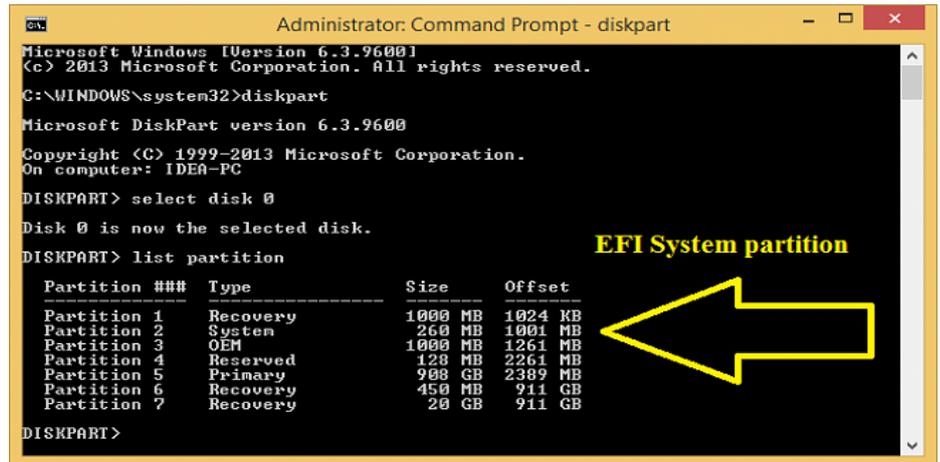


How to create the missing EFI System partition

The **EFI System partition** is required to boot the computer, when you are using the GPT partition style. The UEFI firmware scan your computer's hard disks for existence of the EFI System partition, then run `\efi\boot\bootx64.efi` file in the EFI System partition. This partition has to be formatted with FAT32 file system.



```
Administrator: Command Prompt - diskpart
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.
C:\WINDOWS\system32>diskpart
Microsoft DiskPart version 6.3.9600
Copyright (C) 1999-2013 Microsoft Corporation.
On computer: IDE0-PC

DISKPART> select disk 0
Disk 0 is now the selected disk.

DISKPART> list partition

Partition ###  Type              Size      Offset
-----
Partition 1    Recovery          1000 MB   1024 KB
Partition 2    System            260 MB   1001 MB
Partition 3    OEM               1000 MB   1261 MB
Partition 4    Reserved          128 MB   2261 MB
Partition 5    Primary           908 GB   2389 MB
Partition 6    Recovery          450 MB   911 GB
Partition 7    Recovery          20 GB    911 GB

DISKPART>
```

- For Advanced Format Generation One (4-KB-per-sector) drives, the minimum size of this partition is 260 MB.
- For earlier 512-byte-per-sector drives, the minimum size of this partition is 100 MB.

Contents:

- **Option One:** How to create the missing EFI System partition, if you still have the unallocated space available for the EFI System partition and **no other unallocated space on the drive.**
- **Option Two:** How to create the missing EFI System partition, if you have the unallocated space available for the EFI System partition.
- **Option Three:** How to create the missing EFI System partition, **if you do NOT have the unallocated space available for the EFI System partition.**

How to delete the EFI System partition.

- Windows 7/8/8.1 does not start, if you delete the EFI System partition.
- If you want to delete the EFI System partition, you must use the delete partition override command.
- Boot the computer using the Windows 7/8/8.1 installation media.
- On the first screen, press SHIFT+F10 to bring up command prompt.

diskpart

list disk

select disk #

list partition

select partition #

Note: Make sure to select the EFI System partition.

delete partition override

> OPTION ONE <

How to create the missing EFI System partition, if you still have the unallocated space available for the EFI System partition and **no other unallocated space on the drive.**

- Boot the computer using the Windows 7/8/8.1 installation media.
- On the first screen, press SHIFT+F10 to bring up the command prompt.
- Run the following commands at the command prompt.

diskpart

list disk

select disk # **Note:** Select the disk where you deleted the EFI System partition.

list partition

create partition efi

format quick fs=fat32

list partition

list volume **Note:** Note the volume letter where the Windows OS is installed.

exit

bcdboot X:\windows **Note:** Replace "X" with the volume letter of the Windows OS partition.

- Remove the Windows installation media and restart the computer.

```
Administrator: X:\windows\system32\cmd.exe - diskpart
Microsoft Windows [Version 6.3.9600]

X:\Sources>diskpart
Microsoft DiskPart version 6.3.9600
Copyright (C) 1999-2013 Microsoft Corporation.
On computer: MINWINPC

DISKPART> list disk

   Disk ###  Status         Size      Free      Dyn  Gpt
   -----  -
   Disk 0    Online         120 GB    99 MB    *
   Disk 1    Online         240 GB     0 B     *

DISKPART> select disk 0
Disk 0 is now the selected disk.

DISKPART> list partition

   Partition ###  Type              Size      Offset
   -----  -
   Partition 1    Recovery          300 MB    1024 KB
   Partition 2    Reserved          128 MB    400 MB
   Partition 3    Primary          119 GB    528 MB

DISKPART> create partition efi
DiskPart succeeded in creating the specified partition.

DISKPART> format quick fs=fat32
100 percent completed
DiskPart successfully formatted the volume.

DISKPART> list partition

   Partition ###  Type              Size      Offset
   -----  -
   Partition 1    Recovery          300 MB    1024 KB
   * Partition 4    System            99 MB    301 MB
   Partition 2    Reserved          128 MB    400 MB
   Partition 3    Primary          119 GB    528 MB

DISKPART>
```

```
Administrator: X:\windows\system32\cmd.exe

DISKPART> list volume

   Volume ###  Ltr  Label          Fs      Type          Size      Status       Info
   -----  -
   Volume 0    E    IR3_CCSA_X6   UDF     DUD-ROM       3924 MB   Healthy
   Volume 1    C                    NTFS    Partition     119 GB   Healthy
   Volume 2                    Recovery      NTFS    Partition     300 MB   Healthy   Hidden
   Volume 3    D                    NTFS    Partition     239 GB   Healthy
   * Volume 4                    FAT32    Partition     99 MB    Healthy   Hidden

DISKPART> exit
Leaving DiskPart...

X:\Sources>bcdboot c:\windows
Boot files successfully created.

X:\Sources>
```

> OPTION TWO <

How to create the missing EFI System partition, **if you have the unallocated space available for the EFI System partition.**

- Boot the computer using the Windows 7/8/8.1 installation media.
- On the first screen, press SHIFT+F10 to bring up the command prompt.
- Run the following commands at the command prompt.

diskpart

list disk

select disk # **Note:** Select the disk where you want to add the EFI System partition.

list partition

create partition efi size=260

format quick fs=fat32

list partition

list volume **Note:** Note the volume letter where the Windows OS is installed.

exit

bcdboot X:\windows **Note:** Replace "X" with the volume letter of the Windows OS partition.

- Remove the Windows installation media and restart the computer.

```
Administrator: X:\windows\system32\cmd.exe - diskpart
Microsoft Windows [Version 6.3.9600]

X:\Sources>diskpart
Microsoft DiskPart version 6.3.9600
Copyright (C) 1999-2013 Microsoft Corporation.
On computer: MINWINPC

DISKPART> list disk

   Disk ###  Status         Size       Free       Dyn  Gpt
   -----  -
   Disk 0    Online            240 GB     58 GB           *

DISKPART> select disk 0
Disk 0 is now the selected disk.

DISKPART> list partition

   Partition ###  Type              Size          Offset
   -----  -
   Partition 1    Recovery          300 MB        1024 KB
   Partition 2    Reserved          128 MB        400 MB
   Partition 3    Primary           180 GB        528 MB

DISKPART> create partition efi size=260
DiskPart succeeded in creating the specified partition.

DISKPART> format quick fs=fat32
100 percent completed
DiskPart successfully formatted the volume.

DISKPART> list partition

   Partition ###  Type              Size          Offset
   -----  -
   Partition 1    Recovery          300 MB        1024 KB
   Partition 2    Reserved          128 MB        400 MB
   Partition 3    Primary           180 GB        528 MB
   * Partition 4    System            260 MB        181 GB

DISKPART>
```

```
Administrator: X:\windows\system32\cmd.exe

DISKPART> list volume

   Volume ###  Ltr  Label          Fs      Type          Size      Status       Info
   -----  -
   Volume 0     D    ESD-ISO        UDF     DUD-ROM       3352 MB   Healthy
   Volume 1     C    Recovery       NTFS    Partition     180 GB   Healthy
   Volume 2     C    Recovery       NTFS    Partition     300 MB   Healthy
   * Volume 3     C    Recovery       FAT32   Partition     260 MB   Healthy
   Hidden

DISKPART> exit
Leaving DiskPart...

X:\Sources>bcdboot c:\windows
Boot files successfully created.
X:\Sources>
```

> OPTION THREE <

How to create the missing EFI System partition, if you do NOT have the unallocated space available for the EFI System partition.

- Boot the computer using the Windows 7/8/8.1 installation media.
- On the first screen, press SHIFT+F10 to bring up the command prompt.
- Run the following commands at the command prompt.

diskpart

list disk

select disk # **Note:** Select the disk where you want to add the EFI System partition.

list partition

select partition # **Note:** Select the Windows OS partition or your data partition.

shrink desired=260

create partition efi size=260

format quick fs=fat32

list partition

list volume **Note:** Note the volume letter where the Windows OS is installed.

exit

bcdboot X:\windows **Note:** Replace "X" with the volume letter of the Windows OS partition.

- Remove the Windows installation media and restart the computer.

```
Administrator: X:\windows\system32\cmd.exe - diskpart
Microsoft Windows [Version 6.3.9600]

X:\Sources>diskpart
Microsoft DiskPart version 6.3.9600
Copyright (C) 1999-2013 Microsoft Corporation.
On computer: MINWINPC

DISKPART> list disk

   Disk ###  Status         Size      Free      Dyn  Gpt
   -----  -
   Disk 0    Online         120 GB    0 B           *

DISKPART> select disk 0
Disk 0 is now the selected disk.

DISKPART> list partition

   Partition ###  Type              Size
   -----  -
   Partition 1    Reserved          128
   Partition 2    Primary           119

DISKPART> select partition 2
Partition 2 is now the selected partition.

DISKPART> shrink desired=260
DiskPart successfully shrunk the volume by: 260 MB

DISKPART> create partition efi size=260
DiskPart succeeded in creating the specified partition.

DISKPART> format quick fs=fat32
100 percent completed
DiskPart successfully formatted the volume.

DISKPART> list partition

   Partition ###  Type              Size      Offset
   -----  -
   Partition 1    Reserved          128 MB  1024 KB
   Partition 2    Primary           119 GB  129 MB
   * Partition 3    System            260 MB  119 GB

DISKPART> list volume

   Volume ###  Ltr  Label        Fs      Type          Size      Status      Info
   -----  -
   Volume 0    D    ESD-ISO      UDF     DVD-ROM       3352 MB   Healthy
   Volume 1    C    NTFS         NTFS    Partition     119 GB   Healthy
   * Volume 2          FAT32    Partition     260 MB   Healthy   Hidden

DISKPART> exit
Leaving DiskPart...

X:\Sources>bcdboot c:\windows
Boot files successfully created.

X:\Sources>
```