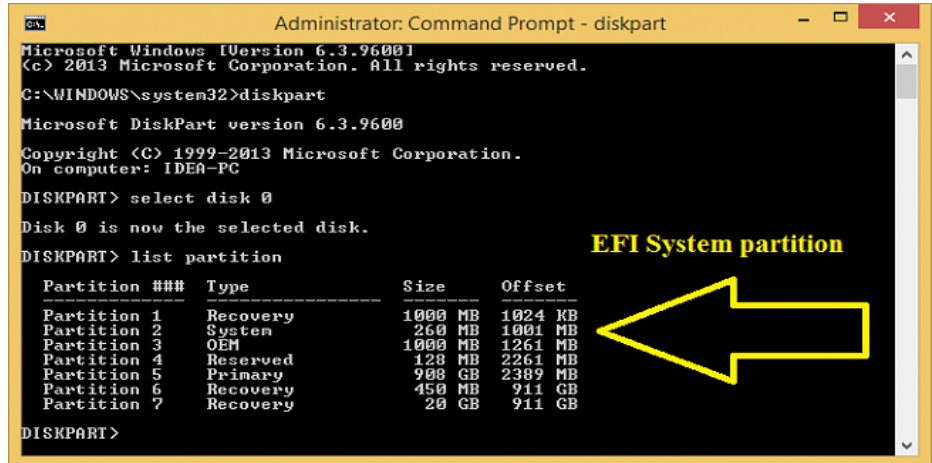


# How to create the missing EFI System partition

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>
```

**EFI System partition** ←

- 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                    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    ESD-ISO         NTFS     Partition     180 GB   Healthy
   Volume 2    C    Recovery        NTFS     Partition     300 MB   Healthy   Hidden
   * 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>
```