Restoring a UEFI/GPT System image to MBR

The Unified Extensible Firmware Interface (UEFI) is an interface between a computer's firmware and operating system. It is designed as a replacement for Basic Input/Output System (BIOS). UEFI supports hard disks with either master boot record (MBR) or the newer GUID Partition Table (GPT) system. GPT is a newer standard that supports disks larger than 2TiB and allows for more than four primary partitions per disk.

This article covers restoring a disk image of a UEFI/GPT system and enable the restored image to boot using legacy MBR booting.

Caution: We assume there are no other hardware differences between the system being imaged and the system being restored to. For dissimilar hardware, use ReDeploy.

- 1. Boot into Windows PE.
- 2. Open a Windows command window. To open a command window click the icon on the taskbar.
- 3. Type:

diskpart

4. Type:

list disk

5. Select the disk number that you want to restore to. For example:

select disk 3

Please ensure that you use the correct disk number in the above command. 6. Clean the selected disk:

clean

7. Ensure that the target disk is MBR formatted

convert mbr

8. Create the Microsoft System Reserved partition

create par pri size=300

9. Format the MSR partition:

format fs=NTFS quick

10. Set the partition 'Active'

active

11. Exit Diskpart:

exit

🔤 Administrator: Command Prompt	
c:\>diskpart	
Microsoft DiskPart version 6.1.7601 Copyright (C) 1999-2008 Microsoft Corporation. On computer: NICK-DEV	
DISKPART> sel dis 3	
Disk 3 is now the selected disk.	
DISKPART> clean	
DiskPart succeeded in cleaning the disk.	
DISKPART> convert mbr	
DiskPart successfully converted the selected disk to MBR format.	
DISKPART> create par pri size=300	
DiskPart succeeded in creating the specified partition.	
DISKPART> format fs=NTFS quick	
100 percent completed	
DiskPart successfully formatted the volume.	
DISKPART> active	
DiskPart marked the current partition as active.	
DISKPART> exit	
Leaving DiskPart	

- 12. In Macrium Reflect, click Backup tab.
- 13. Click **Refresh** to read the newly initialized disk.



14. Click Restore tab.

15. Select the image file, drag and drop just the Windows System partition to the free space on the target disk. In this example, only the 'C:' partition is restored to the target disk.

🕏 Dra	ag Parti	tions to the Dest	ination	Disk or click '0	Copy se	lected partitio	'ns'				
Source	02/06/20	14 10:14 \\hv3\pu	blic\Imag	es\win81_efi-00-	00.mrimg	I					
GPT Disk 1 [AC38AC5B-5897-43FA-B544-913CFD00BA88] - Msft Virtual Disk 1.0 <126.99 GB>											
		1 - Recovery (None) NTFS Primary		2 - NO NAME (Nor FAT32 (LBA) Prima		3 - (None) Unformatted Prima	ary	4 · (C:) NTFS Primary			
		264.8 MB 300.0 MB		25.2 MB 99.0 MB		128.0 MB 128.0 MB		12.16 GB 126.48 GB			
								/			
Destination Local disk 🕼 Undo 👔 Copy selected partitions Select a different target disk											
MBR Disk 4 [EC791DB3] - Msft Virtual Disk 1.0 <2.00 TB >											
-		1 - (None) NTFS Active		4 - (Auto) NTFS Primary							
		24.7 MB 300.0 MB		12.16 GB 126.48 GB			1.88 TB				
	>	Celete Existing part	ition	~	Restored	Partition Proper	ties		Verify image bel	fore restore 📃	
35878711391647615, 35878711391647615 Copy selected partitions when I click 'Next' 📝											
							< Back	Next >	Cancel	Finish	

Note: You can click 'Restored Partition Properties' to resize the restored partition to fill the new disk if you wish.

16. Follow the steps in the section **Fix boot problems on MBR/BIOS systems** in the following KB article: Fixing Windows boot problems

Note: You should select the newly created 300MB partition as the 'Active' partition when running 'Fix Boot Problems'