

Trusty, BROUILLON

# Recovery Tools 1.3.15 Beta By AnarethoS

## Software presentation

### Purpose of this software

Computers, we use them every day. To check our mails, play games, do homework. We used them so much that, sometime, we forget that they are like car and that they may broke, suddenly, without warning, and this normally happen when you have something important to do. Now, your computer does not boot anymore. What can you do? Reinstall Windows? It will take hours with the time required to reinstall all your drivers and required apps. And if you don't know how to do it, you will have to bring it to the computer store. But, it may be closed or they may have too much computer to repair and you will have to wait several days. It would be easier to repair it automatically with the press of a button or by connecting an USB drive, no? Well, that is exactly what I am offering you. A small software that can help you automatically repair and reinstall your Windows installation. And as a bonus, it can do all that without deleting your personal data. And if you can't wait to complete the recovery process, you can still access your files off-line to copy them to an USB drive so you can continue working on another computer.

But be warned! This solution is not made to do full system backup. Rather, it has been made to allow you to bring back your Windows installation to the working state it was when the recovery image was made. If you made it 6 month ago, you will have to reinstall everything that changed since then. The only exception here is under Windows 8 that supports custom "Refresh" point, which is a custom recovery point for your Windows installation. Also, this recovery image must be done during a new installation of Windows. If Windows is already installed on your computer, you won't be able to create the recovery image.

### What it can do

This software will allow you to create a one-time image of a base installation of Windows 7 or Windows 8 and copy this image to a hidden partition on the first drive of your computer. If, for any reason, Windows cannot boot anymore or you just want to revert back to this image, you will be able to use Windows Recovery Environment to completely reinstall Windows based on this image. It is up to you to decide what this image will contain. Will it be only Windows with its drivers, Windows with its drivers and all your personal applications? You decide. But choose wisely as the image CANNOT BE upgraded later. It is not a backup. It is a recovery image.

### What it cannot do

Like I just said, this application creates a recovery image. Not a backup. So don't use it to create a recovery image with all your personal files. Use backup software for that. Also, don't waste your time personalising your settings. The Administrator account used during the preparation of the recovery image will be deleted. Don't waste your time.

## Functionalities

### Windows 7

Under Windows 7, the recovery tools will give you the following options: ☐

- A central place from where you can access recovery options, including
  - Recovery media creator
    - Can create a USB key to be used to restore the computer
- 2. Launch recovery environment
  - Reboot the computer in the recovery environment
- 3. Launch Windows backup
  - This will allow you to backup your personal files, programs and settings

The recovery environment, either booted from the recovery partition or the USB recovery media will give you the following options:

- Option to repair your computer
  - Repair boot option
  - Use system restore to go back to a snapshot made by Windows
- 2. System recovery
  - Use a custom recovery image you may have created using the backup software built into Windows
- 3. Reinstall Windows
  - Move the previous installation and your personal files to the “Windows.Old” folder and then reinstall Windows from the recovery image on the recovery partition
- 4. DoubleCommander file browser
  - Access your files off-line. Useful if your computer can not boot and you don't have time to repair it right now. This will allow you to copy your personal files to a USB key to continue working on another computer.
  - For security reasons, the file browser will require you to authenticate with an administrator account from the Windows installation

Please note that Windows 7, opposed to Windows 8, does not give you the option to do a full reinstall. Previous installation of Windows will be always moved to “Windows.Old” folder. If you want to completely erase all data and trace of previous installation, you can either use a recovery media created on the computer, use the “FullRestore.cmd” script that can be found in “C:\Windows” or use the “Full system recovery” from the “Advanced tools” under the Recovery Environment.

### Windows 8

Under Windows 8, the recovery tools will give you the following options:

- A central place from where you can access recovery options, including
  - Recovery media creator
    - Can create a USB key to be used to restore the computer
- 2. Launch recovery environment
  - Reboot the computer in the recovery environment
- 3. Launch Windows backup (File History)
  - This will allows you to backup your personal files, programs and settings
- 4. Create a custom recovery point
  - Allows to create a custom recovery point, delete it or create a new one
  - A recovery point will replace the recovery image when do you a “Refresh” of your pc. A refresh reinstall Windows without deleting your files
  - A custom image cannot be used to “Reset” the computer, which completely delete all files

The recovery environment, either booted from the recovery partition or the USB recovery media will give you the following options:

- Option to repair your computer
  - Repair boot option
  - Use system restore to go back to a snapshot made by Windows
- 2. Refresh Windows
  - Move the previous installation and you personal file to the “Windows.Old” folder and then reinstall Windows from the recovery image on the recovery partition
  - If a custom recovery point was created, it will be used. Otherwise, it will use the recovery image
- 3. Reset Windows
  - Completely erase the computer and reinstall Windows
- 4. DoubleCommander file browser
  - Access your file off-line. Useful if your computer can not boot and you don’t have time to repair it right now. This will allows you to copy your personal file to a USB key to continue working on another computer.

## Requirement

This software will run only under Windows 7 or Windows 8. It does not work under Windows Vista or Windows XP.

Any computer that can run Windows 7 or Windows 8 can use this software, although a specific partition lay out must be respected.

Also, you will have to choose between two (2) version of the package for Windows 8, each with their pros and cons.

The following section will explain the different partition structure supported by this program. All the files (XMK, script, etc.) for these scenarios are included with this package.

**For Windows 7, you will need to provide the “ImageX.exe” file, both for the 32bits (X86) and the 64bits (AMD64) version. Microsoft© does not allows the redistribution of these files. They can be obtained from the Windows Automated Installation Package. Simply copy them in the right place in the “ImageX” folder in the Windows 7 tools.**

## Select the right package version

This software comes in two (2) versions, one with the recovery image (WIM file) on the same partition as the Recovery Environment and one with the WIM file on the last partition.

The first version is the only one which works with Windows 7. As for Windows 8, it works with both versions.

### Using Windows 8? - Read this!

When using the version with the recovery image on the last partition, Windows 8 will allows you to delete this partition and regain the space when you create a recovery media (USB key). If the recovery image is on the same partition as the Recovery Tools, this option will not be available.

Although it would seems natural to select the second package (WIM on the last partition), please note that all the scripts use partition number to find their required files. This means that if you resize your Windows partition to create a new partition, the partition number of the last partition (with the recovery image on it) will change, making system recovery impossible.

Also, since the recovery partition cannot be created during the installation process of Windows, it will be created during the capture process, making the process longer. The size of the recovery partition can be set in the “SettingsRE.txt” file.

## Supported partition layout

### MBR - WIM with Recovery tools (Windows 7 and Windows 8)

Partition	1	2	3
<b>Default size</b>	12gb	150mb	All
<b>Partition type</b>	Primary	Primary	Primary
<b>File system</b>	NTFS	NTFS	NTFS
<b>Role</b>	Recovery	Boot manager	Windows
<b>Active</b>	No	Yes	No

### UEFI - WIM with Recovery tools (Windows 7 and Windows 8)

Partition	1	2	3	4
<b>Default size</b>	12gb	150mb	128mb	All
<b>Partition type</b>	Primary	EFI	MSR	Primary
<b>File system</b>	NTFS	FAT32	N/A	NTFS
<b>Role</b>	Recovery	Boot manager	System reserved	Windows
<b>Active</b>	No	Yes	No	No

### MBR - WIM on the last partition (Windows 8 only)

Partition	1	2	3	4
<b>Default size</b>	1gb	150mb	All	12gb
<b>Partition type</b>	Primary	Primary	Primary	Primary
<b>File system</b>	NTFS	NTFS	NTFS	NTFS
<b>Role</b>	Recovery	Boot manager	Windows	Recovery image
<b>Active</b>	No	Yes	No	No

### UEFI - WIM on the last partition (Windows 8 only)

Partition	1	2	3	4	5
<b>Default size</b>	1gb	150mb	128mb	All	12gb
<b>Partition type</b>	Primary	EFI	MSR	Primary	Primary
<b>File system</b>	NTFS	FAT32	N/A	NTFS	NTFS
<b>Role</b>	Recovery	Boot manager	System reserved	Windows	Recovery image
<b>Active</b>	No	Yes	No	No	No

### Partition types

#### MBR

All partitions are of type 07 (ID = 07) except the recovery

partition (and the recovery image partition) which are of type 27 (ID = 27).

### **UEFI/GPT**

Recovery partitions (and the recovery image partition) are of type {de94bba4-06d1-4d40-a16a-bfd50179d6ac}. MSR, EFI and Windows partitions don't have any particular type.

## **Installation**

### **Preparing the USB drive**

From the "AutoUnattend" folder, under either the "GPT" or "MBR" folder, copy the "AutoUnattend.xml" file to the root of a USB

From the "Settings - Examples", under either the "GPT" or "MBR" folder, copy all files to the "Settings" folder

Run the "Update\_Settings.cmd" script

Copy the configured package (INSTALLER folder) to the USB key

All other files can now be discarded, as the "INSTALLER" folder and the "AutoUnattend.xml" files are only required for this software

### **Installing Windows**

Connect the USB key to the target computer and start Windows installation

Use only RETAIL or MSDN media

Don't use media that came with your computer as they may contains scripts that will prevent this software from working correctly

2. Select to install Windows
3. If you are using a media with more than 1 operating system available, select the one you want to install
4. Wait during the installation process  
All data and partitions of the first drive will be deleted  
Partitions will be automatically created
5. Proceed to the installation of all your software, drivers, updates, etc.  
Never use the SYSPREP screen. It will prevent the use of this software.

## Installing the recovery tools

When everything is working as expected, you can then install the recovery tools to create the recovery partition

You should copy the installation folder on the hard drive in case something goes wrong and file access is lost to the USB drive

If copying the tools from a CD, remove the “read-only” attributes of the files on the computer

You should create a full backup of the computer, using Ghost or similar software, prior creating the recovery partition. If something goes wrong, you will be able to recover your base installation without having to do it again

Launch the “Install” script and wait for the SYSPREP and capture process

## Step by step installation

This section will show you how to install the recovery tools under Windows 8. For this scenario, we will be using the package that creates the recovery image on the last partition, on a MBR/BIOS computer. The process is similar for Windows 7 or other package version of Windows 8.

Step	Description	Image
1	Unzip the software package on a computer and select which version of the package you want to use. In this case, we will be using the “WIM-Last partition” version.	
2	Open the “Autounattend” folder.	
3	Select the configuration that suits you need. In this scenario, we will be using the “MBR” package for BIOS computer.	

## Configuration

## Utilisation

## Désinstallation

## Voir aussi

- [\(en\) fichiers](#)
- [\(fr\) fichiers](#)

Contributeurs principaux : [Jamaïque](#).

Basé sur [Recovery Tools 1.3.15 Beta](#) par AnarethoS.

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