



## **Technical Tip**

### **How to Perform a System Recovery**

Revision 3.28.2019



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## 1.0 Introduction

All factory pre-configured DIGIOP Servers come with either a DVD or USB Drive with its recovery image. These recovery images are used to perform a system recovery in the case of hard drive replacement, or corruption of the Windows operating system. This guide details how to perform the system recovery on a factory pre-configured DIGIOP Server. For DIGIOP Software only installations on customer provided hardware, please refer to the hardware's documentation for information on its system recovery procedures.

## 2.0 Understanding the DIGIOP Chassis Generations

DIGIOP Chassis Generation List							
Generation	G3 XP	G3 Win 7	G4	G5	G6	G7	G8
Year	2007-2013	2012-2013	2013-2015	2015-2016	2016-2017	2017-2019	2019-Present
Serial Number	GSG-GSM	GSL-GSM	GSM-GSO	GSO-GSP	GSP-GSQ	GSQ-GSS	GSS-Present
Chassis	Dell****	Dell***	Custom**	Custom**	Custom*	Custom*	Custom*
Hardware Type	Desktop	Desktop	Rackmount	Rackmount	Desktop	Desktop	Desktop
System Board	Intel	Intel	Intel	Super Micros	Asus/Gen 4 Intel	Asus/Gen 6 Intel	Asus/Gen 8 Intel
Initial Software	7.0 - 7.6	8.0 - 8.6	8.7 - 8.8	8.8 - 9.0	9.1 - 9.4	9.4 - 9.6	19.3 - Present
OS	XP	Win 7 Pro	Win 7 Emb	Win 7 Emb	Win 7 Emb	Win 7 Emb	Win 10 LTSC

\*Custom desktop units that are DIGIOP branded

\*\*Custom server chassis that are DIGIOP branded; 2U and 3U rackmount servers.

\*\*\*G3 Windows 7 units included the following Dell models:

Optiplex XE, 790, 990, 7010, and 9010

\*\*\*\*G3 XP units included the following Dell models:

Optiplex XE, 745, 755, 760, 780, 960, and T3400

\*\*\*\*The 7.6 recovery image is still available, but this version of the software is no longer supported.

Note: G1 and G2 recovery options are no longer available

## 3.0 System Recovery Images

When performing a system recovery, you should use the recovery image that came with your system. If you no longer have the recovery image that came with your system, you can purchase a replacement recovery image from DIGIOP. You can also create a new recovery image using either a USB or DVD-ROM depending on the generation of the system that you have. The chart in Section 2 will help you determine what generation your DIGIOP system is. The chart below will help you determine what Recovery Image is needed based on the generation of system that you have. Contact DIGIOP Support to obtain a download link to the ISO needed to create the image for your system.

DIGIOP Recovery Images		
Generation	Recovery Image	Media Type
G8	19.3	USB
G6 & G7	9.2	USB
G4 & G5	8.7*	USB
G3 with Windows 7	8.6*	DVD-ROM
G3 with Windows XP	7.6*	DVD-ROM
G2	No longer available	
G1	No longer available	

\*The 7.6, 8.6, and 8.7 images are still available, but these versions of the DIGIOP software are no longer supported.

### 3.1 Creating a G8 Windows 10 Recovery USB

If you no longer have the recovery image that came with your system, and you have a G8 system, you can create a USB Recovery drive using a 16GB flash drive. You will need to download the zipped folder provided by DIGIOP, unzip the files, then copy the unzipped files to the USB Drive. Recovery USB's can also be purchased directly from DIGIOP. Please contact the DIGIOP Support team for pricing options.

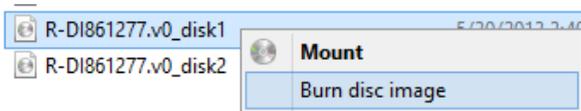
### 3.2 Creating a G4 – G7 Windows 7 Recovery USB from an ISO

If you no longer have the recovery image that came with your system, and you have a G4 – G7 system, you can create a USB Recovery drive using a 16GB flash drive. You will need to download the appropriate ISO file for your generation of system. This ISO file cannot simply be copied to a flash drive. You will need a program that will convert the ISO to a bootable USB. There are several third party programs available to do this. One option is **Rufus** which can be used on Windows 7 and newer systems. Please note this is a third party software that is not supported by DIGIOP. Use of this tool is at the user's discretion. Recovery USB's can also be purchased directly from DIGIOP. Please contact the DIGIOP Support team for pricing options.

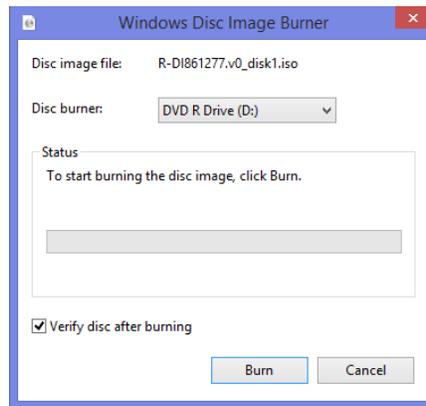
### 3.3 Creating a G3 Recovery Disc form an ISO

If you no longer have the recovery image that came with your system, and you have a G3 system, you can create Recovery DVD-ROM discs. The 8.6 Image requires 2 discs, and the 7.6 Image requires 1 disc. To create these discs, you cannot simply copy the ISO files to the discs, or create data discs. You will need a program that will convert the ISO file to a bootable disc. Newer Microsoft Operating Systems have a built-in tool to do this. For OS's without this feature, there are additional programs available such as the free tool described in Section 3.2. For systems with the built-in tool, follow these steps:

- 1) Download the needed ISO files to your computer.
- 2) Locate the ISO file, right click the file, and select **Burn Disc Image**.



- 3) Select the Disc Burner that you would like to use, and click **Burn**.

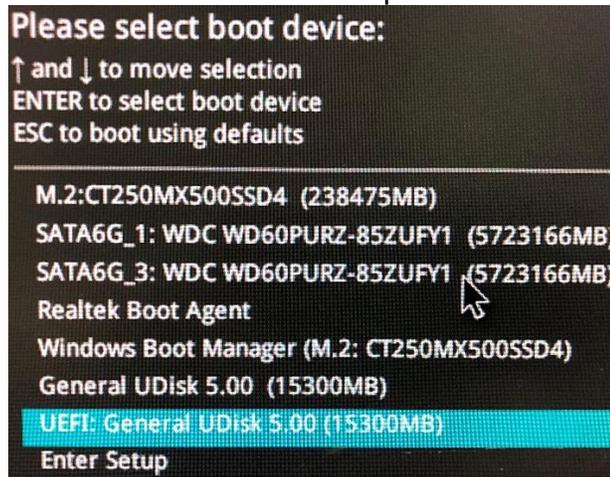


## 4.0 Booting to the Recovery Image

In order to perform a System Recovery, you will need to boot to the recovery image for your system. Safely power down the system and then follow the appropriate steps for your generation of server.

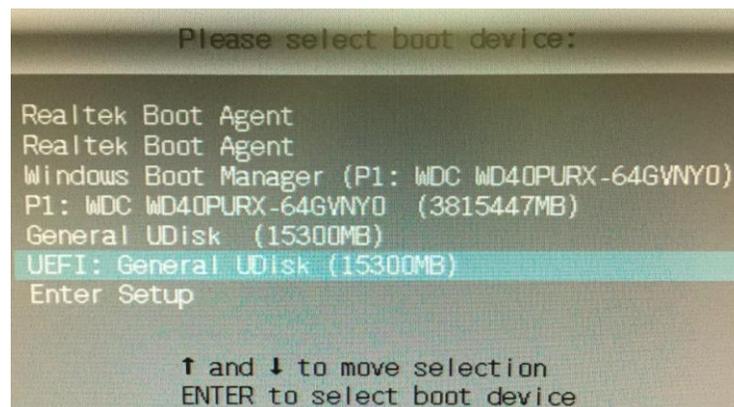
### 4.1 Generation 8 Servers

- 1) Insert the USB Image Drive into the server and power on the Server.
- 2) Upon boot-up of the server you will need to select a special function key to access the boot menu. For the G8 servers this will be the **F8** Function Key. Upon boot-up continuously press the **F8** key to access the boot menu.
- 3) When prompted, select the UEFI USB drive option and select **Enter**.



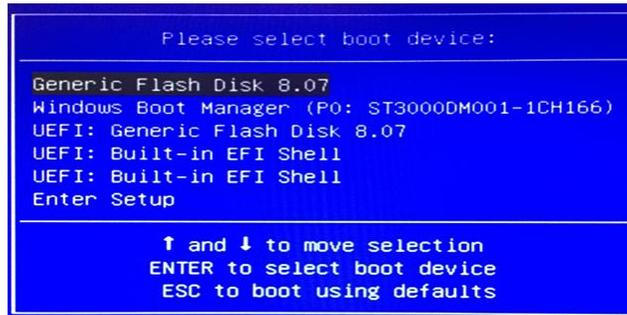
### 4.2 Generation 6 and 7 Servers

- 4) Insert the USB Image Drive into the server and power on the Server.
- 5) Upon boot-up of the server you will need to select a special function key to access the boot menu. For the G6 and G7 servers this will be the **F8** Function Key. Upon boot-up continuously press the **F8** key to access the boot menu.
- 6) When prompted, select the UEFI USB drive option and select **Enter**.



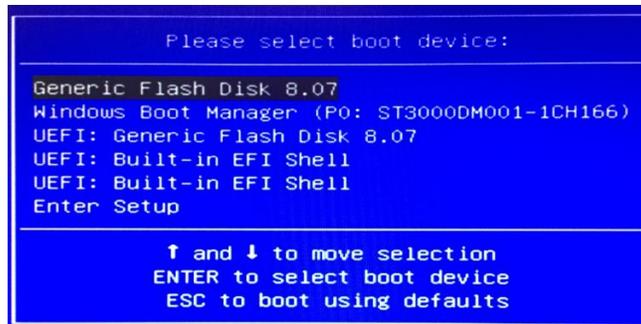
### 4.3 Generation 5 Servers

- 1) Insert the USB Image Drive into the server and power on the Server.
- 2) Upon boot-up of the server you will need to select a special function key to access the boot menu. For the G5 servers this will be the **F11** Function Key. Upon boot-up continuously press the **F11** key to access the boot menu.
- 3) When prompted, select the USB drive option and select **Enter**.



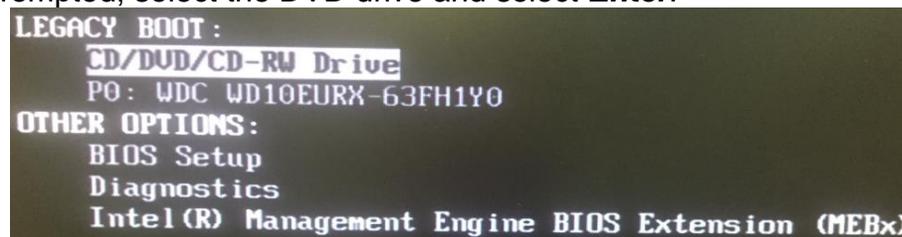
### 4.4 Generation 4 Servers

- 1) Insert the USB Image Drive into the server and power on the Server.
- 2) Upon boot-up of the server you will need to select a special function key to access the boot menu. For the G4 servers this will be the **F10** Function Key. Upon boot-up continuously press the **F10** key to access the boot menu.
- 3) When prompted, select the USB drive option and select **Enter**.



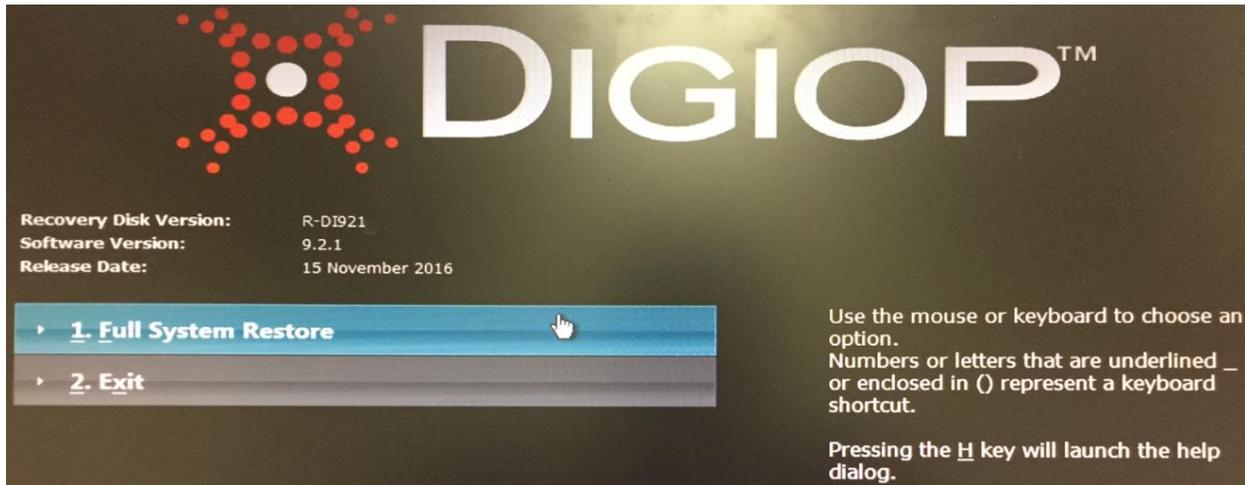
### 4.5 Generation 3 Servers

- 1) Insert Image Disc 1 into the server and power on the Server.
- 2) Upon boot-up of the server you will need to select a special function key to access the boot menu. For the G3 servers this will be the **F12** Function Key. Upon boot-up continuously press the **F12** key to access the boot menu.
- 3) When prompted, select the DVD drive and select **Enter**.



## 5.0 System Recovery

Once you have booted to the appropriate recovery image, Generation 8 systems will start the recovery process automatically. G3 – G7 systems will display a DIGIOP System Recovery menu.



### 5.1 Full System Restore

The Full System Restore will restore the Windows Operating System and format all data drives. All information will be lost. A Full System Restore needs to be performed when replacing the main hard drive in the server or if there are unrecoverable database or operating system issues. To select this option, select **Full System Restore** with a mouse, or by selecting **F** on the keyboard. Follow the on-screen instructions to complete the recovery process. When the recovery completes, it will prompt you to remove the disc/USB drive and restart the server.

**NOTE** The 8.6 recovery image utilizes 2 discs. The recovery will prompt you halfway through to switch to the second disc.

### 5.2 Operating System Restore

Some older generations of hardware also have the option for Operating System Restore, which will only restore the Windows Operating System that is located on the C: Drive. It will not affect video and data located on the data drives (D:, E:, F:, etc.). This option is only useful if the server is having Windows operating system related issues, and you would like to try to keep your video. If there are known database issues, or if an Operating System Restore is not successful, you will need to perform a Full System Restore. To select this option, select **Operating System Restore** with a mouse, or by selecting **O** on the keyboard. Follow the on-screen instructions to complete the recovery process.

## 6.0 Updating DIGIOP Server and DIGIOP Connect

After the recovery process is complete, it is recommended that you update both DIGIOP Server and DIGIOP Connect to the latest version of the software that is available to you. Please note that the version of DIGIOP Connect must be greater than or equal to the version of DIGIOP Server.

When the recovery is complete and the server has restarted, the server will automatically launch the DIGIOP System Setup Tool. Click **Alt + F4** to exit the DIGIOP System Setup Tool. Run the DIGIOP Connect and then the DIGIOP Server installers to update the software. When the DIGIOP Server installer completes, it will relaunch the DIGIOP System Setup Tool. Select the desired options for how to manage the server and begin configuring the server.

For more information on running the DIGIOP Connect and DIGIOP Server installers, and how to utilize the DIGIOP System Setup Tool, please review the ***DIGIOP Software User Manual*** for the version of the software that you are installing.