SIMRAD

Maris ECDIS900 Backup/ Restore Procedures for SW Upgrades

User Guide

ENGLISH

www.navico-commercial.com

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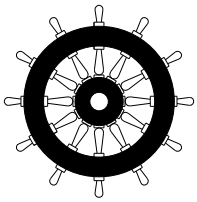

The Wheelmark

The Marine Equipment Directive 96/98/EC (MED), applies to all new ships, to existing ships not previously carrying such equipment, and to ships having their equipment replaced for ships flying EU or EFTA flags. This means that all system components covered by annex A1 must be type-approved accordingly and must carry the Wheelmark, which is a symbol of conformity with the Marine Equipment Directive.

The ECDIS900 system is produced and tested in accordance with the European Marine Equipment Directive 96/98./EC.

Navico has no responsibility for incorrect installation or use of the equipment, so it is essential for the person in charge of the installation to be familiar with the relevant requirements as well as with the contents of the manuals, which covers correct installation and use.

About this manual

This manual is a reference guide for Maris ECDIS900 Backup/Restore procedures for SW 4.7.x.x. The manual will be continuously updated to match new software releases.

Important text that requires special attention from the reader is emphasized as follows:

➔ ***Note:*** Used to draw the reader's attention to a comment or some important information.

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Redo Backup

1. Purpose

This document describes how to Restore PC Hard Drive from Images, and make a Backup using Redo Backup solution, based on bootable Hard Drive with backup capacity.

The chapters describe:

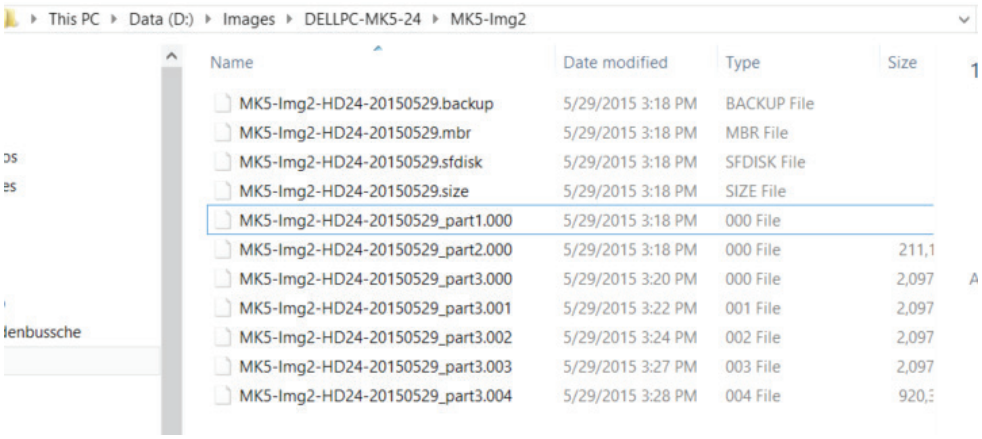
- How to Restore from an image (ImgX for factory image).
- The checklist after Factory image is restored.
- How to Backup the system after installation with final setup.
- How to create a USB Bootable Redo Backup Hard Drive .

2. Restore from an image (ImgX for factory image)

2.1 Material

- USB Bootable HD with Redo Backup (For creation refer to "5. Create a bootable USB stick with Redo Backup" on page 17).
- HD Backup Partition with the proper "image" folder, corresponding to the Computer.

Example:



Example using MK5 (Dell PC)

2.2 Procedure

(Example using MK5 Simrad 24 4S)

2.2.1 Insert Maris ECDIS900 Backup/Restore Portable Hard Drive

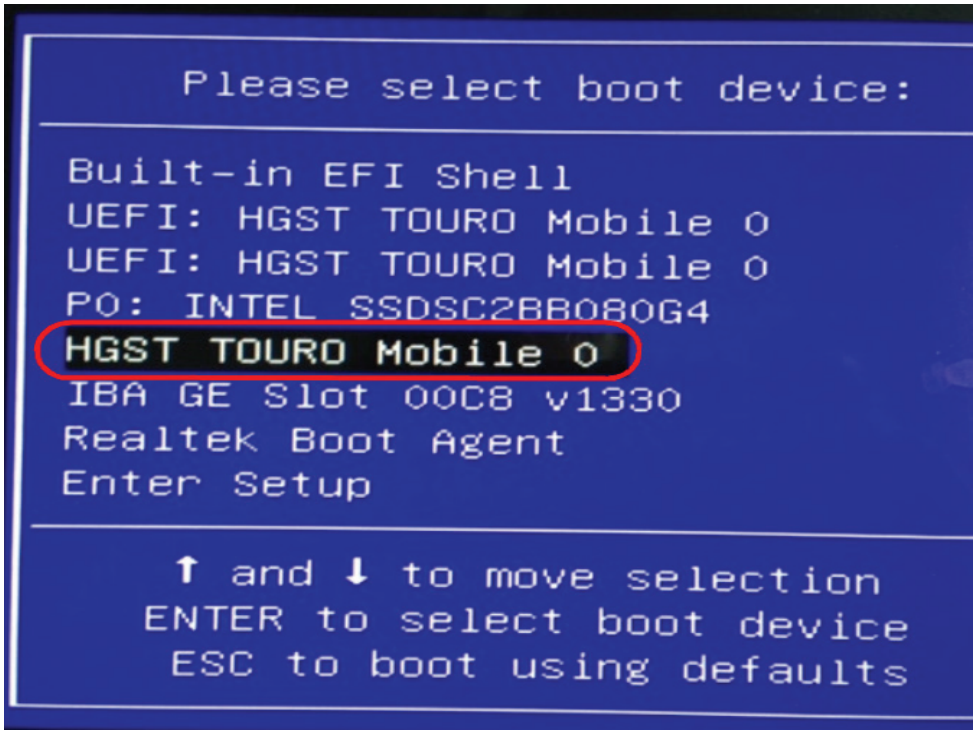
Insert the Maris ECDIS900 Backup/Restore Portable Hard Drive in the USB port of MKx PC.

2.2.2 Restart the PC

Reboot the PC so it is booting on USB:

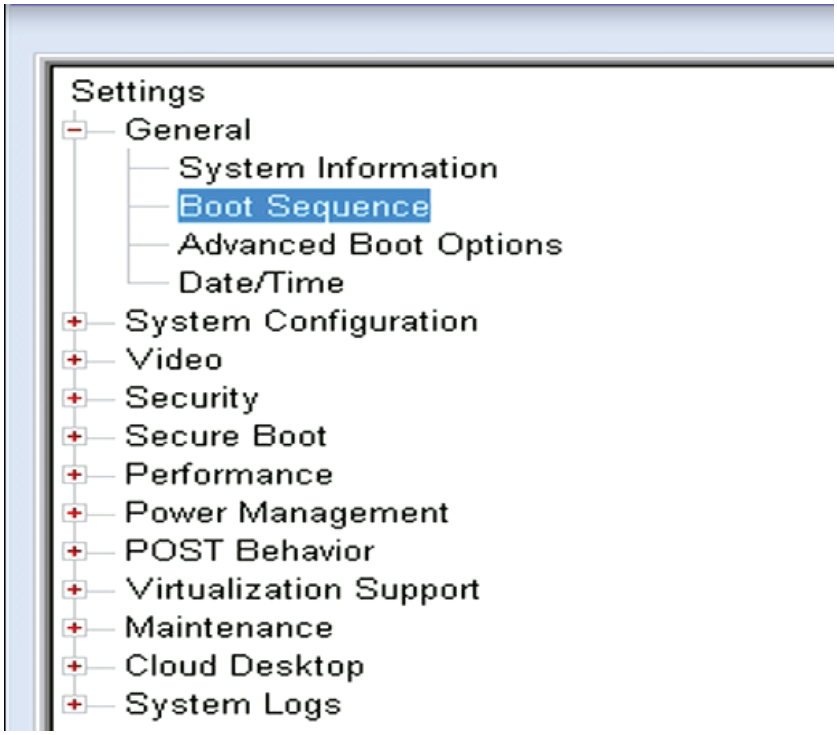
If using MK15 - Press F7 during bootup.

Select the bootable device that has been created. In the following example the bootable device is the "TOURO" USB Hard Drive:

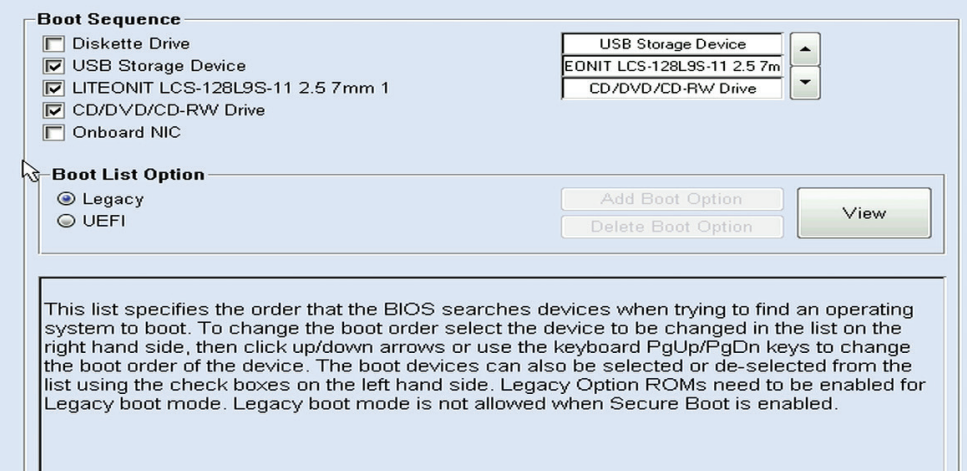


If using MK5 - Adjust BIOS of PC to prioritize booting from USB:

- Press **F2** during bootup.
- Select **Boot Sequence**.

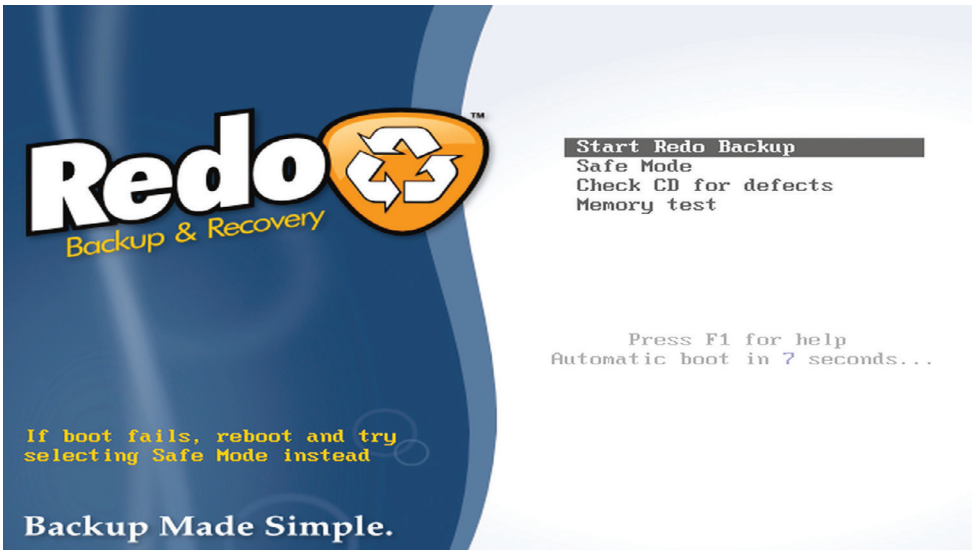


Use the arrows on the right to adjust the boot sequence as in the example below:



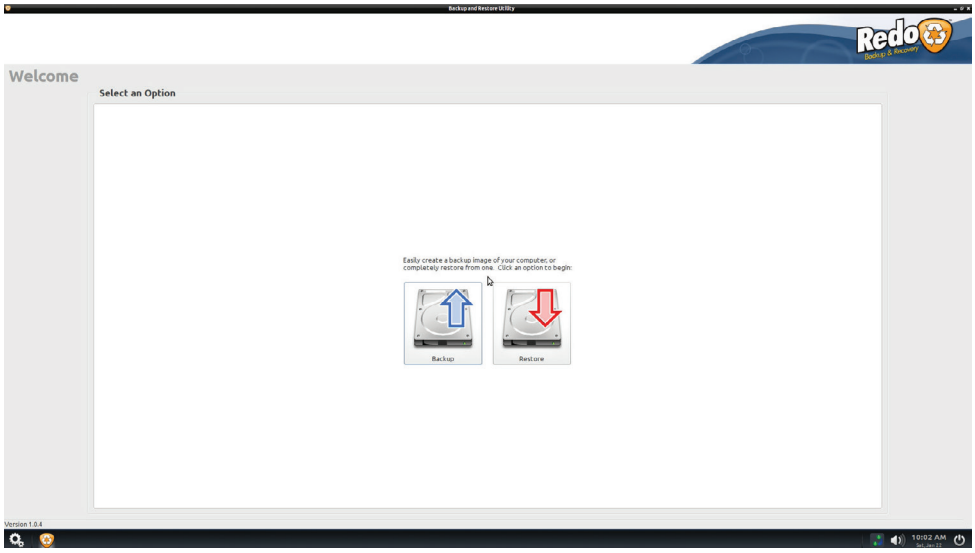
Wait a few seconds to get Redo Backup ready to start.

2.2.3 Start Redo Backup



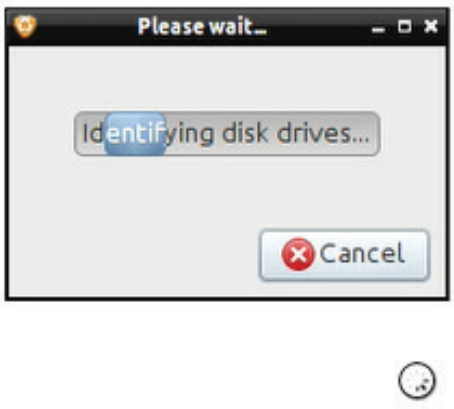
Select **Start Redo Backup** and press **Return**.

2.2.4 Backup Restore menu

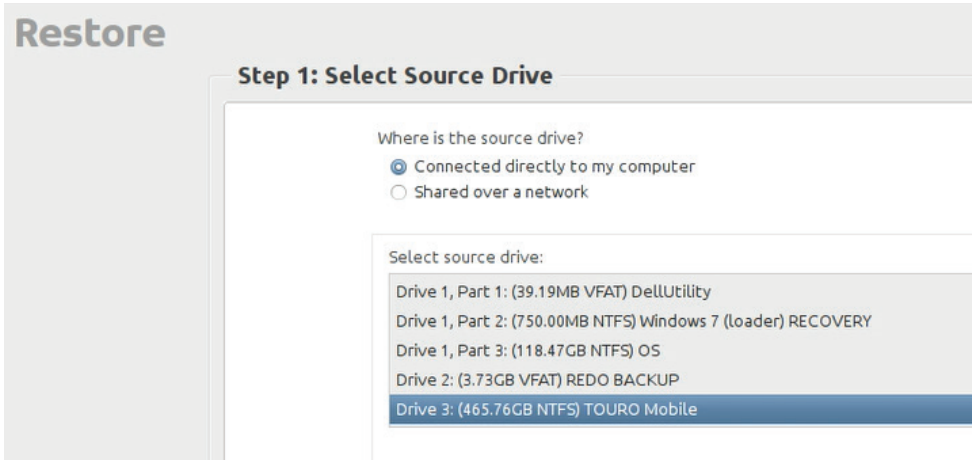


➔ ***Note:*** Up to this step Backup or Restore actions are common.

2.2.5 Start Restore



The program is identifying possible sources.



Select the correct drive on the Maris ECDIS900 Backup/Restore Portable Hard Drive:

Select the folder and press **Open.**

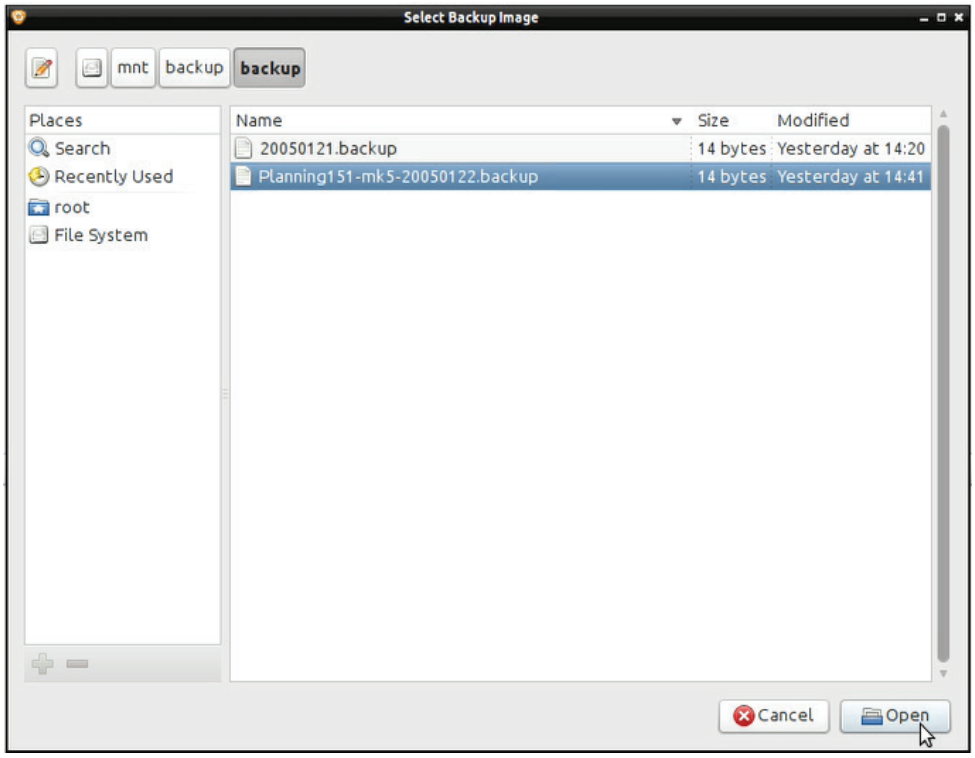
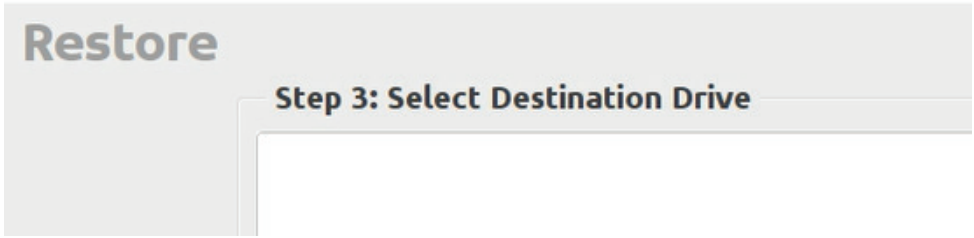


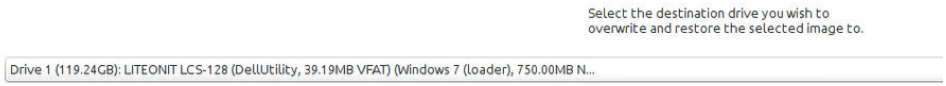
Image is located in the form of a ".backup" file.

Press **Next.**

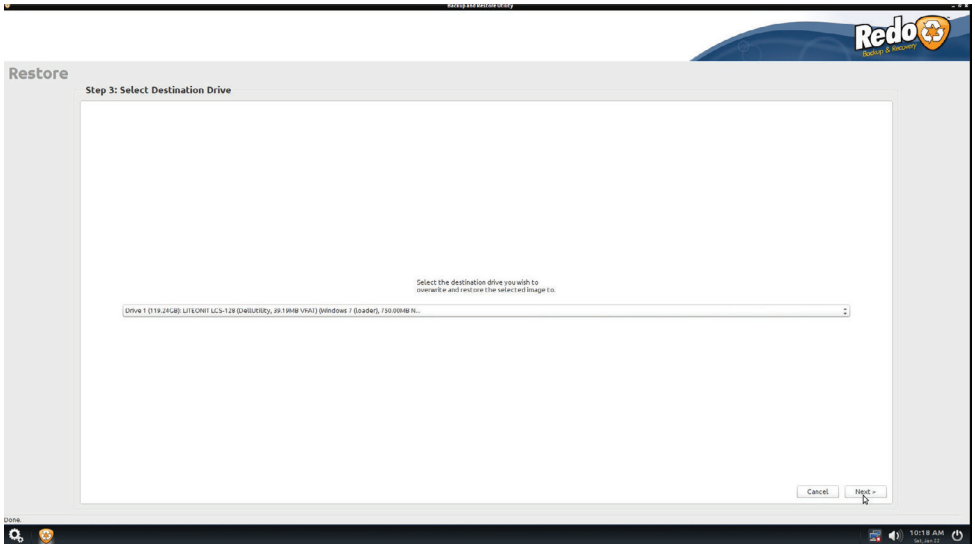
Select destination.



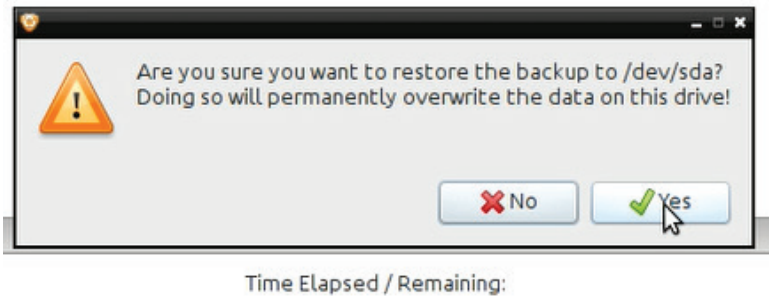
Select the destination in the list.



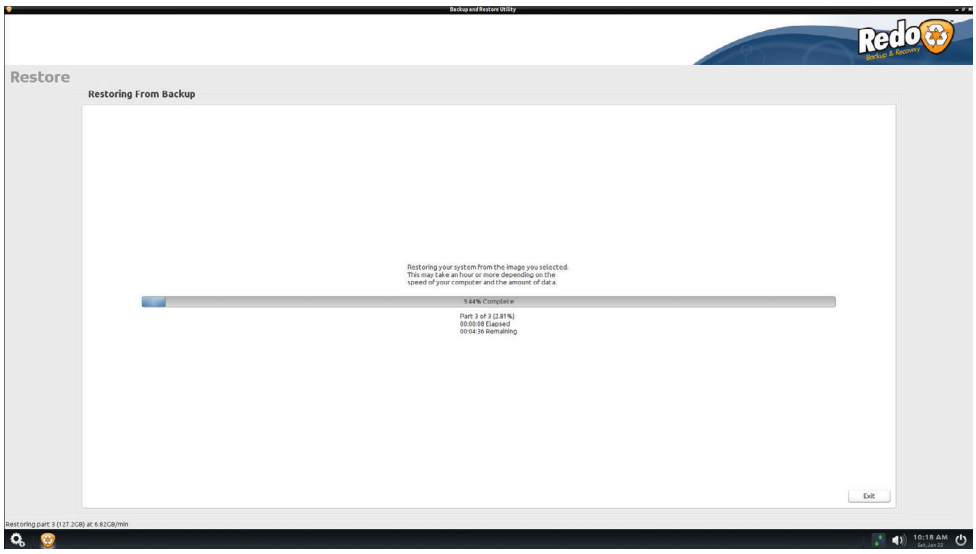
Press **Next**.



A Warning window will appear informing you that by confirming the restore backup process the Destination Drive will be overwritten.



Press **YES** and the Restore process will start:

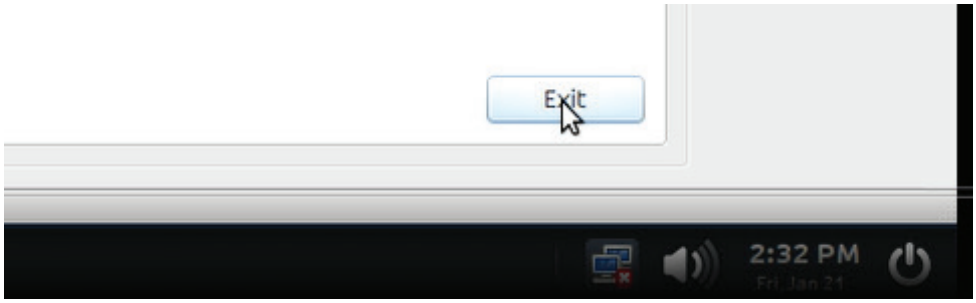


A dialog will appear letting you know the time it took for the backup to be restored:

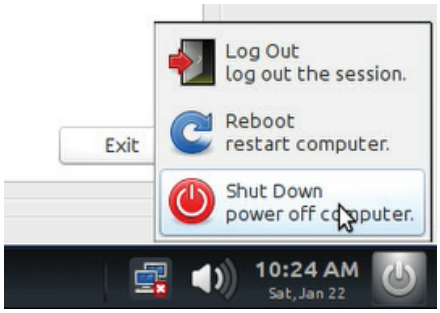
(Image took about 6 minutes to be restored in these conditions)

➔ ***Note:*** Time until backup is restored may vary depending on the amount of data in backup.

Once backup is restored press **OK** and then press **Exit**.



Power off your computer.



3. Checklist after factory image is restored

After PC is restored from backup image the system is ready and the following test should be performed:

	Action	Expected result	Result
System	Start PC	PC start with W7, ECDIS and Application Manager Icon on the desktop	
	Insert ECDIS Sentinel dongle in USB port	ECDIS dongle is recognized by the system, Green light is ON	
ECDIS	Start ECDIS	ECDIS Started Sensor Monitor started	
Sensor Monitor	Started with ECDIS	Check presence of Hatteland Display CTL : COM7 for MK5, COM1 for MK5	
ECDIS Version	Check ECDIS Version: hover cursor over "?" mark icon to view version number	Version 4.7.1.3 (SW version is given as an example)	
SM Version	Check SM version : Menu File/About	Version 3.7.2.18 (SW version is given as an example)	
MK15	New Monitor is detected	Popup window with option to download the Color table: Cancel, it will be done during installation	
MK5	Connect Serial cable between COM1 and Hatteland Monitor: New Monitor is detected	Popup window with option to download the Color table: Cancel, as it will be done during installation	

4. Backup a system

It is recommended to do a System Backup Image:

- After ECDIS PC is completely setup.
- After Sensors are created.
- After Charts are installed.
- After other software like MBA are installed.
- After Application Manager setup according to Software is installed.
- Anytime, for instance after a long period, when all charts have been updated.

It is possible to use the same Redo Backup Solution, using optional kit provided.

All steps until 2.2.4 included are common with the Restore procedure.

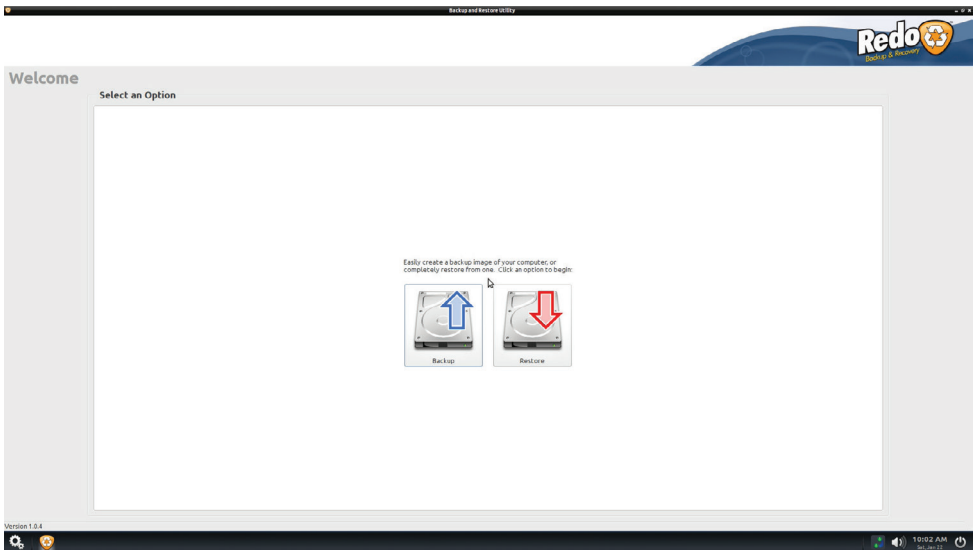
4.1 Material

The optional Simrad Maris ECDIS900 Back-up & Restore hard drive can be obtained by contacting Navico Sales (000-12719-00***n***) or refer to instructions in chapter 5 to create your own backup and restore drive. Download latest SW images from MCP (MARIS Customer Portal).

→ ***Note:*** The last digit in the part numbers marked by an -***n*** is the kits' revision code. The latest version should always be used.

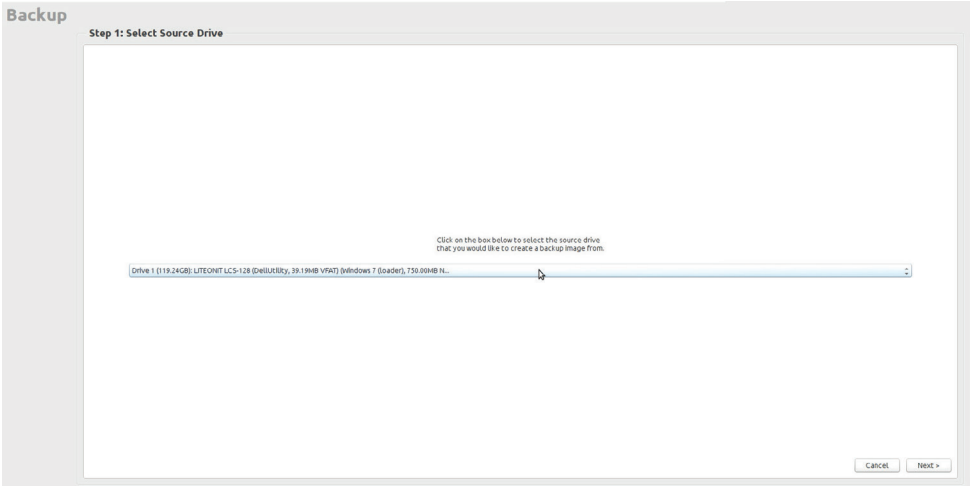
4.2 Procedure

Execute 2.2.1, 2.2.2, 2.2.3, 2.2.4.

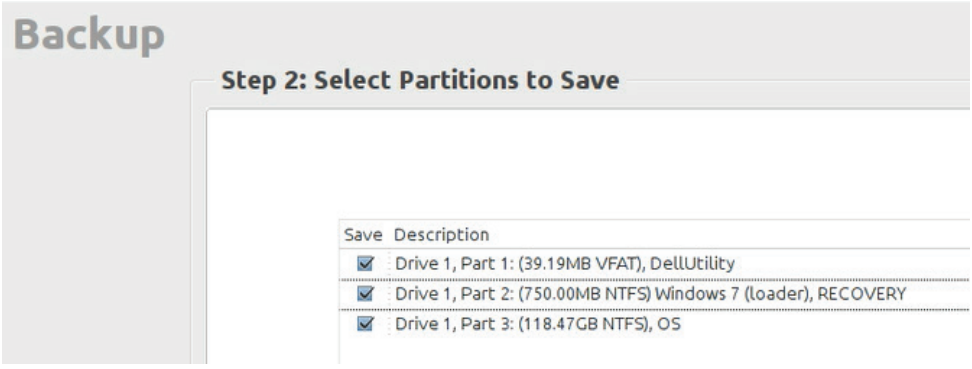


4.2.1 Select Menu Backup

Select PC Hard Drive as source and press **Next**:



Select all partitions.



Select the correct destination drive on the Maris ECDIS900 Backup/Restore Portable Hard Drive:

Browse and create a folder for Backup.

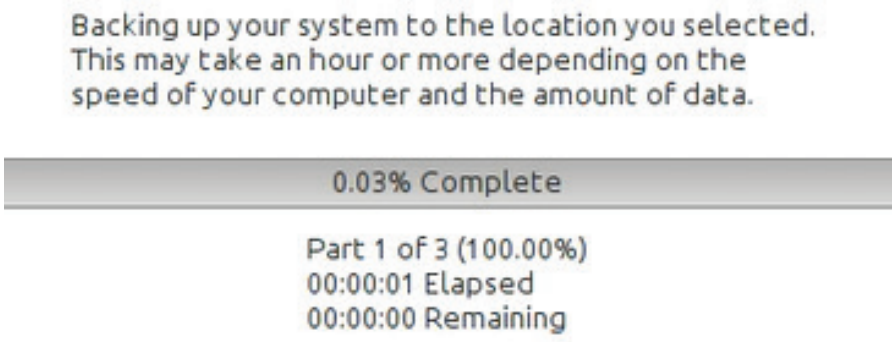
Name the file and press **Next.**

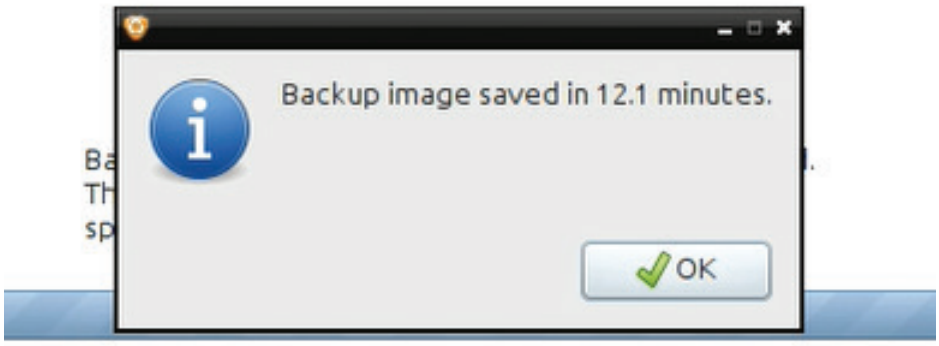
➔ ***Note:*** The Date is added by default: 20150604.

Add Information to clearly identify the system as backup.

➔ ***Note:*** Adding the date when the backup was done to the file name can be helpful in identifying the correct backup files to restore from in the future.

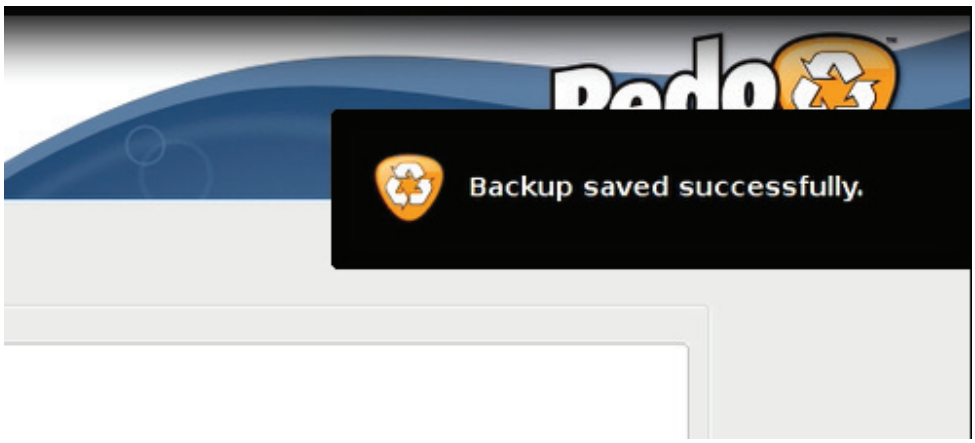
Backup will start. Wait until backup is completed.



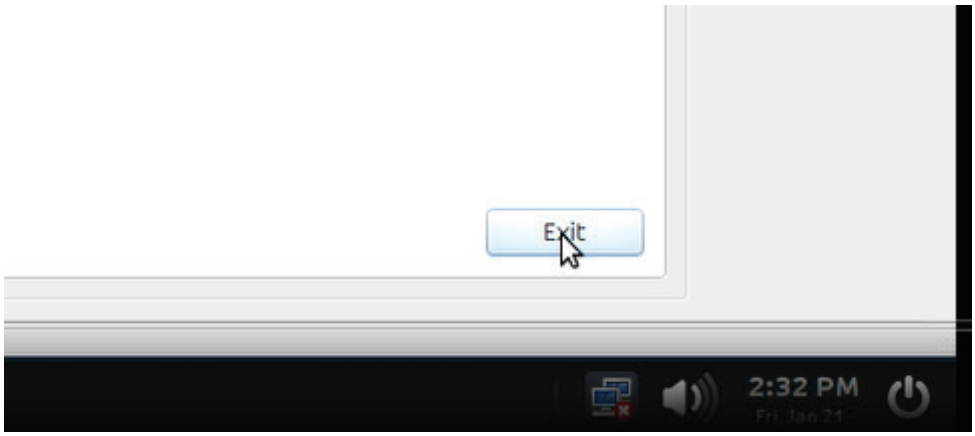


(in these conditions backup image was saved in 12 minutes)

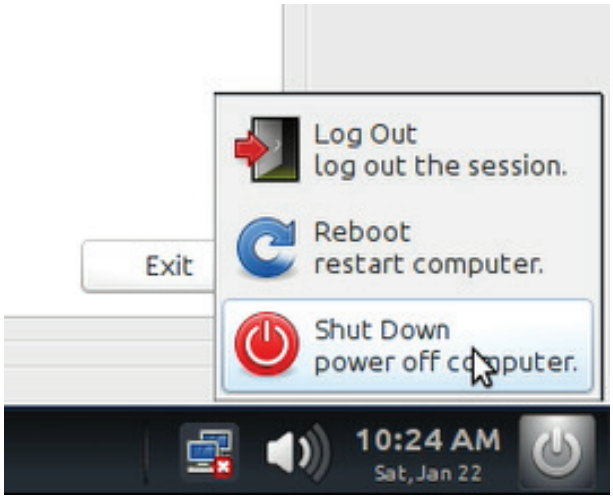
Press **OK.** A message stating "Backup saved successfully" will appear in the upper right corner of the display.



Press **Exit.**

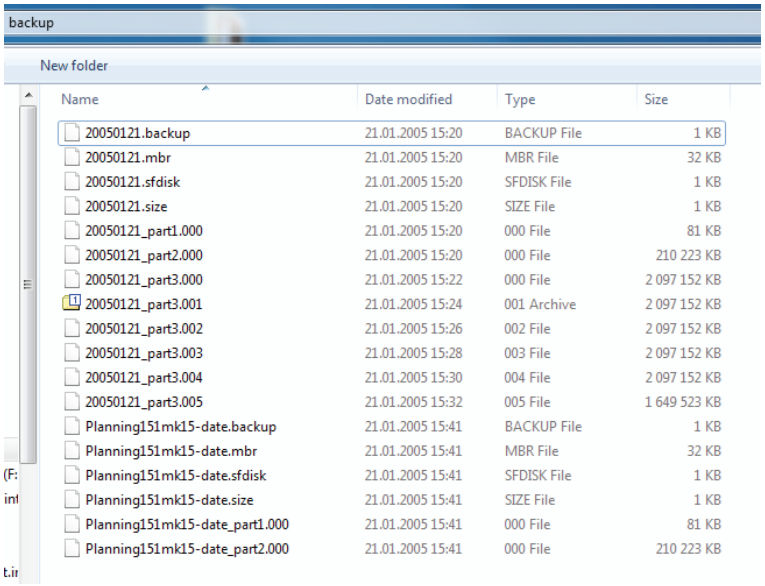


Shut Down the system as described in the Restore procedure, and remove USB devices before restarting the PC.



4.2.2 Result

Go to the specified folder on the Maris ECDIS900 Backup/Restore Portable Hard Drive to see the set of files:



5. Create a bootable USB stick with Redo Backup

5.1 Overview

1. Used Rufus 2.2.668 to make a bootable USB HDD with Redo Backup & Recovery 1.0.4
2. Resize the Redo Backup & Recovery 1.0.4 partition with MiniTool Partition Wizard Free 9.0
3. Created a new partition with MiniTool Partition Wizard Free 9.0

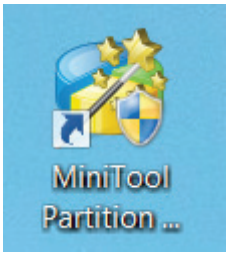
5.2 Preparation

5.2.1 Download material

Links to the software used	File details
https://rufus.akeo.ie/	rufus-2.1.exe
http://redobackup.org/	redobackup-livecd-1.0.4.iso
http://www.partitionwizard.com/free-partition-manager.html	pwfree9.exe

5.2.2 Installation

Install Partition tool on the PC. Run pwfree9.exe with default options.

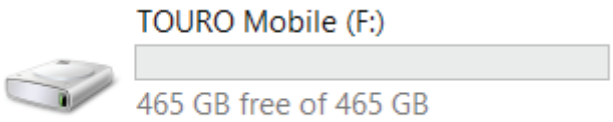


Program icon on desktop

5.3 Procedure

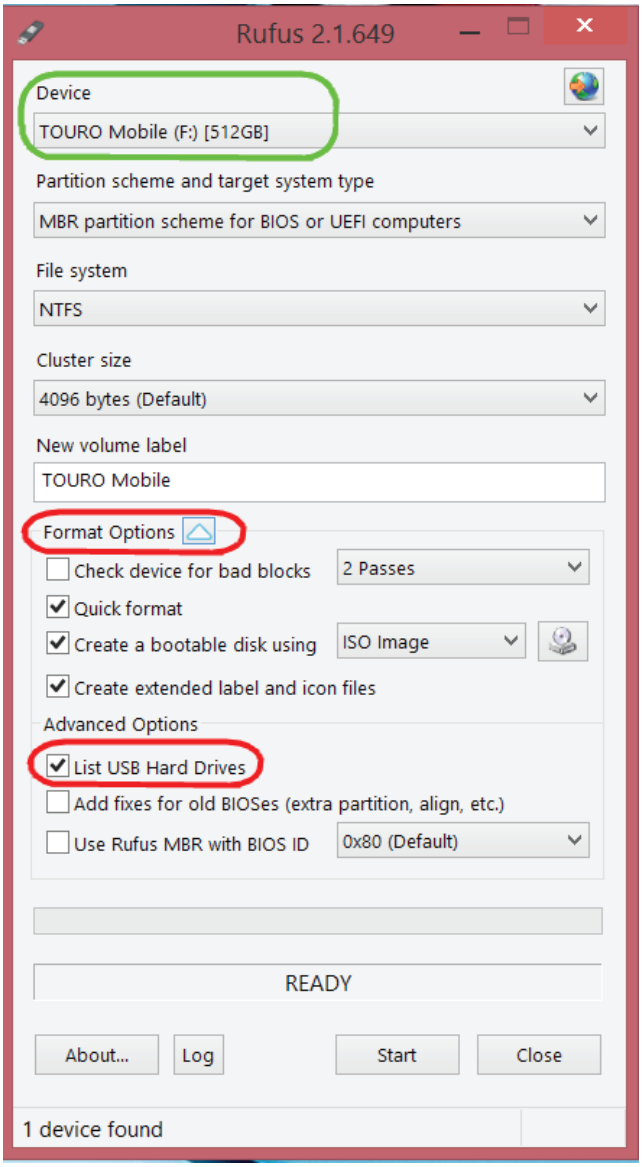
5.3.1 Bootable Maris ECDIS900 Backup/Restore Portable Hard Drive

Connect Portable Hard Drive to USB Port and identify the new Drive.

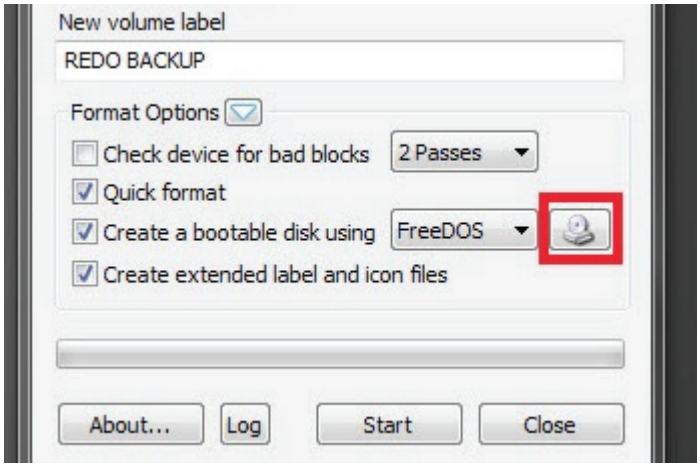


5.3.2 Install Redo Backup bootable solution on the Portable Hard Drive

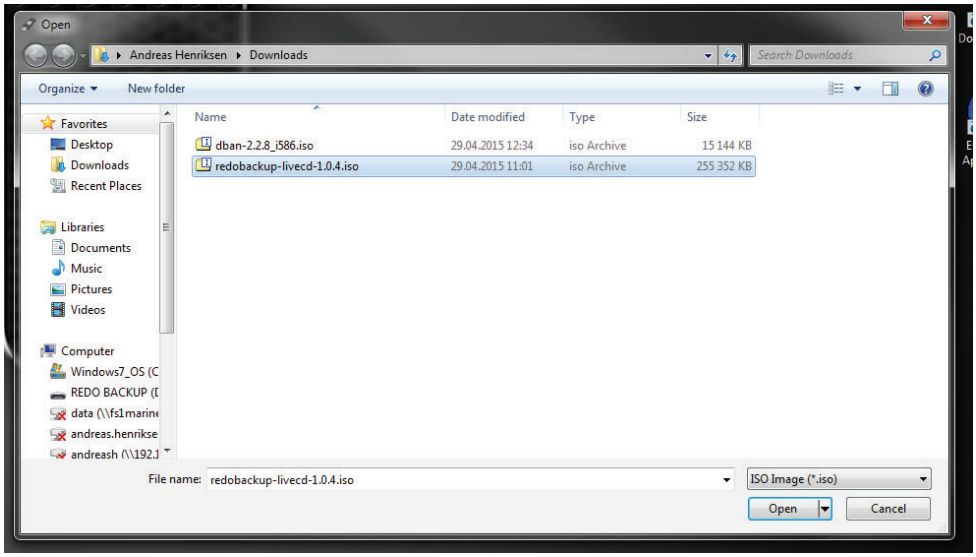
- Run Rufus 2.1
- Open "Format Options" and select the "List USB Hard Drives" check box.
- Select TOURO USB Hard Drive (will be automatically listed if only one HD is inserted in the PC).



- Select the image file for Redo 1.0.4. Use the button marked with red in the following picture:

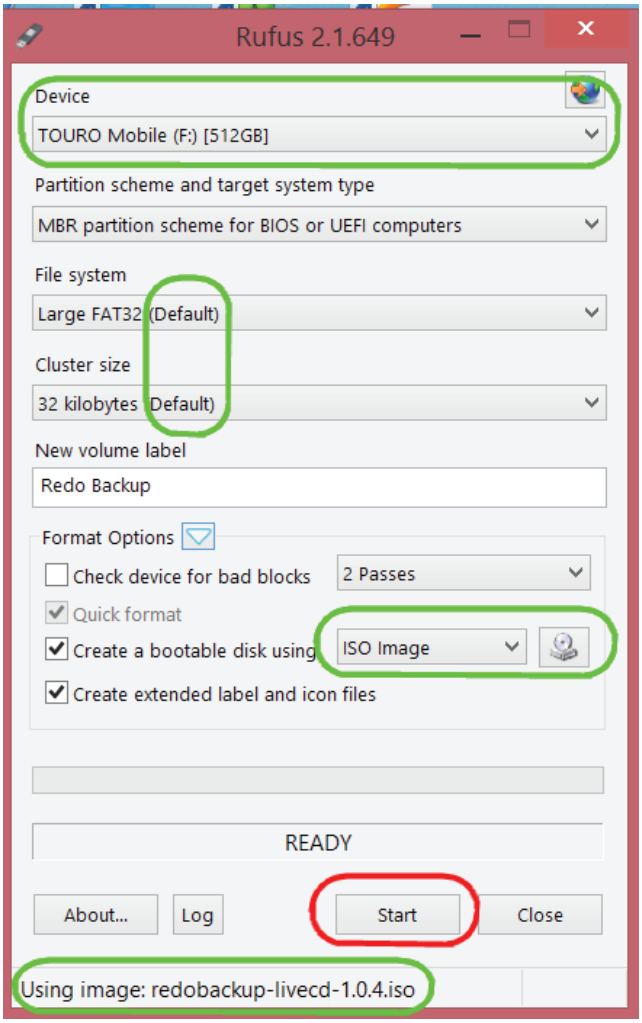


- Find the location where you stored the image for Redo 1.0.4

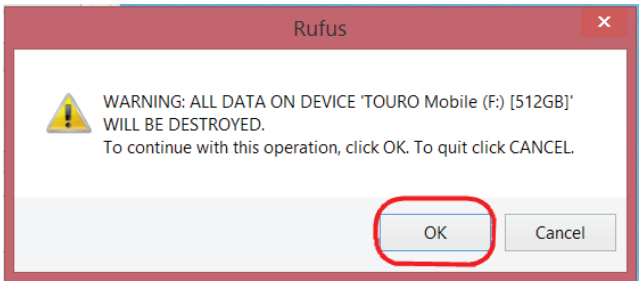


- Use the default settings for other options:

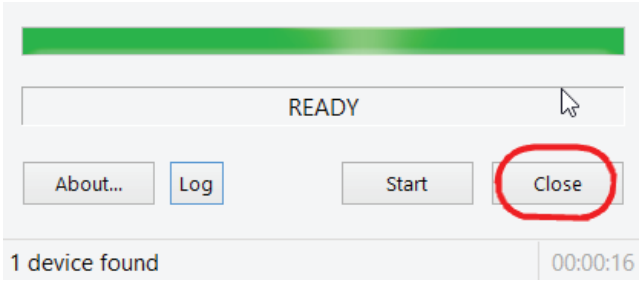
Press **Start**:

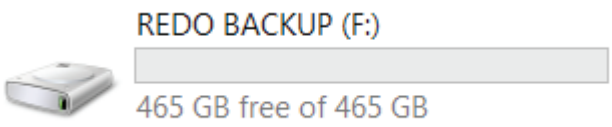


Press **OK.**



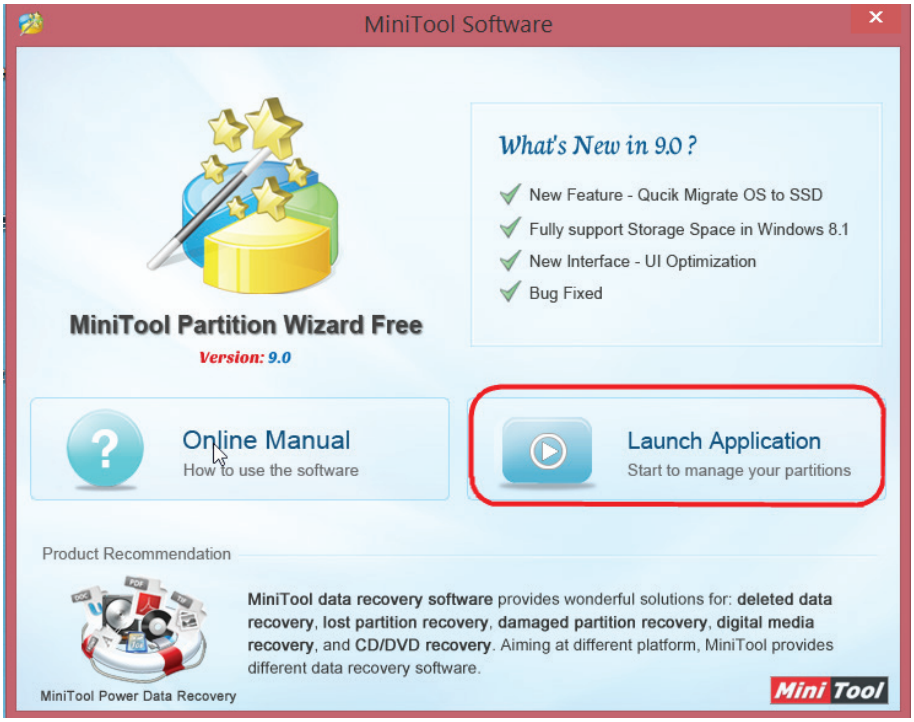
Press **Close** when ready.



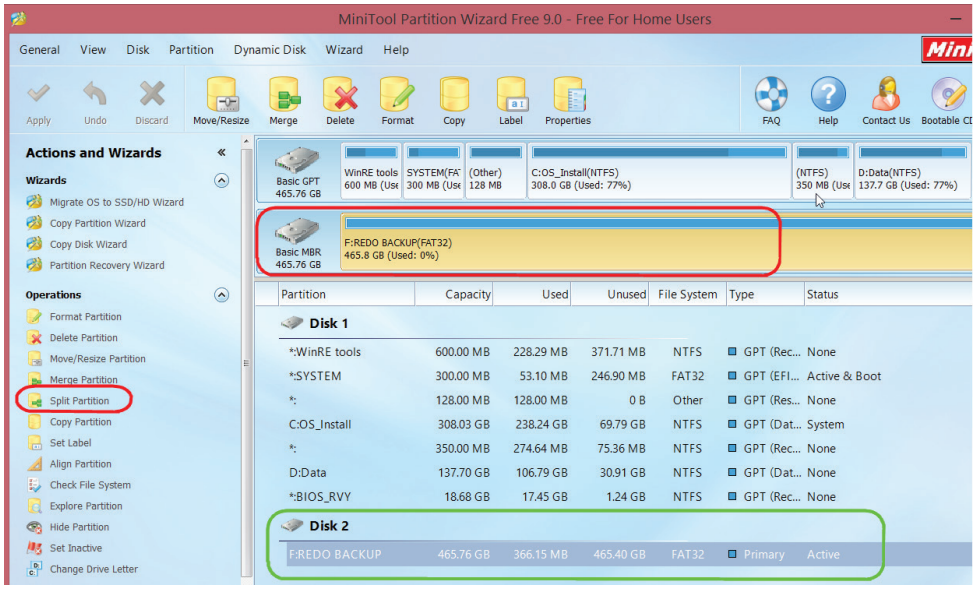


5.3.3 Create Partition

Run "Mini Tool Partition" from the Desktop and "Launch Application".

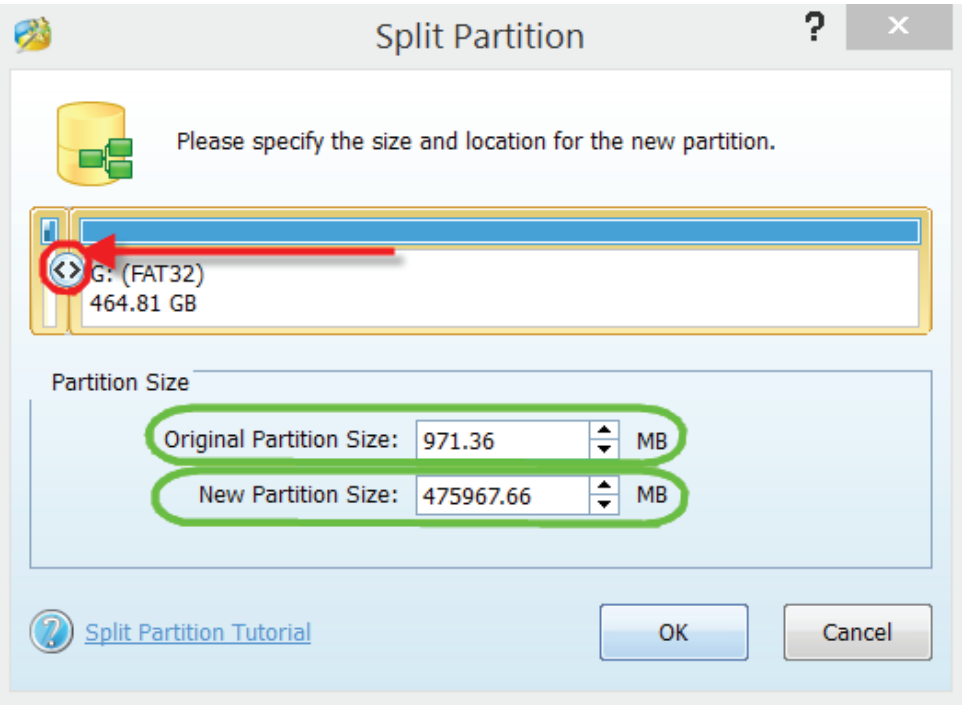


Select **Redo Backup** Drive and press **Split Partition**.



Once Split Partition window opens use the cursor to adjust the size. Move it to the maximum, on the left, to optimize Backup possibility:

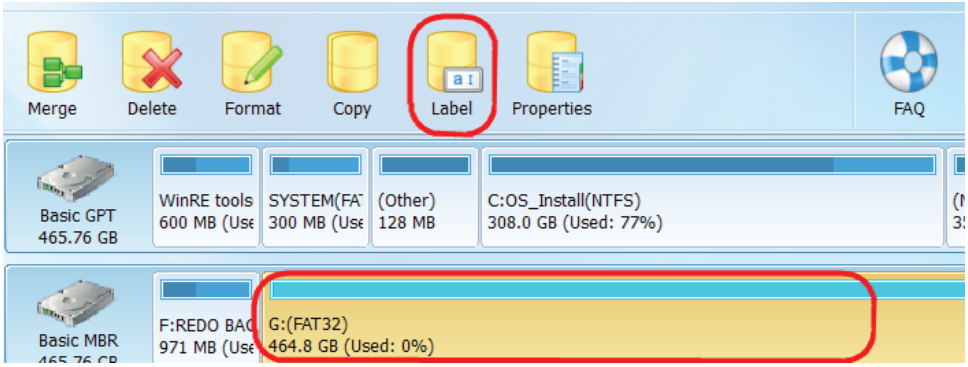
- 1GB for Redo Backup Bootable partition F.
- 475GB for the Backup (DATA) Partition G.



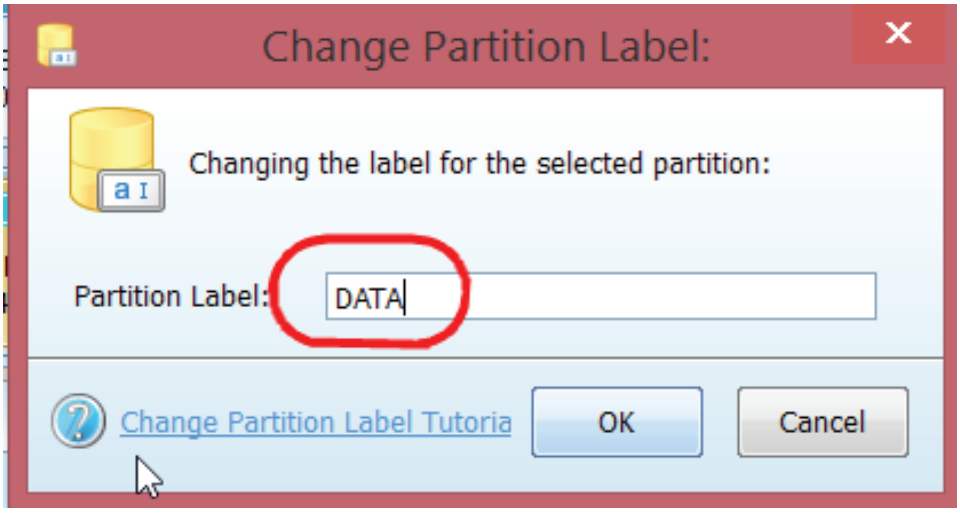
Press **OK**.

Rename Backup partition.

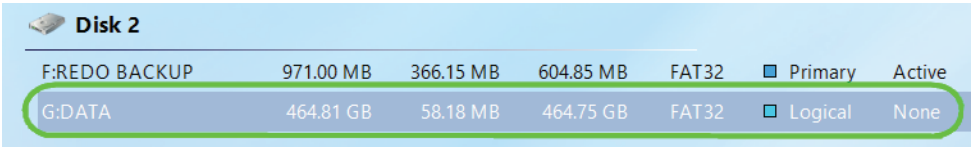
Select the new partition and press **Label**.



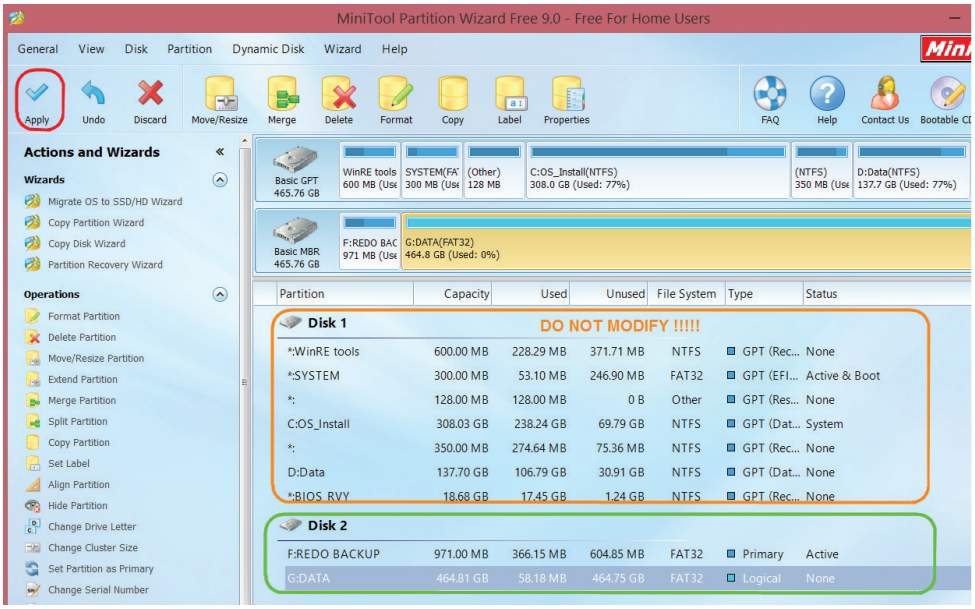
Enter "DATA" and press **OK**.



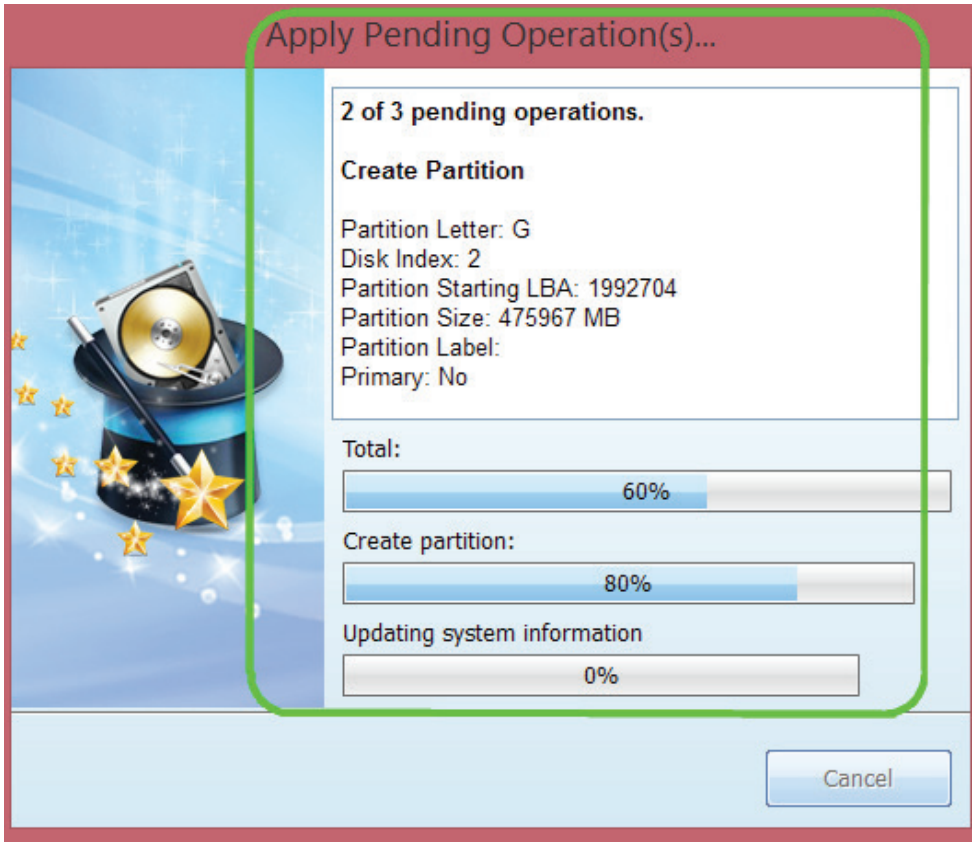
Result:



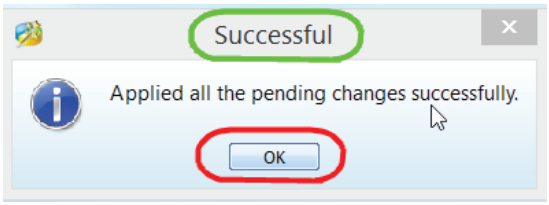
Modifications are now ready to be applied on the Hard Drive:
Press **Apply**.



Wait for the operation to be applied:



Press **OK** to complete the operation.



The Hard Drive is ready for use: 2 necessary Partitions on the same Hard Drive.

DOCUMENT STATUS				
Release	**Date**	**Paragraph(s)**	**Prepared by**	**Description of Change**
A	04/06/2015	All	Hugues VDB	First release
B	05/06/2015		Hugues VDB	Checklist after first start
C	07/08/2015		Hugues VDB	Double Partition for 1 single device (HD) solution

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