This article shows you how to independently check your system if you have received a verification error with Macrium Reflect. The verification process in Macrium reflect checks that the same data is read back as was written when the image file was created. A verification error indicates that there is a underlying problem with your system and by using a third party tool, such as ExactFile, this inconsistency can be corroborated

- 1. Download and install Exact File from <u>www.exactfile.com</u>
- 2. Have a large file (multiple gigabytes (Gb)) on the root of the drive that you are attempting to image. For the purpose of this tutorial is will be the C: drive. See below:

rganize 🔹 📑 Open	Burn	New folder		8F • 🗍 😮
Favorites Desktop		testing.txt Text Document 23 bytes	P	818034A835BBDFAA-00-00.mrimg Disk Partition Image 261 MB
Recent Places	2	.rnd RND File 1.00 KB		msdia80.dll 8.0.50727.762 Microsoft® Debug Information A
Libraries Documents Music		Program Files (x86) File folder		www.macrium.com File folder
 Pictures Videos 	M	Program Files File folder	I	Share File folder
Homegroup	I	Windows File folder	IL	boot File folder
Computer Local Disk (C:) CORSAIR (E:)	M	Users File folder	I	inetpub File folder
Network	F	HVRemote File folder	III	Intel File folder
		dell File folder	L	PerfLogs File folder
	Z	checksum_file.exe VMware installation launcher VMware, Inc.		

3. Open Exact File and ensure that 'Single File Checksums' is selected



4. Please ensure that in the 'Hash Methods' panel that only MD5 is selected.

Single <u>File</u> Checksums	File:					
<u>C</u> reate Digest	Hach Method	,				. .
<u>I</u> est Digest	Adler32	MD2	SHA1	RIPEMD128	TIGER128	
Create TestFile Applet	CRC32	MD4	SHA256	RIPEMD160	TIGER160	
Renchmark		MD5	SHA384		TIGER192	
Deneminark	GOST		SHA512			
About ExactFile						

- 5. Within Exact File click the button that is entitled '...' browse to the file large file, select it, and then click open.
- 6. The file should then appear in the 'File:' text box in Exact File. The click the 'Go' button.

Single File Checksums	File:						
<u>C</u> reate Digest	C:\checksum_f	C:\checksum_file.exe					
<u>T</u> est Digest	Hash Method	s	SHA1	RIPEMD128	TIGER128		
Create TestFile Applet	CRC32	MD4	SHA256	RIPEMD160	TIGER160		
Benchmark	GOST	MD2	SHA384		IIGER192		
About ExactFile							

7. This should then run a MD5 Hash check on the file that you have selected and pop up an Exact File Report.



8. Click on 'Copy All' in the Exact File report. Open up notepad and paste the copied information into notepad (this is the original file information)



9. You then need to copy the 'large file' from the C: drive to the drive that you want to backup to, in this tutorial it will be the E: drive, please see below:

. Share with	• Burn	New folder			11.1	0
itei	Narre		Date modified	Type	- 60	
ktop wnicada ent Places	📕 Files		67/06/2010 10:36	File heater		
ries Jurnents Sic Jures		View Sort by Group by Refresh Customize this folder	:			
egroup		Paste Paste shortcut Undo Rename	Ctri+Z			
puter al Disk (Ct)		Share with Shared Folder Synchronization New	:			
OARK (E)		Properties				

- 10. After this has finished copying please run through steps 3 to 6 again, but with the 'large file' on the backup drive (E: drive)
- 11. When the Exact File report opens up please copy the results to the notepad document UNDERNEATH the original results like below



12. If the results do not match this normally means that you have a hardware problem, for example, RAM (memory), Hard Disk controller, USB controller, USB subsystem etc...

It may also be worthwhile disabling your anti-virus / spyware software in case it is causing disk read write corruption

C:\checksum_file.exe 532132088 bytes MD5: **a6430bcc16ff7b3a29bb8da1704fc38a**

E:\checksum_file.exe 532132088 bytes MD5: **a6430bcc16ff7b3a29bb8da1704fc38a**