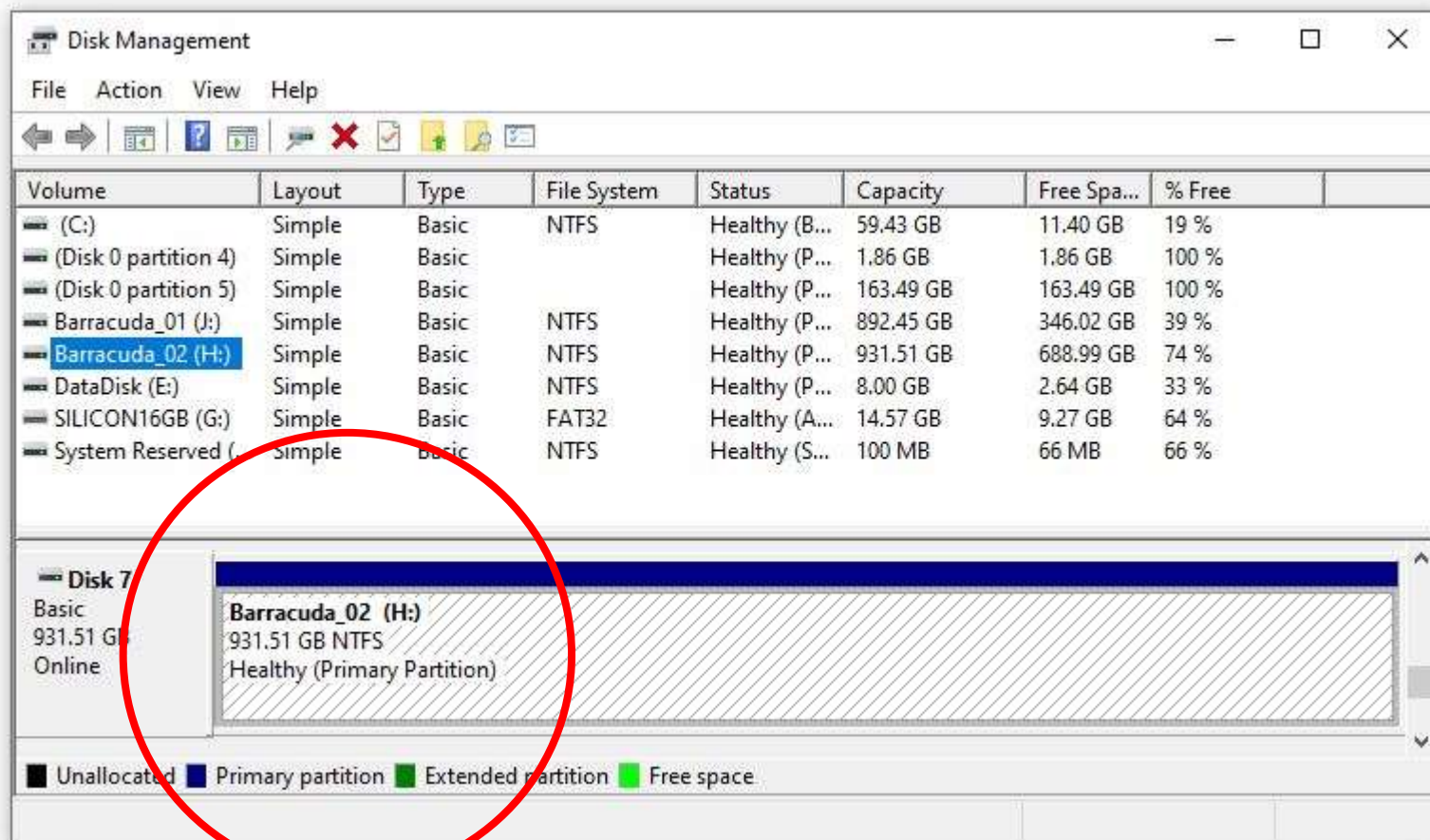




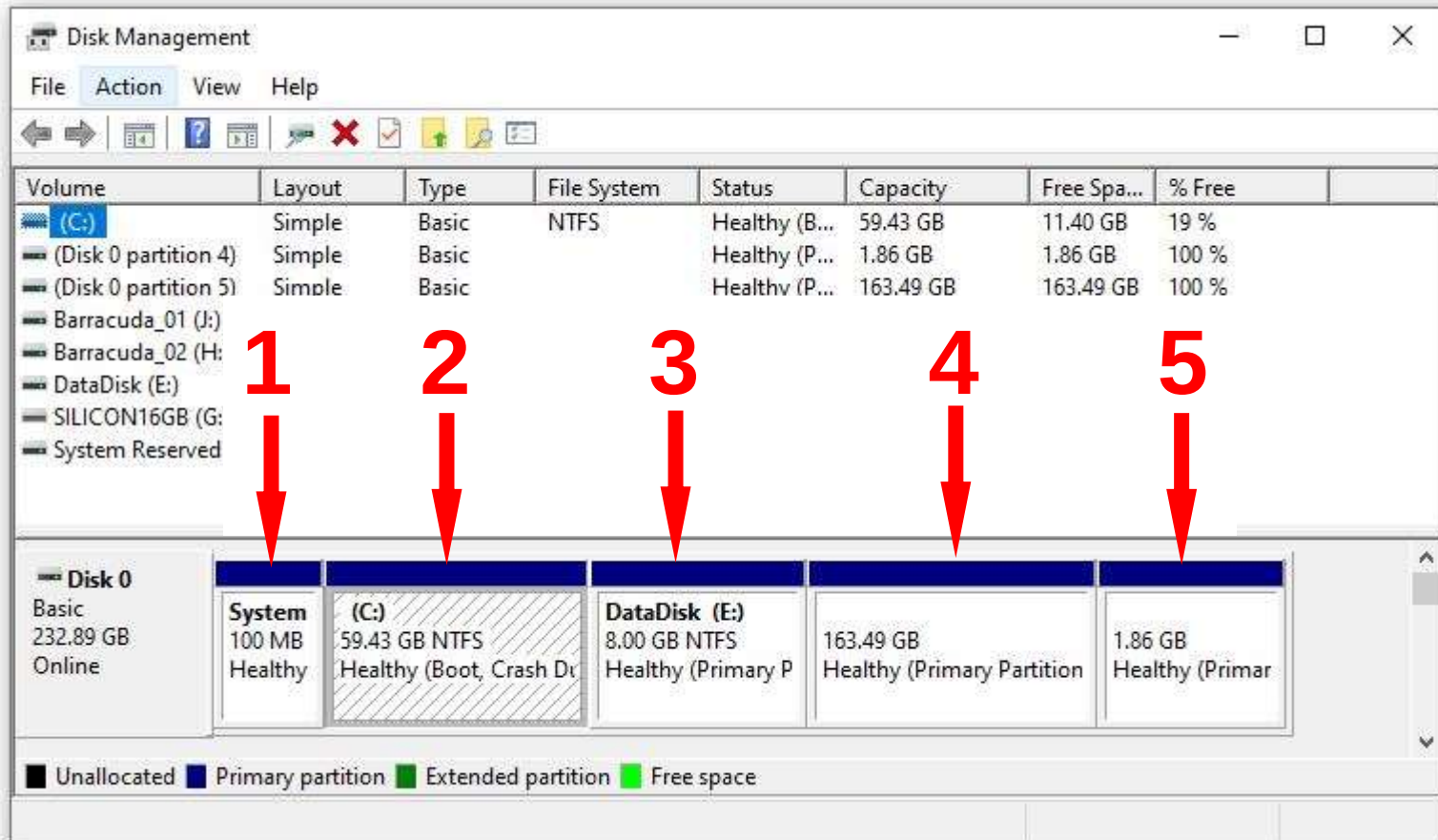
Disk Partitioning

Alan German
Ottawa PC Users' Group

Hard drives can contain a single partition...



...or several



Dedicated Data Partition

**Windows 10
(Drive C:)**

**Data
(Drive E:)**



Disk 0 Basic 232.89 GB Online				
	System 100 MB Healthy	(C:) 59.43 GB NTFS Healthy (Boot, Crash D	DataDisk (E:) 8.00 GB NTFS Healthy (Primary P	163.49 GB Healthy (Primary Partition
				1.86 GB Healthy (Primar

Dedicated Data Partition

**Data
(DataDisk)**

Linux



Disk 0 Basic 232.89 GB Online	System 100 MB Healthy	(C:) 59.43 GB NTFS Healthy (Boot, Crash D	DataDisk (E:) 8.00 GB NTFS Healthy (Primary P	163.49 GB Healthy (Primary Partition	1.86 GB Healthy (Primar
---	------------------------------------	--	--	---	----------------------------

Multiple Partitions

**Windows
Recovery**



**Linux
Swap**



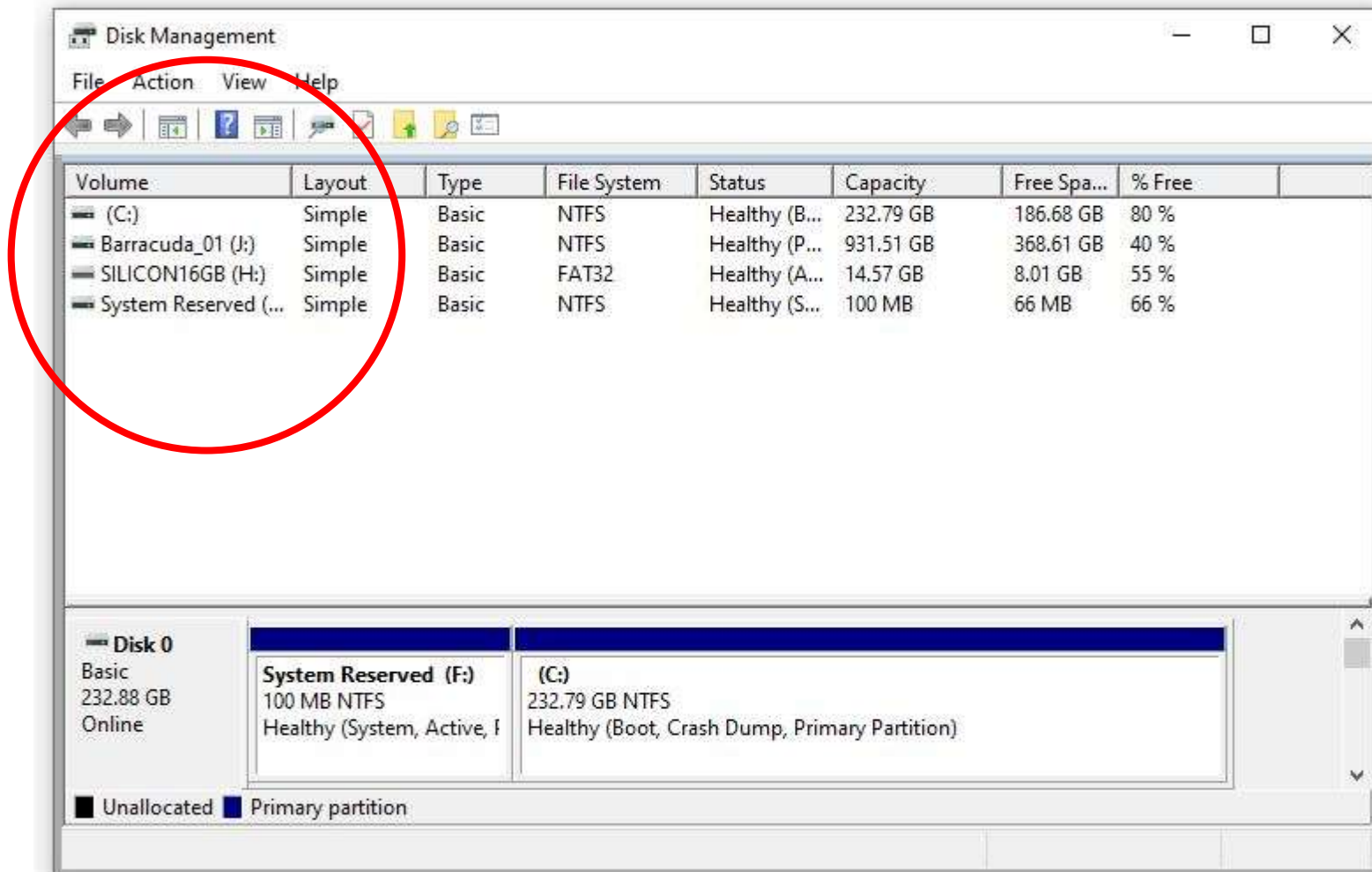
Disk 0 Basic 232.89 GB Online	System 100 MB Healthy	(C:) 59.43 GB NTFS Healthy (Boot, Crash D	DataDisk (E:) 8.00 GB NTFS Healthy (Primary P	163.49 GB Healthy (Primary Partition	1.86 GB Healthy (Primar
---	------------------------------------	--	--	---	----------------------------

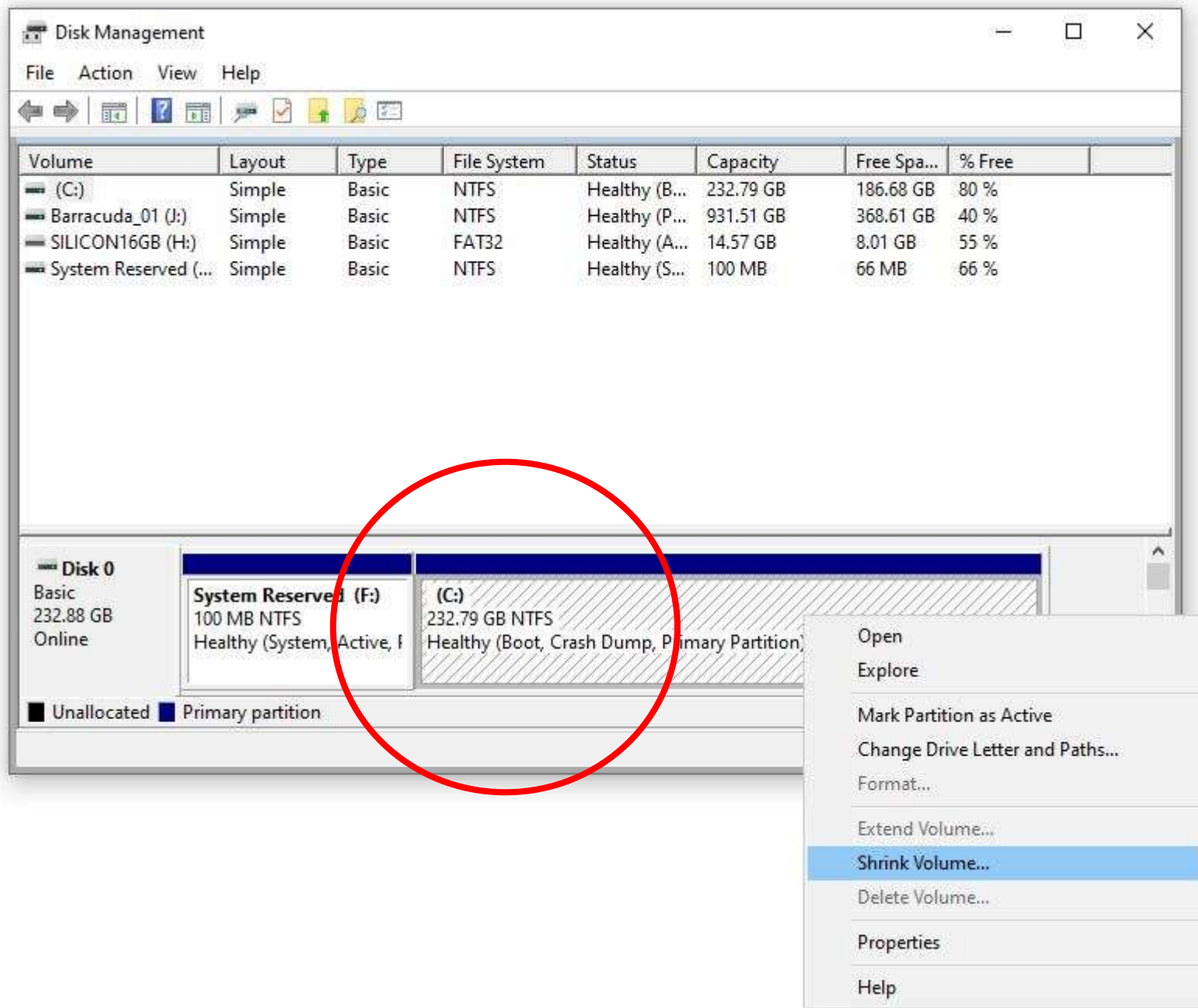
Creating a Disk Partition

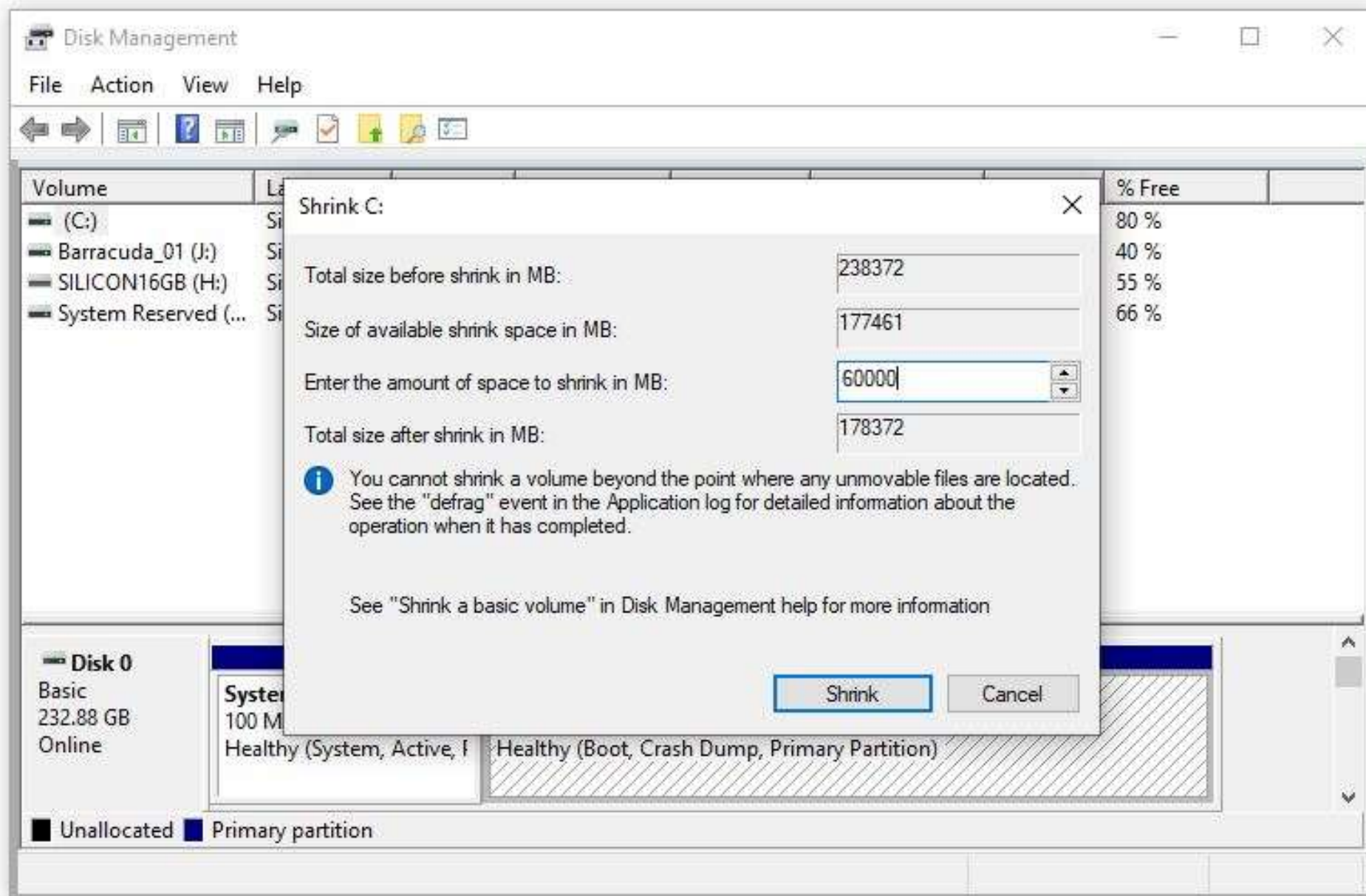
- Windows Disk Management utility
- Requires Administrator permission
- Shrink C: drive to create free (unallocated) space
- Create a “new simple volume” in the free space
- Assign a drive letter



Disk Management







Disk Management

File Action View Help



Volume	Layout	Type	File System	Status	Capacity	Free Spa...	% Free
(C:)	Simple	Basic	NTFS	Healthy (B...	174.19 GB	128.08 GB	74 %
Barracuda_01 (J:)	Simple	Basic	NTFS	Healthy (P...	931.51 GB	368.61 GB	40 %
SILICON16GB (H:)	Simple	Basic	FAT32	Healthy (A...	14.57 GB	8.01 GB	55 %
System Reserved (...)	Simple	Basic	NTFS	Healthy (S...	100 MB	66 MB	66 %

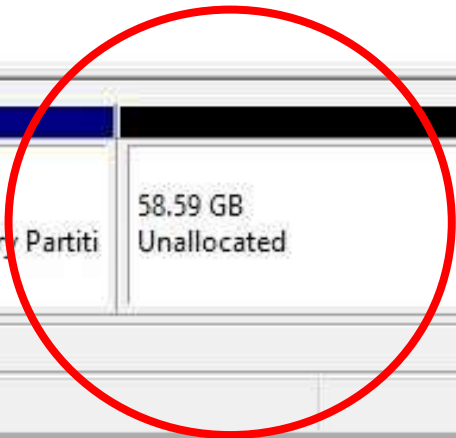
Disk 0

Basic
232.88 GB
Online

System Reser 100 MB NTFS Healthy (Syste	(C:) 174.19 GB NTFS Healthy (Boot, Crash Dump, Primary Partiti	58.59 GB Unallocated
---	--	-------------------------

■ Unallocated

■ Primary partition



Disk Management

File Action View Help

Volume	Layout	Type	File System	Status	Capacity	Free Spa...	% Free
(C:)	Simple	Basic	NTFS	Healthy (B...	174.19 GB	128.08 GB	74 %
Barracuda_01 (J:)	Simple	Basic	NTFS	Healthy (P...	931.51 GB	368.61 GB	40 %
SILICON16GB (H:)	Simple	Basic	FAT32	Healthy (A...	14.57 GB	8.01 GB	55 %
System Reserved (...)	Simple	Basic	NTFS	Healthy (S...	100 MB	66 MB	66 %

— Disk 0

Basic
232.88 GB
Online

System Reser

100 MB NTFS
Healthy (Syste

(C:)

174.19 GB NTFS
Healthy (Boot, Crash Dump, Primary Partiti

58.59 GB
Unallocated

■ Unallocated ■ Primary partition

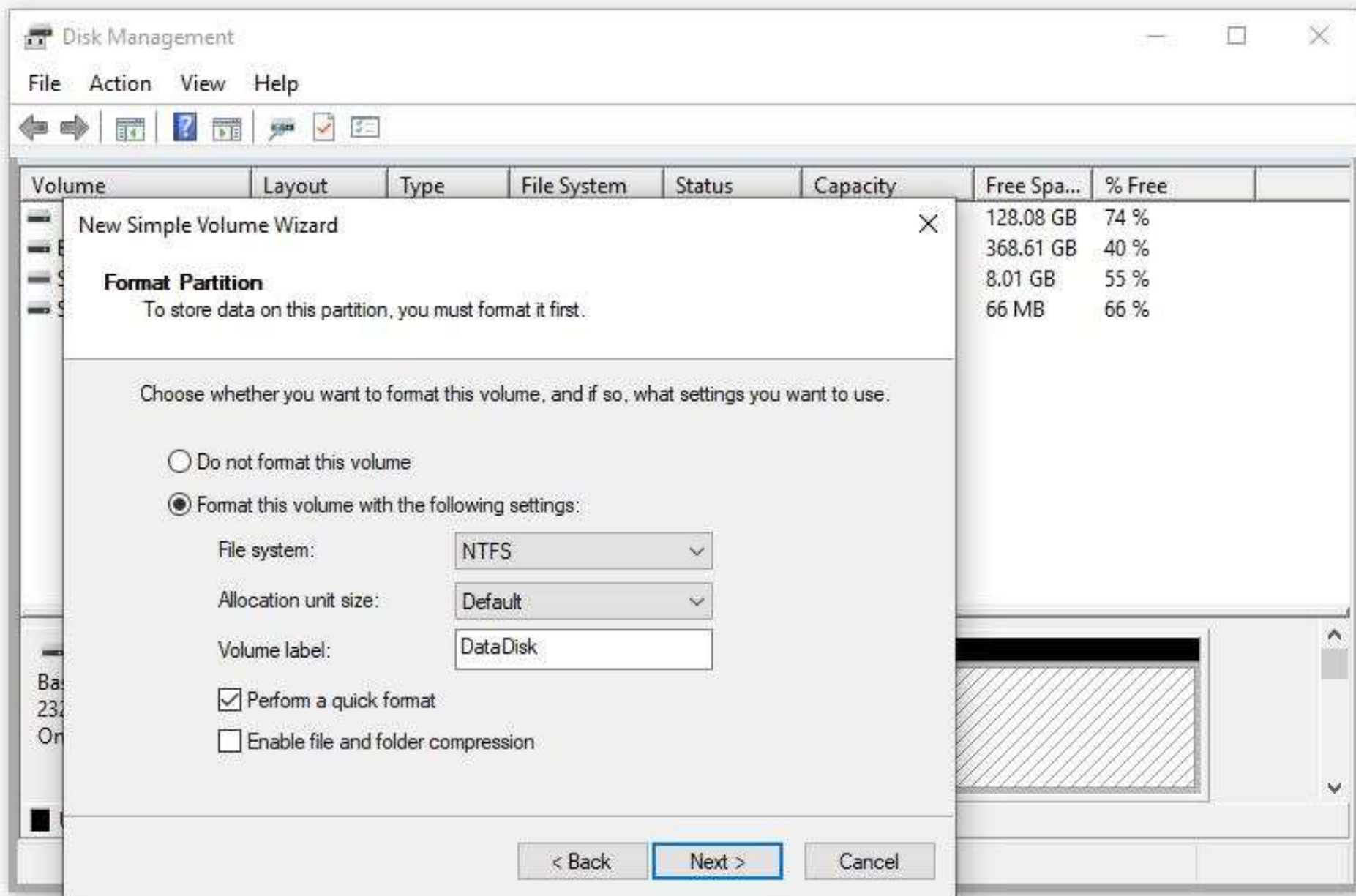
New Simple Volume...

New Spanned Volume...

New Striped Volume...

Properties

Help



Disk Management

File Action View Help



Volume	Layout	Type	File System	Status	Capacity	Free Spa...	% Free	
(C:)	Simple	Basic	NTFS	Healthy (B...	174.19 GB	128.08 GB	74 %	
Barracuda_01 (J:)	Simple	Basic	NTFS	Healthy (P...	931.51 GB	368.61 GB	40 %	
DataDisk (X:)	Simple	Basic	NTFS	Healthy (P...	58.59 GB	58.50 GB	100 %	
SILICON16GB (H:)	Simple	Basic	FAT32	Healthy (A...	14.57 GB	8.01 GB	55 %	
System Reserved (...)	Simple	Basic	NTFS	Healthy (S...	100 MB	66 MB	66 %	

Disk 0

Basic
232.88 GB
Online

System Reser
100 MB NTFS
Healthy (Syste

(C:)
174.19 GB NTFS
Healthy (Boot, Crash Dump, Primary Partiti

DataDisk (X:)
58.59 GB NTFS
Healthy (Primary Partition)

■ Unallocated ■ Primary partition

What if Disk Management Isn't Sufficient?

GParted



GParted is a GTK front-end to GNU Parted and an official GNOME partition-editing application. GParted is used for creating, deleting, resizing, moving, checking, and copying disk partitions and their file systems. [Wikipedia](#)

Written in: C++

Operating system: Linux

Stable release: 1.1 / January 20, 2020; 3 months ago

Developer(s): GParted developers

Initial release: August 26, 2004; 15 years ago

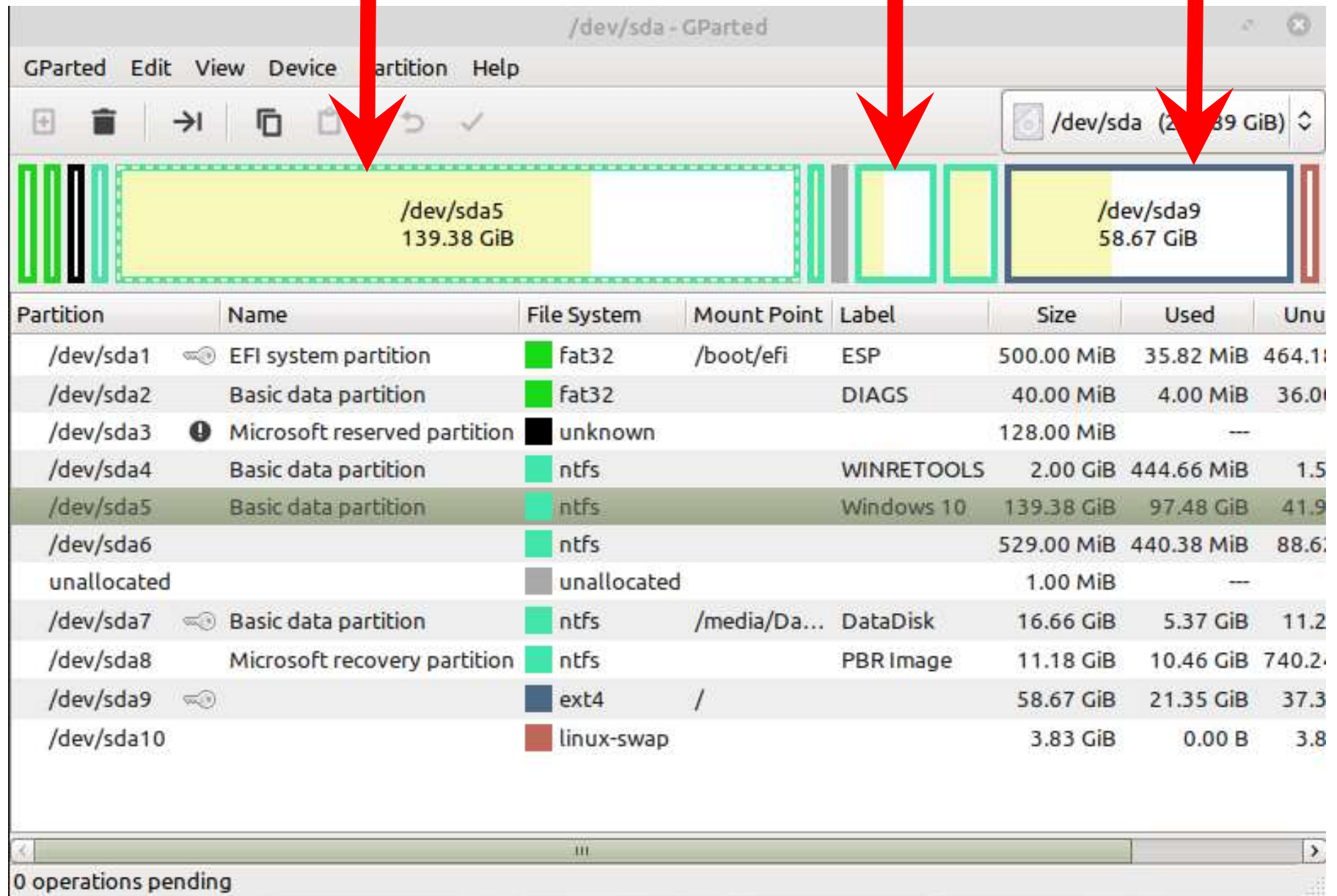
License: [GNU General Public License](#)



**Windows 10
(Drive C:)**

**Data (Drive D:
& DataDisk)**

Linux



GParted /dev/sda - GParted

Partition Name File System Mount Point Label Size Used Unu

/dev/sda1	EFI system partition	fat32	/boot/efi	ESP	500.00 MiB	35.82 MiB	464.11
/dev/sda2	Basic data partition	fat32		DIAGS	40.00 MiB	4.00 MiB	36.00
/dev/sda3	Microsoft reserved partition	unknown			128.00 MiB	---	
/dev/sda4	Basic data partition	ntfs		WINRETOOLS	2.00 GiB	444.66 MiB	1.5
/dev/sda5	Basic data partition	ntfs		Windows 10	139.38 GiB	97.48 GiB	41.9
/dev/sda6		ntfs			529.00 MiB	440.38 MiB	88.6
unallocated		unallocated			1.00 MiB	---	
/dev/sda7	Basic data partition	ntfs	/media/Da...	DataDisk	16.66 GiB	5.37 GiB	11.2
/dev/sda8	Microsoft recovery partition	ntfs		PBR Image	11.18 GiB	10.46 GiB	740.2
/dev/sda9		ext4	/		58.67 GiB	21.35 GiB	37.3
/dev/sda10		linux-swap			3.83 GiB	0.00 B	3.8

0 operations pending



Questions