Using DiskGenius to format large volumes in FAT32

Contents

Purpose

This document provides instructions on formatting large volumes (for e.g., USB drives, microSD cards, etc.) in FAT32 format using DiskGenius.
DiskGenius has its own full User Guide can be viewed here:
https://www.diskgenius.com/manual/DiskGenius_User_Guide.pdf

Download link

https://www.diskgenius.com/download.php

Tested versions

Ver 5.4.2.1239
Ver 5.4.1.1178

Recommended Hardware requirement

1 GHz x86 or compatible CPU, 512MB RAM memory, mouse and keyboard.

Supported file system

FAT12, FAT16, FAT32, exFAT, NTFS, EXT2, EXT3, EXT4.

Supported operating system

Windows 2000/XP/Vista/7/8/8.1/10, Small Business Server 2011/2003/2008, Windows home server 2011, and Windows Server 2003/2008/2008 R2/2012/2012 R2/2016/2019 (both 32bit and 64bit).

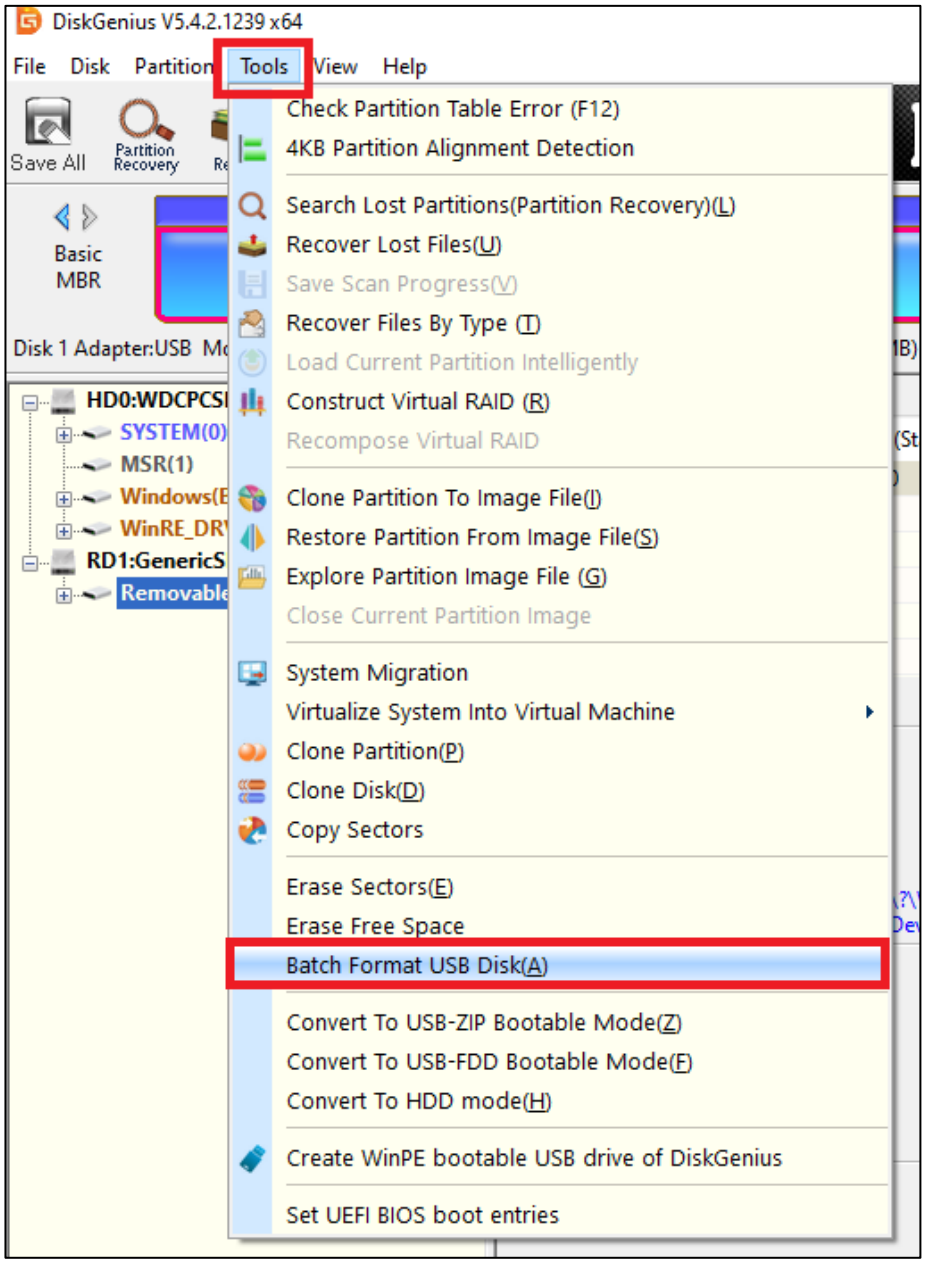
Description

DiskGenius is a versatile program packed with comprehensive functions for partition recovery, file recovery, disk management, data backup, disk utilities, etc. It manages storage space with high efficiency, recovers data lost due to disk corruption, formatting, deletion, virus attack, etc. and provides the easiest yet reliable backup solutions to let users say NO to data loss.

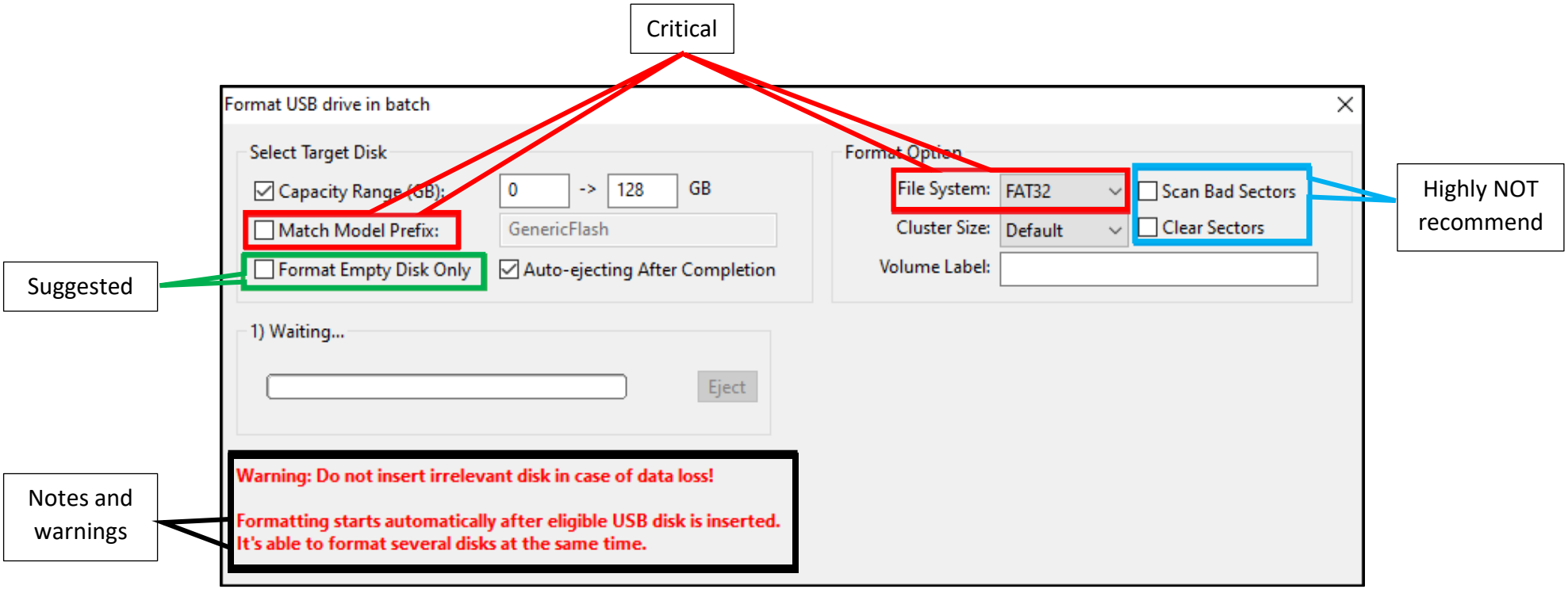
Formatting 64GB Devices to FAT32

Windows OS has a limitation when formatting a device in a volume of 64GB and over to FAT32. DiskGenius provides the means to bypass this limitation:

1. Open DiskGenius.
   1.1. click on Tools.
   1.2. click on Batch Format USB Disk(A).

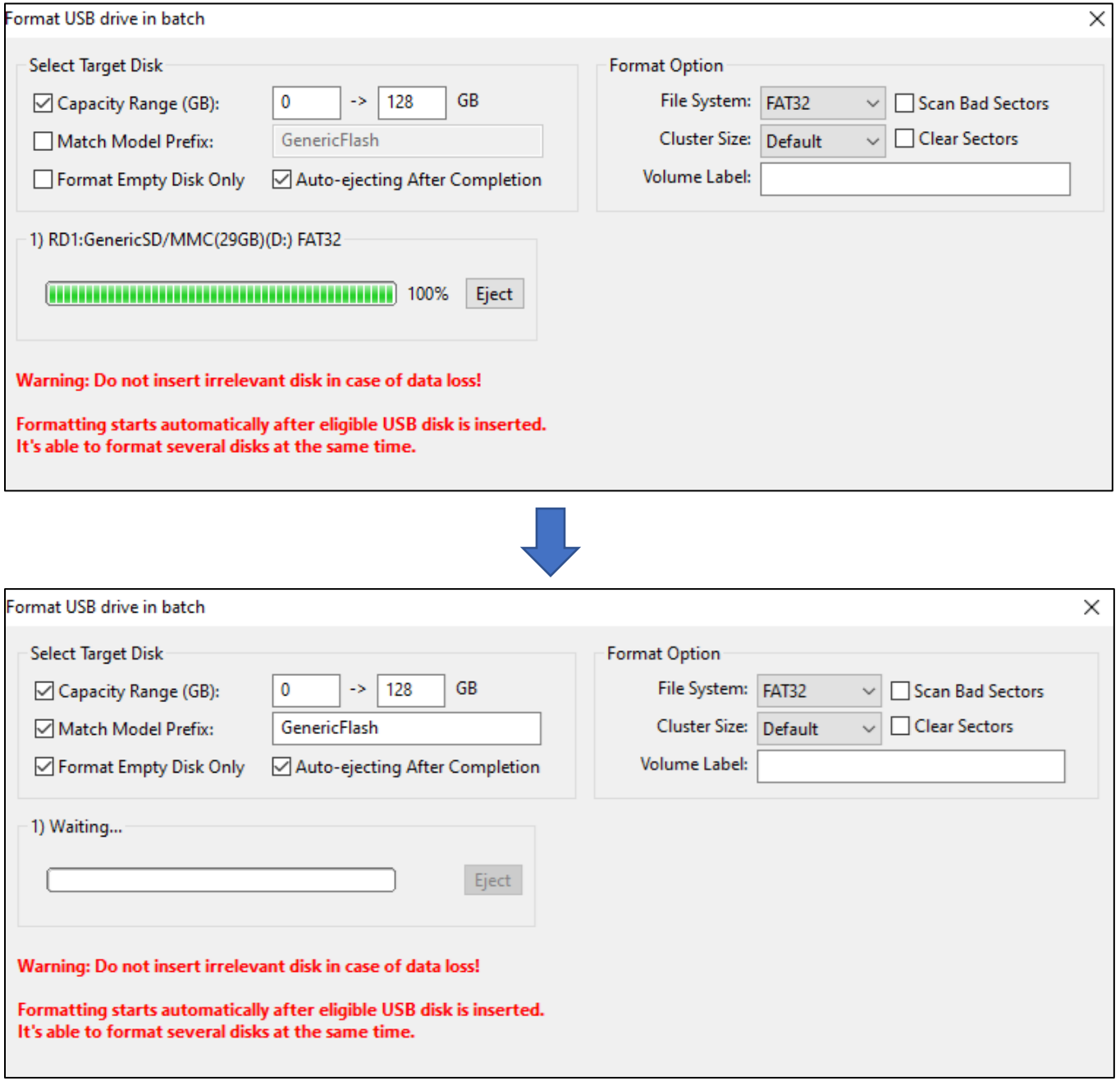


2. Once the following window opens, check the following parameters:
   2.1. **All** parameters inside of the **red squares** are critical, they **must** be set as shown!
   2.2. Both parameters inside of the **blue squares** are **highly not recommended to be checked** as they significantly slow down the formatting process.
   2.3. The parameters inside of the **green square** is suggested to be **unchecked** unless the cards already have data which is needed.
   2.4. The rest of the parameters are optional.
   2.5. Mind the notes and warning issued by DiskGenius inside of the **black squares** before starting with the formatting process(s):

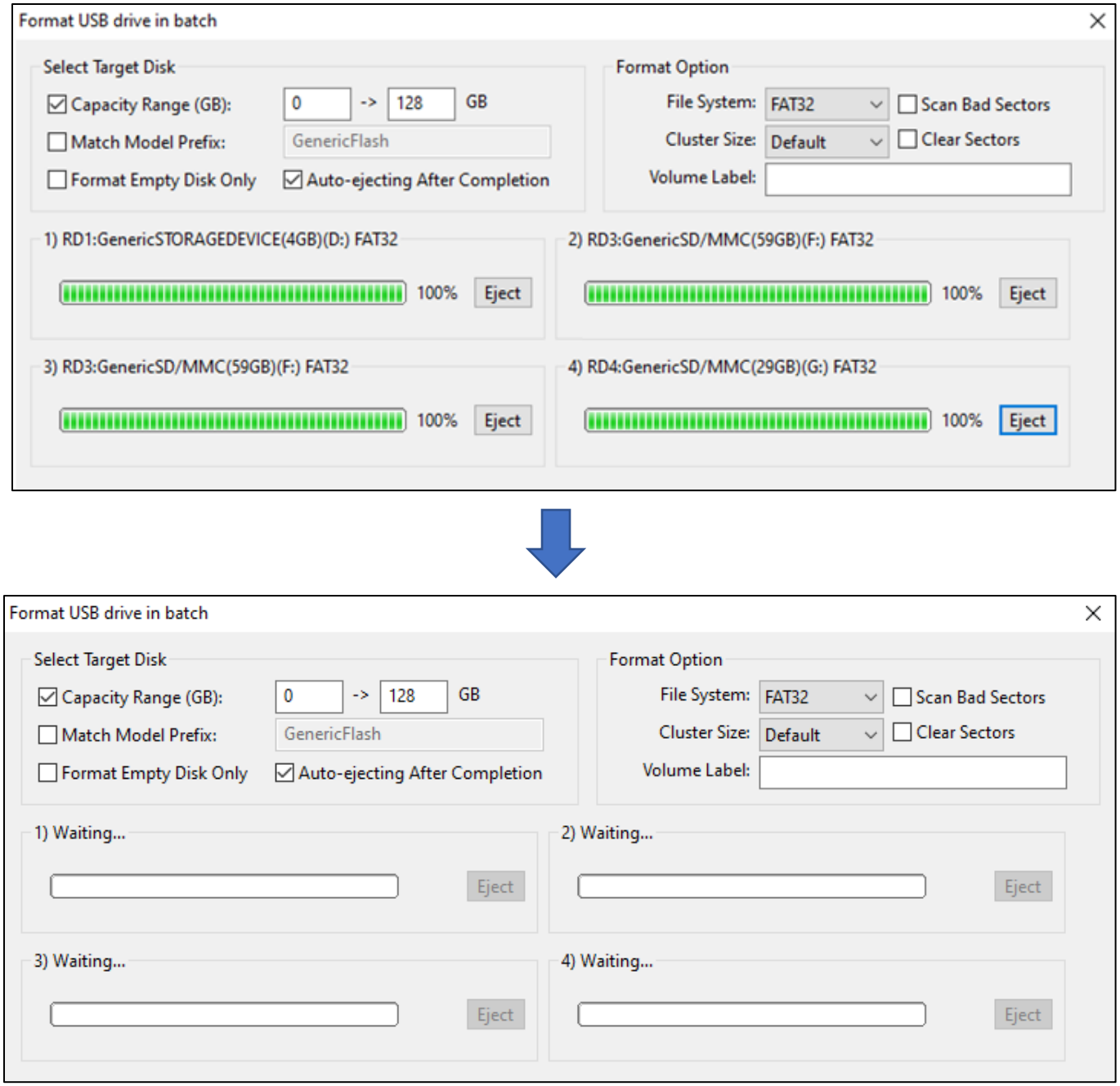


3. Once you have verified that **all** of the parameters are **correctly** set, insert a card reader with the 64GB (or more) microSD in it to a USB port.
   3.1. Up to 4 devices (USB card readers can be inserted for a parallel process.
4. DiskGenius will automatically start the formatting process(s).

5. Once a process is done DiskGenius will present a full (100%) progress bar and will return to a “Waiting…” status, for e.g.:
   5.1. A single device formatting:



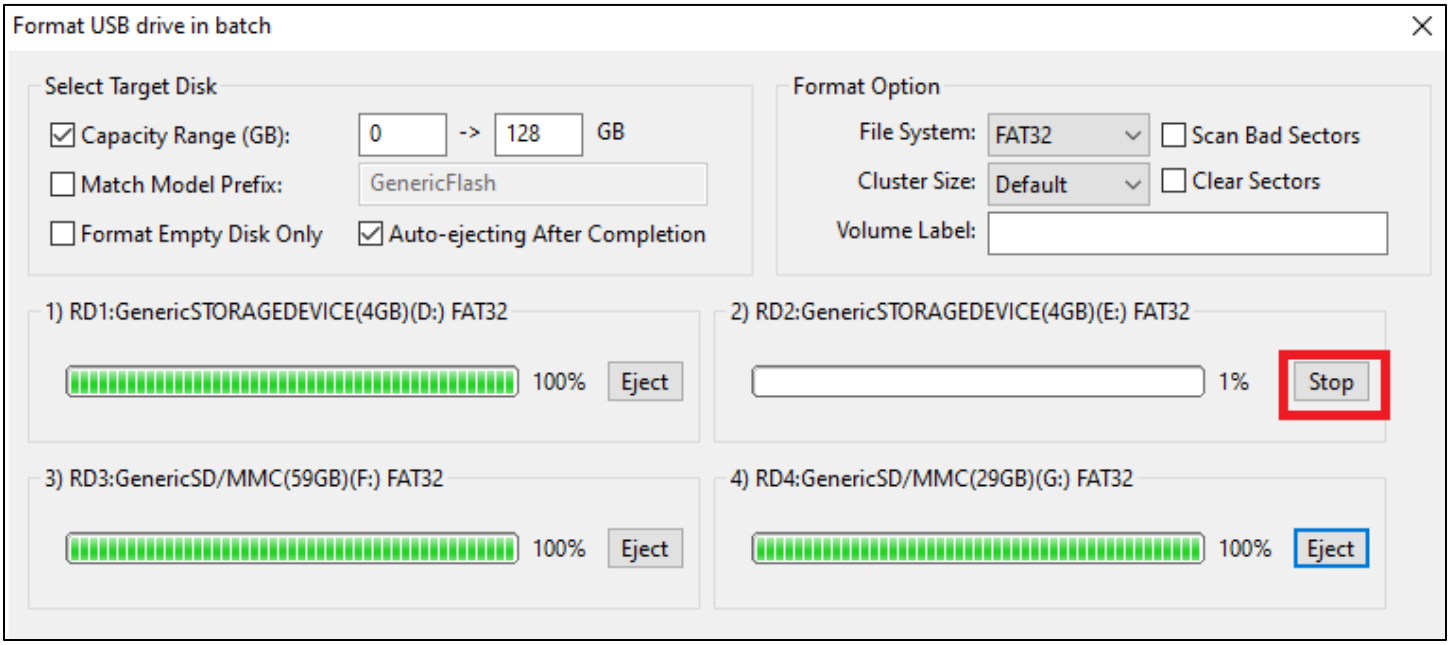
5.2. Formatting 4 devices:



6. All device(s) are auto ejected from Windows, can be unplugged from the USB port(s) and are ready for use.

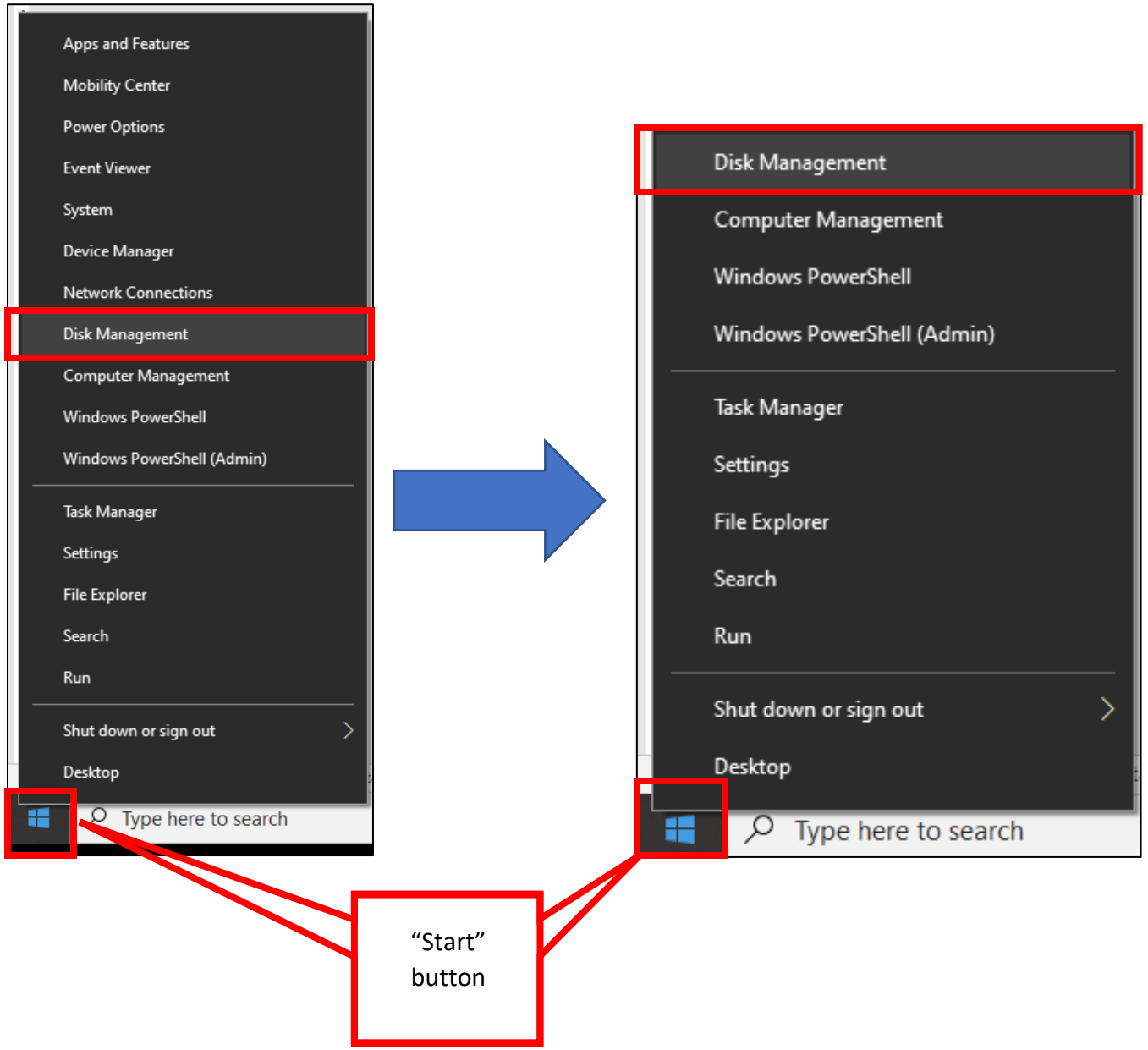
Troubleshooting

1. If during the formatting one or more formatting process are not advancing you may click on the “stop” button in order to proceed with further inspections as needed of the microSD card and/or the card reader:



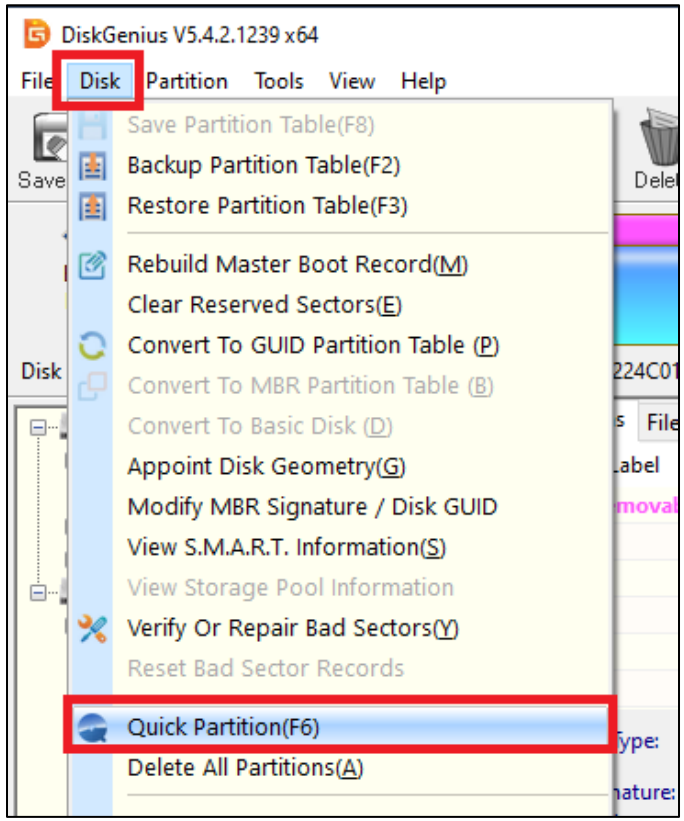
1.1. Pull the device out of the USB port and reinsert it after the other connected device(s) has been auto ejected by DiskGenius.

2. If a formatted drive is causing a device to not turn on when it's supposed to, use Windows Disk Management and check if an unallocated volume exists in the drive:
   2.1. Right mouse click on the Windows "Start" button > left mouse click on "Disk Management".

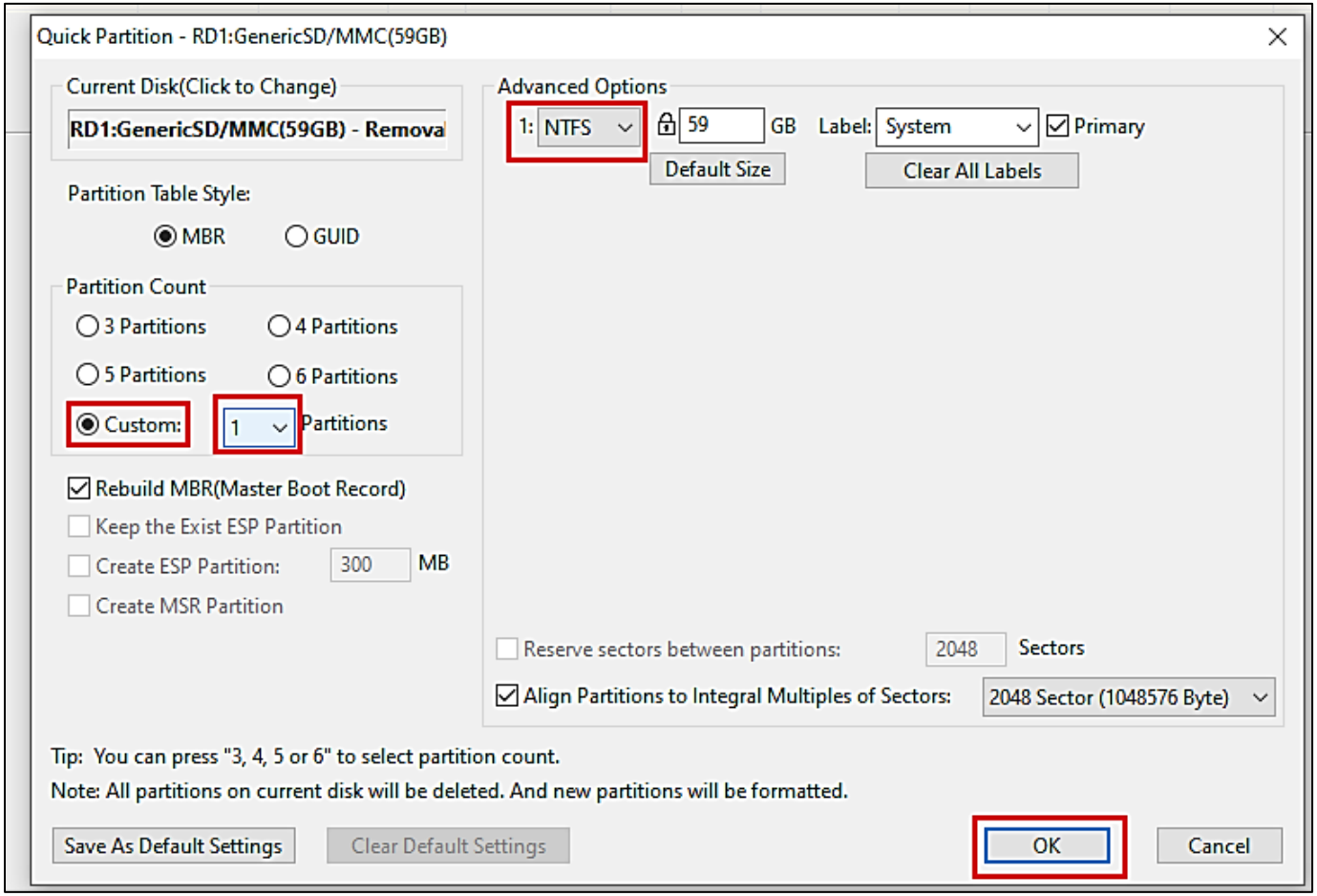


2.2. If an unlocated volume does exit in a drive it will look similarly to the one shown in the picture below:

2.3. to solve this issue open DIskGenius > left mouse click on the correct drive > left mouse click on "Disk" > left mouse click on "Quick Partition(F6)".



2.4. The following window will open, under “Partition Count” area, check “Custom” and choose 1 partition > choose the appropriate/correct format > press “OK”



2.5. When repeating stages 2.1 – 2.2 you should see that the unallocated volume doesn’t exist anymore and if so, the problem should be fixed.