

Windows 10 Help on Commands

C:\>HELP FORMAT

Formats a disk for use with Windows.

```
FORMAT volume [/FS:file-system] [/V:label] [/Q] [/L[:state]] [/A:size] [/C] [/I:state] [/X] [/P:passes]
[/S:state]
```

```
FORMAT volume [/V:label] [/Q] [/F:size] [/P:passes]
```

```
FORMAT volume [/V:label] [/Q] [/T:tracks /N:sectors] [/P:passes]
```

```
FORMAT volume [/V:label] [/Q] [/P:passes]
```

```
FORMAT volume [/Q]
```

volume Specifies the drive letter (followed by a colon),
mount point, or volume name.

/FS:filesystem Specifies the type of the file system (FAT, FAT32, exFAT,
NTFS, UDF, ReFS).

/V:label Specifies the volume label.

/Q Performs a quick format. Note that this switch overrides /P.

/C NTFS only: Files created on the new volume will be compressed
by default.

/X Forces the volume to dismount first if necessary. All opened
handles to the volume would no longer be valid.

/R:revision UDF only: Forces the format to a specific UDF version
(1.02, 1.50, 2.00, 2.01, 2.50). The default
revision is 2.01.

/D UDF 2.50 only: Metadata will be duplicated.

/L[:state] NTFS Only: Overrides the default size of file record.
By default, a non-tiered volume will be formatted with small
size file records and a tiered volume will be formatted with
large size file records. /L and /L:enable forces format to
use large size file records and /L:disable forces format to
use small size file records.

/A:size Overrides the default allocation unit size. Default settings

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NTFS supports 512, 1024, 2048, 4096, 8192, 16K, 32K, 64K, 128K, 256K, 512K, 1M, 2M.

FAT supports 512, 1024, 2048, 4096, 8192, 16K, 32K, 64K, (128K, 256K for sector size > 512 bytes).

FAT32 supports 512, 1024, 2048, 4096, 8192, 16K, 32K, 64K, (128K, 256K for sector size > 512 bytes).

exFAT supports 512, 1024, 2048, 4096, 8192, 16K, 32K, 64K, 128K, 256K, 512K, 1M, 2M, 4M, 8M, 16M, 32M.

Note that the FAT and FAT32 files systems impose the following restrictions on the number of clusters on a volume:

FAT: Number of clusters ≤ 65526

FAT32: $65526 < \text{Number of clusters} < 4177918$

Format will immediately stop processing if it decides that the above requirements cannot be met using the specified cluster size.

NTFS compression is not supported for allocation unit sizes above 4096.

/F:size Specifies the size of the floppy disk to format (1.44)

/T:tracks Specifies the number of tracks per disk side.

/N:sectors Specifies the number of sectors per track.

/P:count Zero every sector on the volume. After that, the volume will be overwritten "count" times using a different random number each time. If "count" is zero, no additional overwrites are made after zeroing every sector. This switch is ignored when /Q is specified.

/S:state Specifies support for short filenames (enable, disable)
Short names are disabled by default

/TXF:state Specifies txf is enabled/disabled (enabled, disabled)

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`/I:state` ReFS only: Specifies whether integrity should be enabled on the new volume. "state" is either "enable" or "disable"
Integrity is enabled on storage that supports data redundancy by default.

`/DAX[:state]` NTFS Only: Enable direct access storage (DAX) mode for this volume. In DAX mode, the volume is accessed via the memory bus, boosting IO performance. A volume can be formatted with DAX mode only if the hardware is DAX capable.
State can specify "enable" or "disable". `/DAX` is considered as `/DAX:enable`.

`/LogSize[:size]` NTFS Only: Specifies the size for NTFS log file in kilobytes. The minimum supported size is 2MB, so specifying size smaller than 2MB will result in a 2MB log file. Zero indicates the default value which generally depend on the volume size.

`/NoRepairLogs` NTFS Only: Disables NTFS repair logs. If the flag is set `spotfix` (i.e. `chkdsk /spotfix`) will not work.