

NAME

ntfsfallocate – preallocate space to a file on an NTFS volume

SYNOPSIS

ntfsfallocate [*options*] -l *length* *device* *file* [*attr-type* [*attr-name*]]

DESCRIPTION

ntfsfallocate preallocates space for any attribute of a file or directory, thus reserving space before actual contents is written. This is similar to fallocate(1).

OPTIONS

Below is a summary of all the options that **ntfsfallocate** accepts. Nearly all options have two equivalent names. The short name is preceded by - and the long name is preceded by --. Any single letter options, that don't take an argument, can be combined into a single command, e.g. -fv is equivalent to -f -v. Long named options can be abbreviated to any unique prefix of their name.

-f, --force

This will override some sensible defaults, such as not using a mounted volume. Use this option with caution.

-h, --help

Show a list of options with a brief description of each one.

-l, --length LENGTH

This is a mandatory option to specify the number of bytes to preallocate. It will be rounded up to a multiple of the cluster size. A suffix of K, M, G, T, P or E may be appended to mean a multiplicative factor of a power of 1000. Similarly a suffix of Ki, Mi, Gi, Ti, Pi or Ei may be appended to mean a multiplicative factor of a power of 1024.

-n, --no-size-change

Do not change the apparent size of the file. The space allocated beyond the apparent size is not zeroed, but subsequent writing beyond the apparent end of file will force zeroing the inner allocated space as it cannot be considered as a hole any more, and this may take significant time.

-N, --no-action

Simulate the allocation without actually write to device.

-o, --offset OFFSET

Specify the offset in the file where preallocation starts. By default, the preallocation is counted from the beginning of the file. Space already allocated in the area defined by offset and length is preserved.

-q, --quiet

Suppress some debug/warning/error messages.

-v, --verbose

Display more debug/warning/error messages.

-V, --version

Show the version number, copyright and license of **ntfsfallocate**.

attr-type

Define a particular attribute type to be preallocated (advanced use only). By default, the unnamed \$DATA attribute (the contents of a plain file) will be preallocated. The attribute has to be specified by a number in decimal or hexadecimal :

Hex	Decimal	Name
0x10	16	"\$STANDARD_INFORMATION"
0x20	32	"\$ATTRIBUTE_LIST"
0x30	48	"\$FILE_NAME"
0x40	64	"\$OBJECT_ID"
0x50	80	"\$SECURITY_DESCRIPTOR"
0x60	96	"\$VOLUME_NAME"
0x70	112	"\$VOLUME_INFORMATION"
0x80	128	"\$DATA"
0x90	144	"\$INDEX_ROOT"
0xA0	160	"\$INDEX_ALLOCATION"
0xB0	176	"\$BITMAP"
0xC0	192	"\$REPARSE_POINT"
0xD0	208	"\$EA_INFORMATION"
0xE0	224	"\$EA"
0xF0	240	"\$PROPERTY_SET"
0x100	256	"\$LOGGED_UTILITY_STREAM"

attr-name

Define the name of the particular attribute type to be preallocated (advanced use only).

EXAMPLES

Preallocate 100MB to the file database.db located in the Data directory which is at the root of an NTFS file system.

```
ntfsfallocate -l 100M /dev/sda1 Data/database.db
```

BUGS

There are no known problems with **ntfsfallocate**, however it can lead to configurations not supported by Windows and Windows may crash (BSOD) when writing to preallocated clusters which were not written to earlier. Files with preallocated space should be fully be written to before they are updated by Windows.

If you find a bug in **ntfsfallocate** proper, please send an email describing the problem to the development team:

ntfs-3g-devel@lists.sf.net

AUTHORS

ntfsfallocate was written by Jean-Pierre Andre.

AVAILABILITY

ntfsfallocate is part of the **ntfs-3g** package and is available from:

<https://github.com/tuxera/ntfs-3g/wiki/>

SEE ALSO

ntfs-3g(8), **ntfstruncate(8)**, **ntfsprogs(8)**, **fallocate(1)**