

Mounting NTFS

Synopsis:

The FreeBSD Operating System natively uses the Unix File System (UFS2) and also offers native support for ISO9600 CD, NFS, UDF, ZFS, EXT2, EXT3, EXT4 (in 12.0-Release) and MSDOS. The NTFS (NT Filesystem) is the default filesystem for modern Windows systems. EXFAT filesystem can be natively read and written by both Windows and MacOS, making it an excellent cross-platform filesystem for USB pen drives. To support NTFS and EXFAT, we'll install FuseFS from FreeBSD Ports.

I. Installation

FuseFS is included in the FreeBSD Ports and it requires Perl5 as a dependency.

```
#  
# cd /usr/ports/sysutils/fusefs-ntfs && make install clean  
#
```

Use the default compile options:

Now the actual installation will proceed.

The compiler and installation process takes only a few minutes to install the program on the Celeron 1.6G system.

II. Configuration

1. If FuseFS has already been installed to support EXFAT, skip steps 1-3. Otherwise, add the start up to the rc.conf file:

```
#  
# echo 'fusefs_enable="YES"' >> /etc/rc.conf  
# echo 'fusefs_safe="YES"' >> /etc/rc.conf  
# echo 'fusefs_safe_evil="YES"' >> /etc/rc.conf  
#
```

2. Load fuse for FreeBSD kernel

In /boot/loader.conf add:

```
#  
# echo 'fuse_load="YES"' >> /boot/loader.conf  
#
```

3. Manually load kernel module:

```
#  
# kldload fuse  
#
```

4. Create mount points for NTFS

```
#  
# mkdir /mnt/ntfs  
#
```

5. Plug in an already NTFS formatted USB pen drive. Check the console message showing the device name. Example /dev/da0

Check the partition name on the device, assuming it is GPT partitioned.

```
#  
# gpart show /dev/da0  
#
```

6. Typically, a flash drive will only have one partition, /dev/da0s1.

note: sometimes "p" (partition) is used instead of "s" (slice) in naming. Mount the device for NTFS or EXFAT depending on its format and device name.

```
#  
# mount.ntfs /dev/da0s1 /mnt/ntfs  
#
```

7. To unmount and eject flash drive

```
#  
# umount /mnt/ntfs  
# camcontrol eject da0  
#
```