Prepare USB as Simulated Floppy Disk

Due to the scarcity and unreliability of floppy disks, we have replaced the floppy disk drive in some lab machines with a floppy drive emulator that can be used to transfer files on USB flash drives.
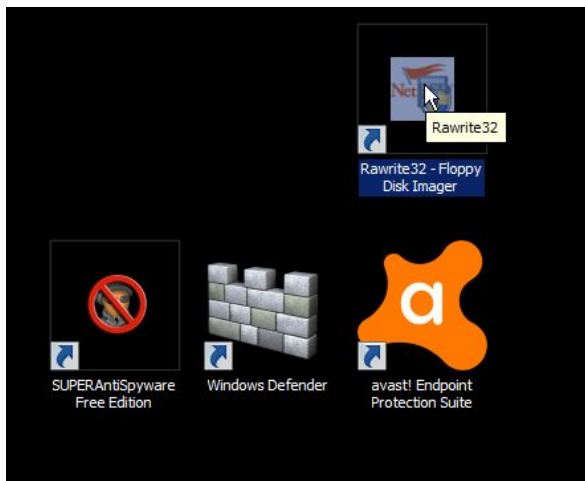
To use this device successfully, you may need to erase the contents of an existing flash drive.

Instructions

The software needed for these instructions are available on the USB scanning station in the viewing corridor of the clean room, but you can perform the same steps on any PC with windows (just make sure to update the paths where appropriate).
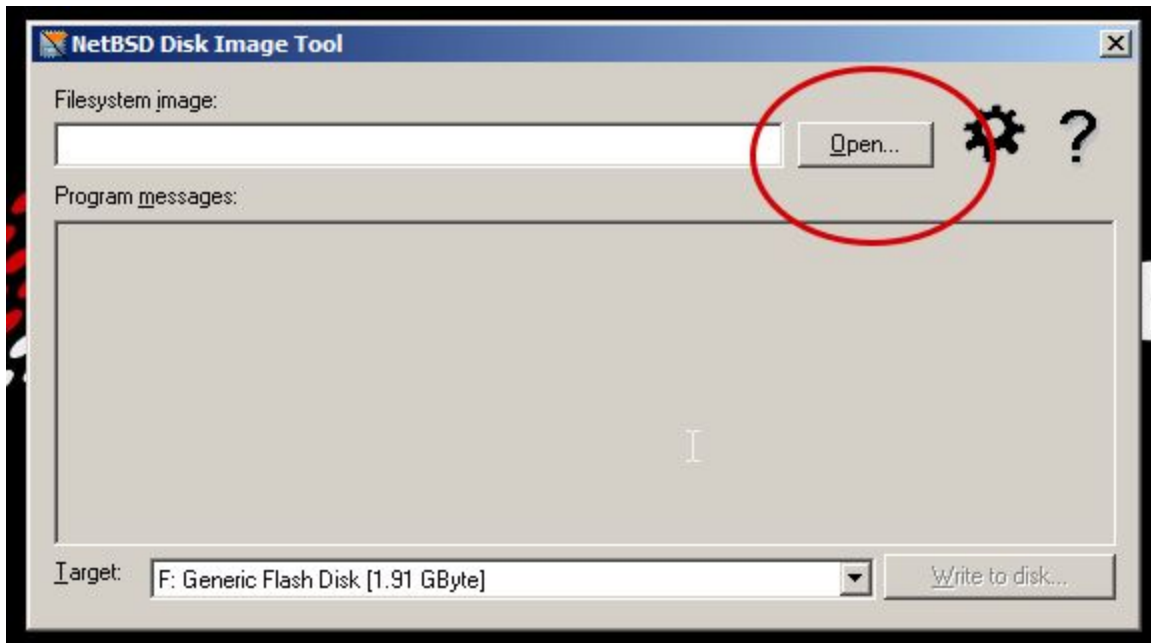
Step 1.
Open rawrite32 (If you are prompted to grant admin access, select yes).
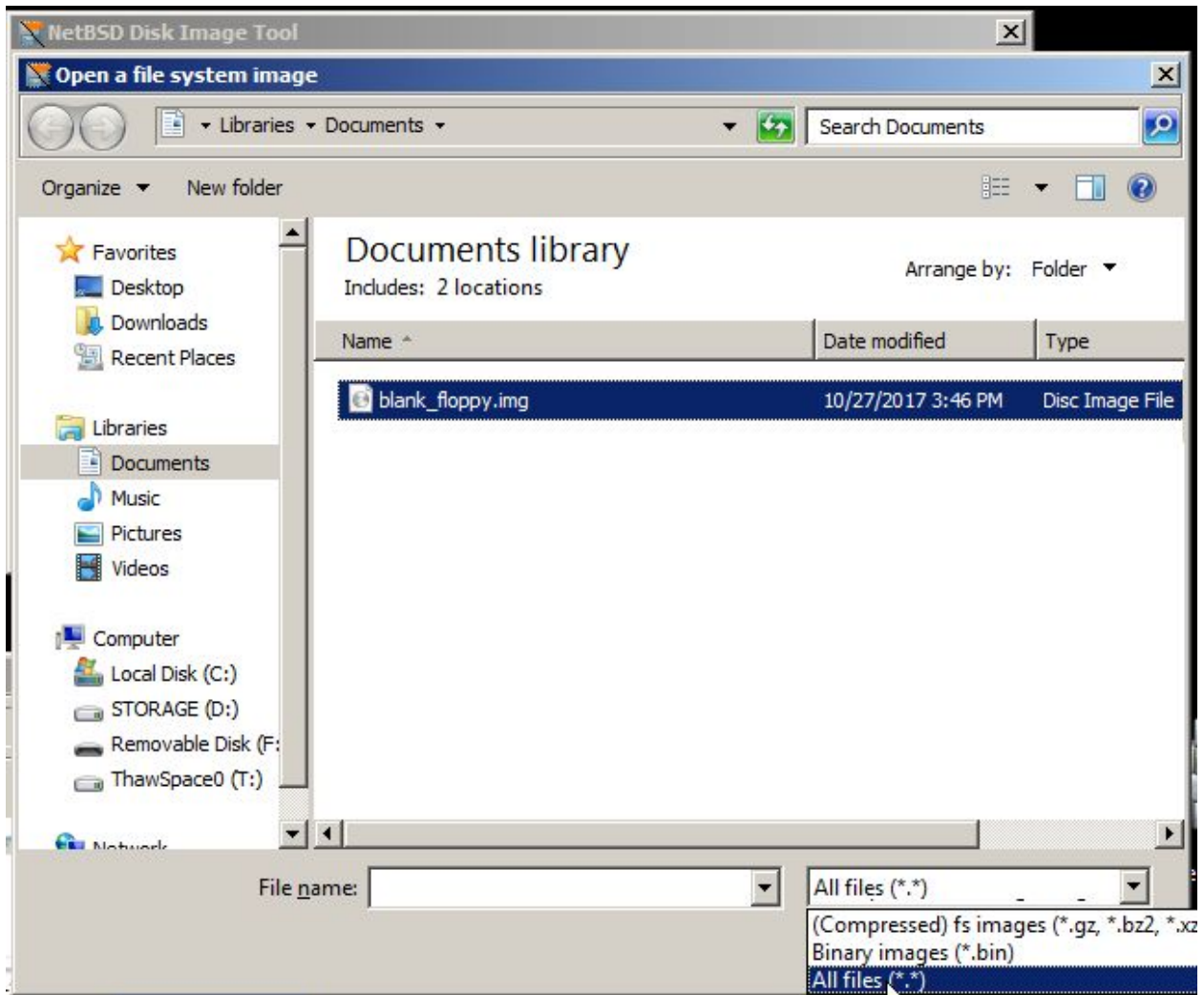

Step 2.
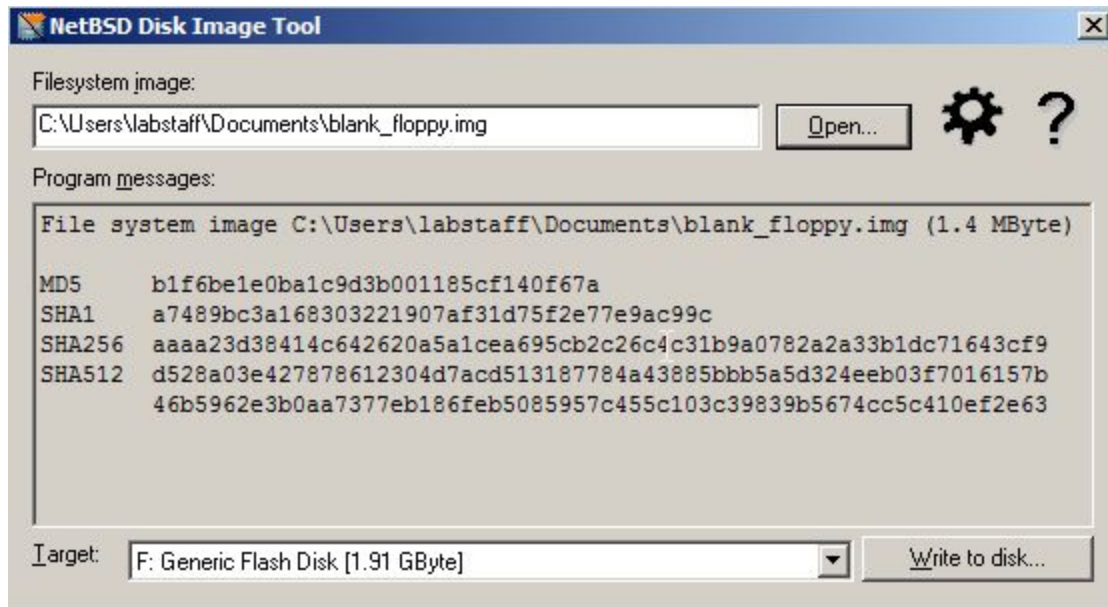Click the Open button to browse for the blank floppy image file.

Step 3.
Browse to the location of the blank floppy image file "blank_floppy.img". Make sure that the file type filter drop-down is set to "All files (*.*). Select the image file and click "open".

Step 4.
Make sure your USB drive is selected as the target and click "Write to disk" and it should finish preparing the USB drive for you. At this point, you should be able to read and write from the USB drive as if it were a floppy at "A:" drive. Note, you will probably not be able to write more data than a floppy disk can hold (1.44MB).

```
NetBSD Disk Image Tool                                    X

Filesystem image:
C:\Users\labstaff\Documents\blank_floppy.img    Open...   ⚙ ?

Program messages:
File system image C:\Users\labstaff\Documents\blank_floppy.img (1.4 MByte)

MD5     b1f6be1e0ba1c9d3b001185cf140f67a
SHA1    a7489bc3a168303221907af31d75f2e77e9ac99c
SHA256  aaaa23d38414c642620a5a1cea695cb2c26c4c31b9a0782a2a33b1dc71643cf9
SHA512  d528a03e4278786123040d7acd513187784a43885bbb5a5d324eeb03f7016157b
        46b5962e3b0aa7377eb186feb5085957c455c103c39839b5674cc5c410ef2e63

Target:  F: Generic Flash Disk [1.91 GByte]      ▼    Write to disk...
```

Supporting Info

If you are not on windows, you can still prepare a USB drive using the same blank_floppy.img and standard imaging tools like "dd".

The device we are using is the same model as available here

The device came with some tools on a CD that didn't seem to prove very useful, but for the sake of keeping an archive, here is a 7z archive of that CD's contents.

Links

- Manufacturer CD: https://goo.gl/srZZGg
- Emulator on Amazon: https://goo.gl/aTjyyP
- Blank Floppy Image: https://goo.gl/nncX5S
- Rawrite32: https://goo.gl/SpLD2g