

## 2.11 BSD on PiDP-11

### Using the TQ tape driver in 2.11 BSD

Create a directory bsdtapes in your Raspbian home directory:

```
cd
mkdir bsdtapes
cd bsdtapes
```

Download “tapadd.pl” and “tapcat.pl” from the folder “tape” in this repository, and save them in “psdtapes”.

Go to the 211BDS directory:

```
cd /opt/pidp11/systems/211bsd
```

Make a backup of boot.ini:

```
sudo cp boot.ini boot.ini.backup
```

Edit boot.ini

```
sudo leafpad boot.ini          (or sudo nano boot.ini)
```

Add right after the line “set tq enabled”

```
attach tq0 /home/pi/bsdtapes/tq0tape.tap
```

Save and quit leafpad (or nano)

Restart simh with BSD so that it uses your new boot.ini

### Example: Backing up your BSD home directory on tape

Login as a user and make sure you are in the home directory:

```
cd
```

Rewind the tape

```
mt rewind
```

Backup your home directory on tape

```
tar cv .
```

You are all done in BSD. Now open a terminal in Raspbian and go to the “bsdtapes” directory:

```
cd
cd bsdtapes
ls
```

There should now be a tq0tape.tap file there. You can check it’s size with

```
ls -l tq0tape.tap
```

The size should not be 0 if you have successfully written to that file in BSD.

If you want to look into that file in Raspbian, it needs to be converted. Type

```
./tapcat.pl tq0tape.tap 0 > tq0tape.tar
```

Now you can extract its content using

```
tar xvf tq0tapes.tar
```

## Example 2: Transferring a file from Raspbian to BSD

In Raspbian, go to the bsdtapes directory and tar your file

```
cd  
cd bsdtapes  
sudo rm tq0tape.tap tq0tape.tar  
tar cvf tq0tape.tar yourfilename
```

Convert it to BSD tape format:

```
./tapadd.pl tq0tape.tar tq0tape.tap
```

Restart simh with BSD. In BSD, load that tape with your file.

```
mt rewind  
tar xv
```

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