



### Exercise 13.1 Managing Swap Space

Examine your current swap space by doing:

```
$ cat /proc/swaps
```

Filename	Type	Size	Used	Priority
/dev/sda11	partition	4193776	0	-1

We will now add more swap space by adding either a new partition or a file. To use a file we can do:

```
$ dd if=/dev/zero of=swpfile bs=1M count=1024
```

```
1024+0 records in
1024+0 records out
1073741824 bytes (1.1 GB) copied, 1.30576 s, 822 MB/s
```

```
$ mkswap swpfile
```

```
Setting up swappiness version 1, size = 1048572 KiB
no label, UUID=85bb62e5-84b0-4fdd-848b-4f8a289f0c4c
```

(For a real partition just feed **mkswap** the partition name, but be aware all data on it will be erased!)

Activate the new swap space:

```
$ sudo swapon swpfile
```

```
swapon: /tmp/swpfile: insecure permissions 0664, 0600 suggested.
swapon: /tmp/swpfile: insecure file owner 500, 0 (root) suggested.
```

Notice **RHEL 7** warns us we are being insecure, we really should fix with:

```
$ sudo chown root:root swpfile
$ sudo chmod 600 swpfile
```

and ensure it is being used:

```
$ cat /proc/swaps
```

Filename	Type	Size	Used	Priority
/dev/sda11	partition	4193776	0	-1
/tmp/swpfile	file	1048572	0	-2

Note the Priority field; swap partitions or files of lower priority will not be used until higher priority ones are filled.

Remove the swap file from use and delete it to save space:

```
$ sudo swapoff swpfile
$ sudo rm swpfile
```