Creating Swap Space on the Omega

Kit Bishop

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This document is a quick guide to setting up your Omega to have swap space using a USB drive to effectively provide usable additional Ram.

1. **Create a swap partition on your USB drive**
   The tool you use to do this depends upon the OS you are using. I use the **KDE Partition Manager** under **KUbuntu 14.4**
   You will need to create a partition with:

   - Type: **linuxswap**
   - Size: whatever you want and have available – I am using a 32GByte USB drive and set the size to 1GByte

   If you are already using your USB drive to extend your Omega disk space using the instructions in https://wiki.onion.io/Tutorials/Using-USB-Storage-as-Rootfs be careful not to disturb it – you may be able to resize any existing partition using the partition manager

   You will need to note the partition number of the swap partition you created.

   On my USB drive I have:

   - Partition 1: Type:ext4 Name:OmegaOverlay – used for Omega overlay space as in https://wiki.onion.io/Tutorials/Using-USB-Storage-as-Rootfs
   - Partition 2: Type:linuxswap – my swap space

2. **Accessing the swap partition on your Omega**
   a. Plug your USB drive into your Omega and boot your Omega

   b. Run the command:
      block detect
      On your Omega and note or save the output.
      In my case, this gives:

```
config 'global'
        option  anon_swap       '0'
        option  anon_mount      '0'
        option  auto_swap       '1'
        option  auto_mount      '1'
        option  delay_root      '5'
        option  check_fs        '0'

config 'mount'
        option  target  '/mnt/sda1'
        option  uuid    '914a1370-a5b5-4519-8279-1e21ae6db9d6'
        option  enabled '0'
```

```
config 'swap'
        option  uuid    'f101005b-ead3-40ff-82ad-b2778bb57cdb'
        option  enabled '0'
```

Notes:

- The **uuid** values will be different for you.
- The section **config 'swap'** relates to the **linuxswap** partition
- The section **config 'mount'** relates to my overlay partition

c. Edit your **/etc/config/fstab** to add the **config 'swap'** section with the following changes:

- Add the line:

  option device '/sda2'

  changing the **'/sda2'** to reflect the partition number of your **linuxswap** parition

- Change:

  option enabled '0'

  to:

  option enabled '1'

The relevant part of **/etc/config/fstab** should now look something like:

```
config 'swap'
        option  device  '/sda2'
        option  uuid    'f101005b-ead3-40ff-82ad-b2778bb57cdb'
        option  enabled '1'
```

3. Checking that swap space is now operative
   a. Reboot your Omega
   b. Run the command:

   free

   This should show something like:

```
              total          used          free         shared
buffers
Mem:         61176         30500         30676            92
3680
-/+ buffers:               26820         34356
Swap:      1044220             0       1044220
```

Where the values against the **Swap:** line indicate the **total**, **used** and **free** swap space (values are in Kbytes) – normally all zero when there is no swap space