**Segregated install**

**Table 1. Disk Allocation and Partitioning Scheme**

| **Disk** | **Partitions** | **Mount Points** | **Recommended Size** |
| --- | --- | --- | --- |
| 0 | essentials | /boot & swap | 1 GB + 2xRAM (see Table 3 below) |
| 1 | OS | / & /usr | 12 GB (5 GB + 7 GB) |
| 2 | user | /home & /var | 10 GB (2 GB + 8 GB) |

**Table 2. Partitions and Mount Points**

| **Partition** | **Recommended** | **Description** |
| --- | --- | --- |
| / | >= 5 GB \* | Linux root partition, home of root user |
| /boot | 1 GB | Contains Linux kernel and boot files |
| /dev | 1 GB \*\* | Devices. Does not need a specific partition |
| swap | see Table 1 |  |
| /home | > 100 MB | User files and data |
| /var | >4 GB | Temporary package data, webserver application files |
| /usr | >4 GB | System and user software |
| /tmp | >50 MB | Usually created in virtual memory on swap space |

\* 3 GB for Linux minimal installation, 5 GB for full or remaining disk space left from partitioning

\*\* Does not need a specific partition and will be installed on the udev filesystem

Swap scheme recommended by Red Hat

**Table 3. Recommended System Swap Space**

| **Amount of RAM in the system** | **Recommended swap space** | **Recommended swap space if allowing for hibernation** |
| --- | --- | --- |
| ⩽ 2GB | 2 times the amount of RAM | 3 times the amount of RAM |
| > 2GB – 8GB | Equal to the amount of RAM | 2 times the amount of RAM |
| > 8GB – 64GB | At least 4 GB | 1.5 times the amount of RAM |
| > 64GB | At least 4 GB | Hibernation not recommended |

REAL EXAMPLES

Ubuntu Server - 12 GB - Saturated

**Filesystem Size Used Avail Use% Mounted on**

udev 950M 0 950M 0% /dev

tmpfs 199M 1.2M 198M 1% /run

/dev/mapper/ubuntu--vg-ubuntu--lv 8.8G 8.1G 291M 97% /

tmpfs 994M 0 994M 0% /dev/shm

tmpfs 5.0M 0 5.0M 0% /run/lock

tmpfs 994M 0 994M 0% /sys/fs/cgroup

/dev/sda2 976M 300M 610M 33% /boot

/dev/loop2 56M 56M 0 100% /snap/core18/2253

/dev/loop1 15M 15M 0 100% /snap/aws-cli/130

/dev/loop3 56M 56M 0 100% /snap/core18/2246

/dev/loop4 62M 62M 0 100% /snap/core20/1270

/dev/loop5 33M 33M 0 100% /snap/snapd/13640

/dev/loop6 68M 68M 0 100% /snap/lxd/21545

/dev/loop7 68M 68M 0 100% /snap/lxd/21835

/dev/loop0 100M 100M 0 100% /snap/core/11993

/dev/loop8 62M 62M 0 100% /snap/core20/1169

/dev/loop9 252M 252M 0 100% /snap/google-cloud-sdk/205

/dev/loop10 44M 44M 0 100% /snap/snapd/14295

/dev/loop11 253M 253M 0 100% /snap/google-cloud-sdk/210

vboxshared 218G 208G 9.9G 96% /mnt/vboxshared

tmpfs 199M 0 199M 0% /run/user/1000

– Disk usage

ludz@ubuserv:~$ sudo du -sh /\*

0 /bin

201M /boot

4.0K /cdrom

0 /dev

6.6M /etc

182M /home

0 /lib

0 /lib32

0 /lib64

0 /libx32

16K /lost+found

4.0K /media

121K /mnt

19M /opt

0 /proc

64K /root

1.2M /run

0 /sbin

3.9G /snap

4.0K /srv

1.7G /swap.img

0 /sys

48K /tmp

3.4G /usr

2.4G /var

Ubuntu server 20.04 - partitioned - fresh install

ludz@us1:~$ df -h

**Filesystem Size Used Avail Use% Mounted on**

udev 950M 0 950M 0% /dev

tmpfs 199M 1.2M 198M 1% /run

/dev/mapper/root-lv\_root 4.9G 1.3G 3.4G 27% /

/dev/disk/by-id/dm-uuid-LVM-9AMt… 4.9G 1.8G 2.9G 39% /usr

tmpfs 994M 0 994M 0% /dev/shm

tmpfs 5.0M 0 5.0M 0% /run/lock

tmpfs 994M 0 994M 0% /sys/fs/cgroup

/dev/sda2 976M 107M 803M 12% /boot

/dev/mapper/shared-lv\_var 4.9G 674M 4.0G 15% /var

/dev/mapper/shared-lv\_home 4.9G 21M 4.6G 1% /home

/dev/loop0 71M 71M 0 100% /snap/lxd/21029

/dev/loop1 33M 33M 0 100% /snap/snapd/12704

/dev/loop2 56M 56M 0 100% /snap/core18/2128

tmpfs 199M 0 199M 0% /run/user/1000

/dev/loop3 56M 56M 0 100% /snap/core18/2253

/dev/loop4 44M 44M 0 100% /snap/snapd/14295

/dev/loop5 62M 62M 0 100% /snap/core20/1270

/dev/loop6 68M 68M 0 100% /snap/lxd/21835

-- Disk usage

0 /bin

104M /boot

0 /dev

5.3M /etc

52K /home

0 /lib

0 /lib32

0 /lib64

0 /libx32

16K /lost+found

4.0K /media

4.0K /mnt

4.0K /opt

0 /proc

48K /root

1.2M run

0 /sbin

1.3G /snap

4.0K /srv

1.3G /swap.img

0 /sys

64K /tmp

1.8G /usr

654M /var