

Creating bootable Solaris 11 USB drive

Download the requisite Solaris OS image from Oracle [here](#). You may need to create a free account first.

Note that if you are building a SPARC server e.g. T8-2, it comes with Solaris pre-installed. You should start with this document [here](#), connecting to the ILOM System Console via the SER MGT Port using the instructions [here](#).

The instructions from Oracle are as follows, but I don't like the way they say to use `dmesg | tail` to identify the USB device when `lsusb` to identify the make and model and `df -h` to identify the device name provide much clearer, humanly readable output.

- **On Linux:**

- a. **Insert the flash drive and locate the appropriate device.**

```
# dmesg | tail
```

- b. **Copy the image.**

```
# dd if=/path/image.usb of=/dev/diskN bs=16k
```

For other client operating systems such as Solaris itself or MacOSX, instructions from Oracle can be found [here](#).

In my case, the USB stick was mounted to `/dev/sdg1` automatically when plugged into Linux desktop, so I unmounted `/dev/sdg1` then changed to the directory containing my Solaris 11 image, then used `dd` as shown in the screenshot below.

```
matt@EliteDesk ~/Downloads/Oracle/Solaris11 text installer usb image
File Edit View Search Terminal Help
udev          1940284      0    1940284     0% /dev
tmpfs         392384      40672    351712    11% /run
/dev/sda2     476050060 108094244 343750096 24% /
tmpfs         1961916     57964   1903952     3% /dev/shm
tmpfs         5120        4        5116       1% /run/lock
tmpfs         1961916     0    1961916     0% /sys/fs/cgroup
/dev/sdb1     1922725680 919197008 905836768 51% /Elements
/dev/sda1ice 001: ID fd 523248 Linc 3480nda 519768 0 1% /boot/efi
cgmanagerfs  100         0        100         0% /run/cgmanager/fs
/home/matt/.Private 1476050060 108094244 343750096 24% /home/matt
tmpfs         19392384    48    19392336    0% /run/user/1000
/dev/sdg1     15617112    406716   15617096   11% /media/matt/16GBUSB
matt@EliteDesk ~ $ sudo umount /dev/sdg1
[sudo] password for matt:
matt@EliteDesk ~ $ cd Downloads/Oracle/Solaris11\ text\ installer\ usb\ image/
matt@EliteDesk ~/Downloads/Oracle/Solaris11 text installer usb image $ dd if=sol-11_3-text-x86.usb of=/dev/sdg bs=16k
dd: failed to open '/dev/sdg': Permission denied
matt@EliteDesk ~/Downloads/Oracle/Solaris11 text installer usb image $ sudo dd if=sol-11_3-text-x86.usb of=/dev/sdg bs=16k
56788+1 records in
56788+1 records out
930428416 bytes (930 MB, 887 MiB) copied, 245.996 s, 3.8 MB/s
matt@EliteDesk ~/Downloads/Oracle/Solaris11 text installer usb image $
```

The commands are therefore,

df -h to Identify the USB device e.g. /dev/sdg

sudo umount /dev/sdg1 to unmount the filesystem on the USB device

cd ~/Downloads/Solaris11 to change to the location of your downloaded image file

sudo dd if=sol-11_3.usb of=/dev/sdg bs=16k to write it to the USB device

Since dd is a block level, not a file level copy, you don't need to make the USB device bootable or anything like that. That's all contained in the blocks copied to the device.