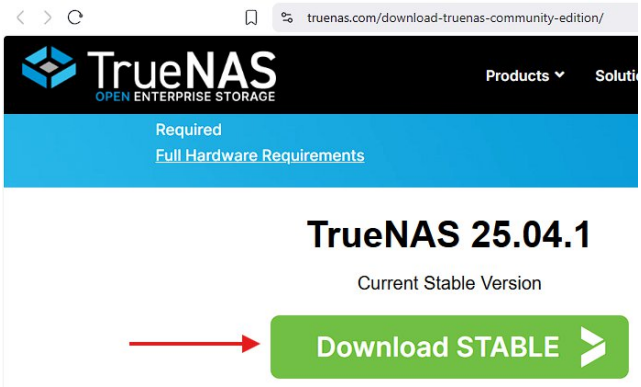
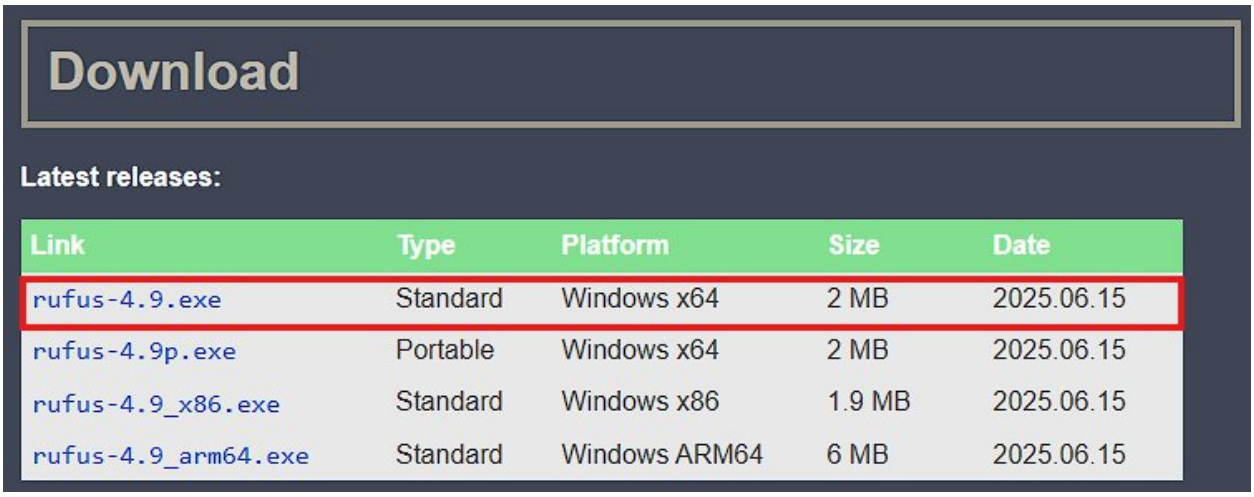
Creating a boot, app, and data partition within the TrueNAS Community boot drive

In order to use the unused space on the TrueNAS Community boot drive, follow this guide to create a 32GB boot partition, a 224GB apps partition, and a data partition filling the remaining space.

1. Download TrueNAS Community Stable build from https://www.truenas.com/download-truenas-community-edition

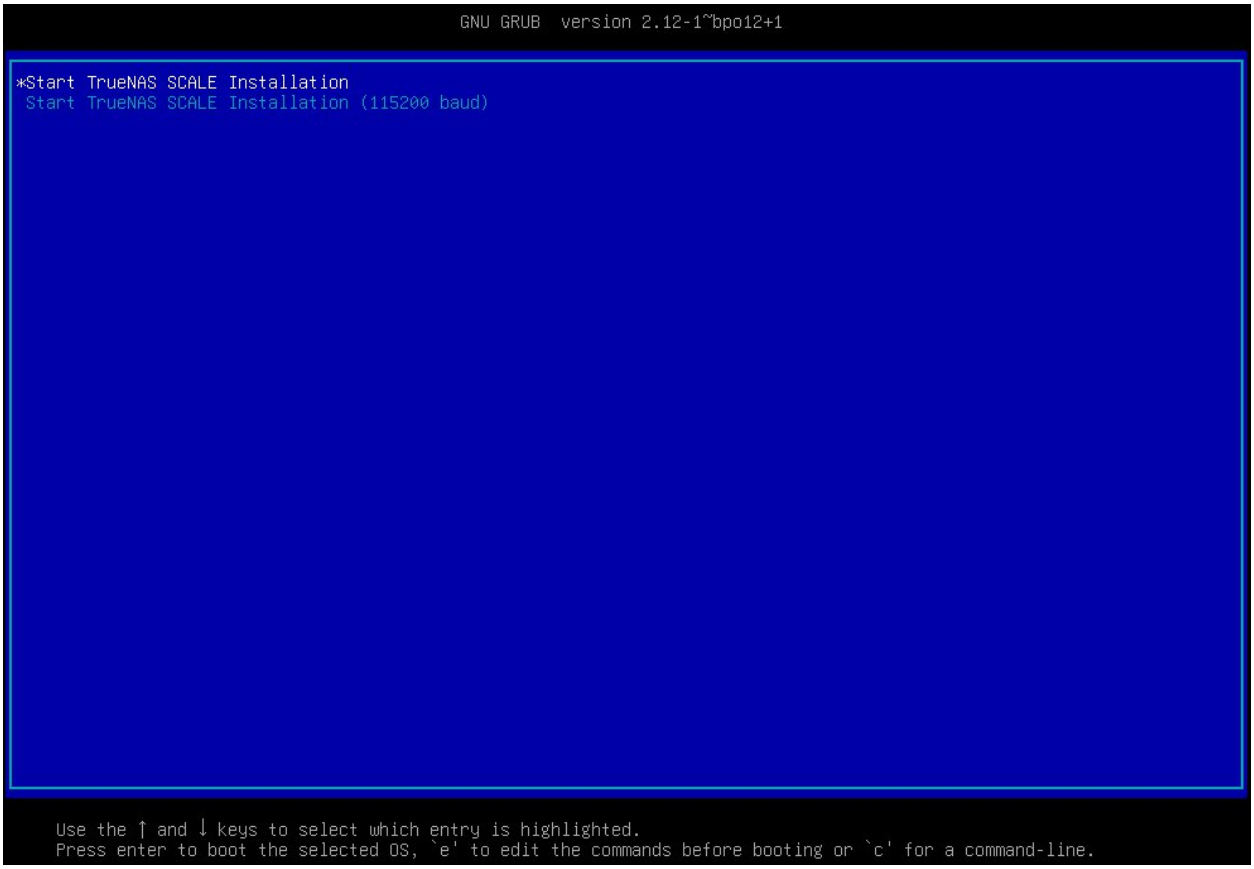


2. Download Rufus from https://rufus.ie



3. Double clicking the downloaded executable will launch Rufus. Click SELECT and navigate to to the downloaded ISO. Select it and click the Open button.
4. Insert a USB flash drive and use the Device pull down to select the USB drive.
5. Click START. When the write is successfully completed, Show hidden items in the bottom right hand corner of the screen which looks like a caret (^). Left click on Safely remove hardware and media which looks like a little USB drive. Eject your USB drive.

6. Remove the USB flash drive and insert it in to the target PC. Boot the target PC and either have the USB drive first in the boot order in BIOS or tap the boot menu key for your PC to select the USB drive.
7. Select *Start TrueNAS SCALE Installation from the Grub loader menu and press Enter on the keyboard.



8. Select Shell from the Console Setup menu.

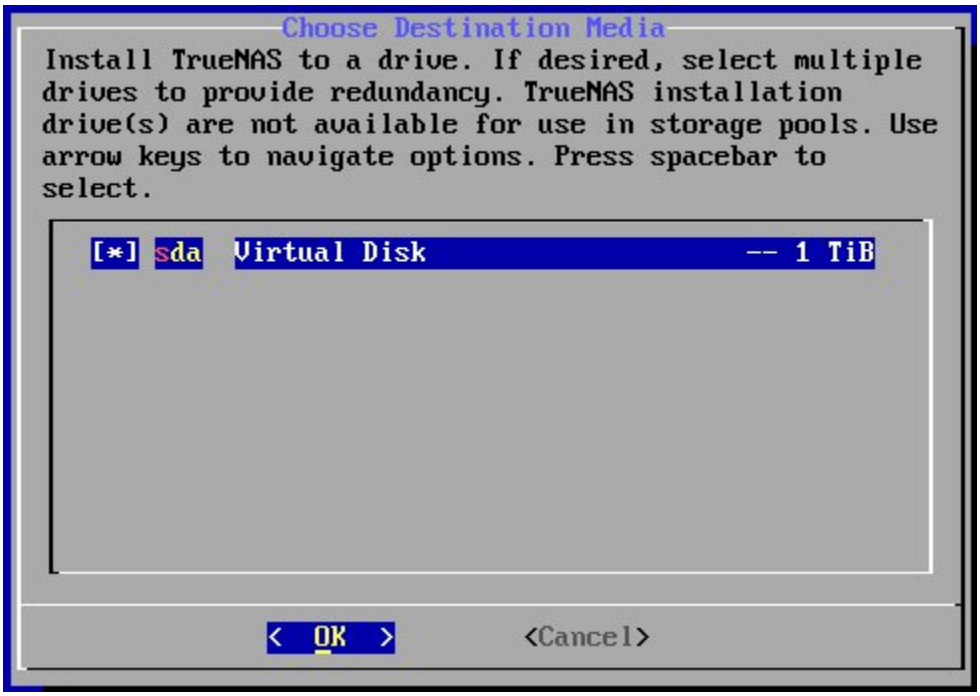
9. Modify the installer to create a 32GB boot partition instead of using the entire drive. You really don’t need more space than this.

10. Execute the following command:
sed -i 's/-n3:0:0/-n3:0:+32G/g' /usr/lib/python3/dist-packages/truenas_installer/install.py

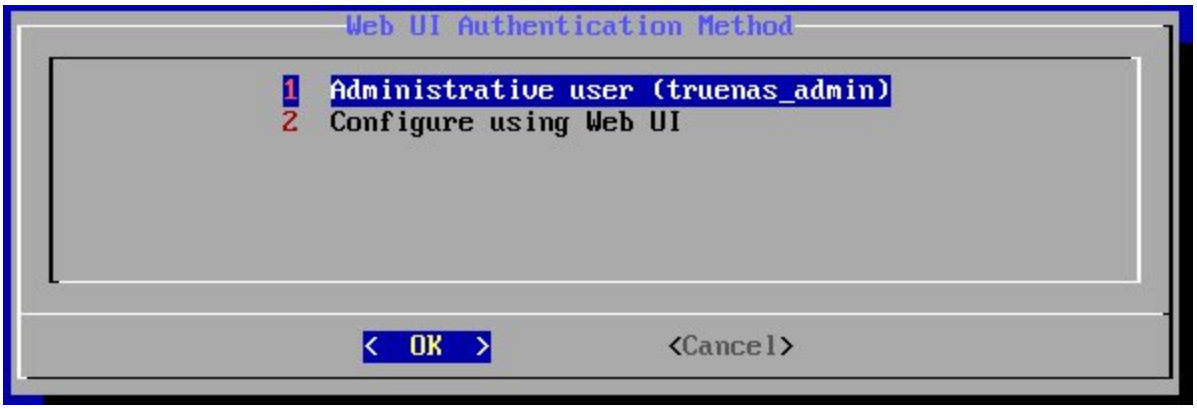
11. Type exit to return to the Console Setup menu from the shell.

```
root@truenas-installer:~# sed -i 's/-n3:0:0/-n3:0:+32G/g' /usr/lib/python3/dist-packages/truenas_installer/install.py
root@truenas-installer:~# exit
```

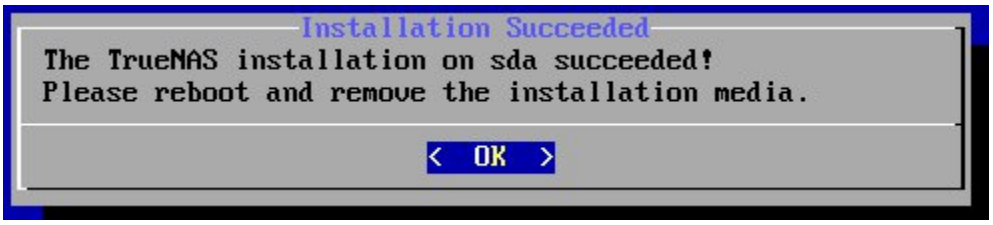
12. Select Install/Upgrade from the Console Setup menu and install to the NVMe drive.



13. In Web UI Authentication Method, choose either option. The password for the truenas_admin account is set now for option 1 or when the web ui is first logged into for option 2.

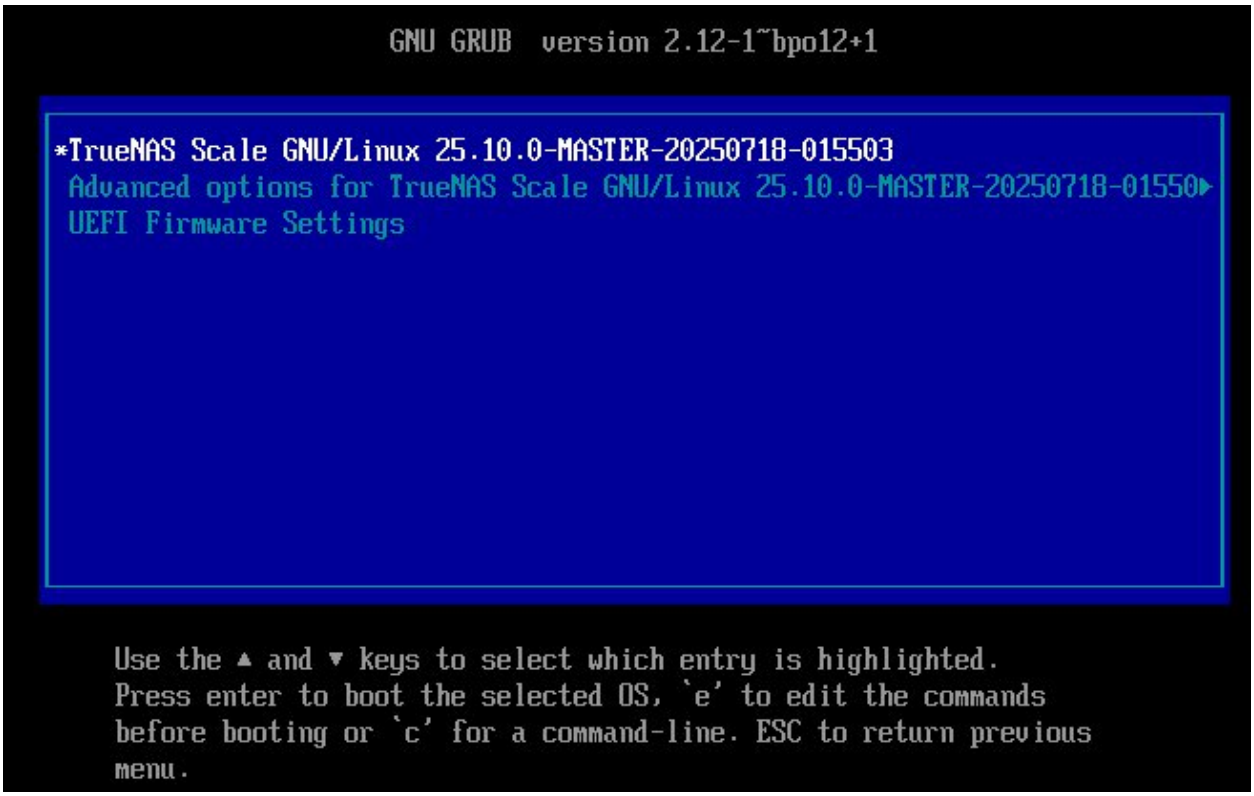


14. Watch the installer perform the install. Remove the USB flash drive and press Enter to reboot.



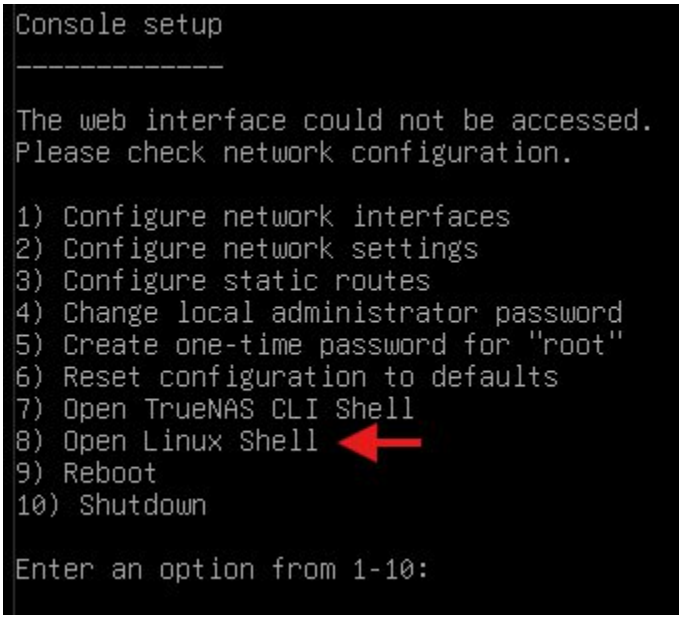
15. Press Enter to return to the Console Setup menu. Select option 3 to reboot. When the PC powers off to restart, remove the USB flash drive.

Upon reboot, the GRUB menu will appear. Don’t press any key to boot into TrueNAS.



The NVME drive needs to be re-partitioned. This step must be performed on console. Using SSH will not give you the correct access.

1. Login to the linux shell by selecting **Open Linux Shell.**



2. Type **parted** to enter the parted CLI.
3. Type **print** to show the current nvme layout.

4. Type **name 3 boot-pool** to give the boot pool a name of boot-pool.
5. Type **mkpart** and follow the prompt:

Partition name? apps-pool
File system type? zfs
Start? Value where partition 3 ENDS. In this case 34.9GB
End? 256GB

```
(parted) print
Model: Msft Virtual Disk (scsi)
Disk /dev/sda: 1100GB
Sector size (logical/physical): 512B/4096B
Partition Table: gpt
Disk Flags:

Number  Start   End     Size    File system  Name  Flags
 1      2097kB  3146kB  1049kB                     bios_grub, legacy_boot
 2      3146kB  540MB   537MB   fat32              boot, esp
 3      540MB   34.9GB  34.4GB  zfs

(parted) name 3 boot-pool
(parted) mkpart
Partition name?  []? apps-pool
File system type?  [ext2]? zfs
Start? 34.9GB
End? 256GB
```

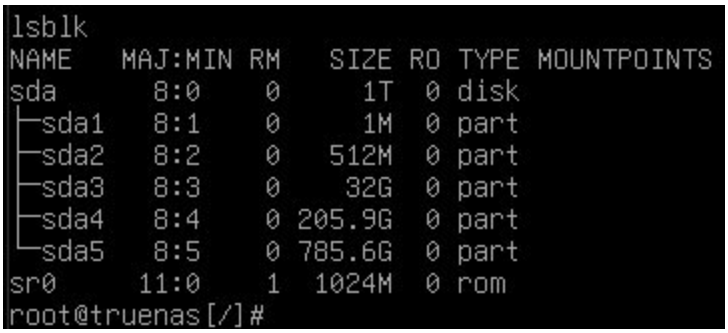
6. Type **mkpart** and follow the prompt:

Partition name? data-pool
File system type? zfs
Start? 256GB
End? 100%

7. Type **print** to make sure everything is correct.

```
Number  Start   End     Size    File system  Name       Flags
 1      2097kB  3146kB  1049kB                          bios_grub, legacy_boot
 2      3146kB  540MB   537MB   fat32                   boot, esp
 3      540MB   34.9GB  34.4GB  zfs          boot-pool
 4      34.9GB  256GB   221GB   zfs          apps-pool
 5      256GB   1100GB  844GB   zfs          data-pool
```

8. Type **quit** to return to the linux shell.
9. Type **lsblk** to get the device names of the partitions.

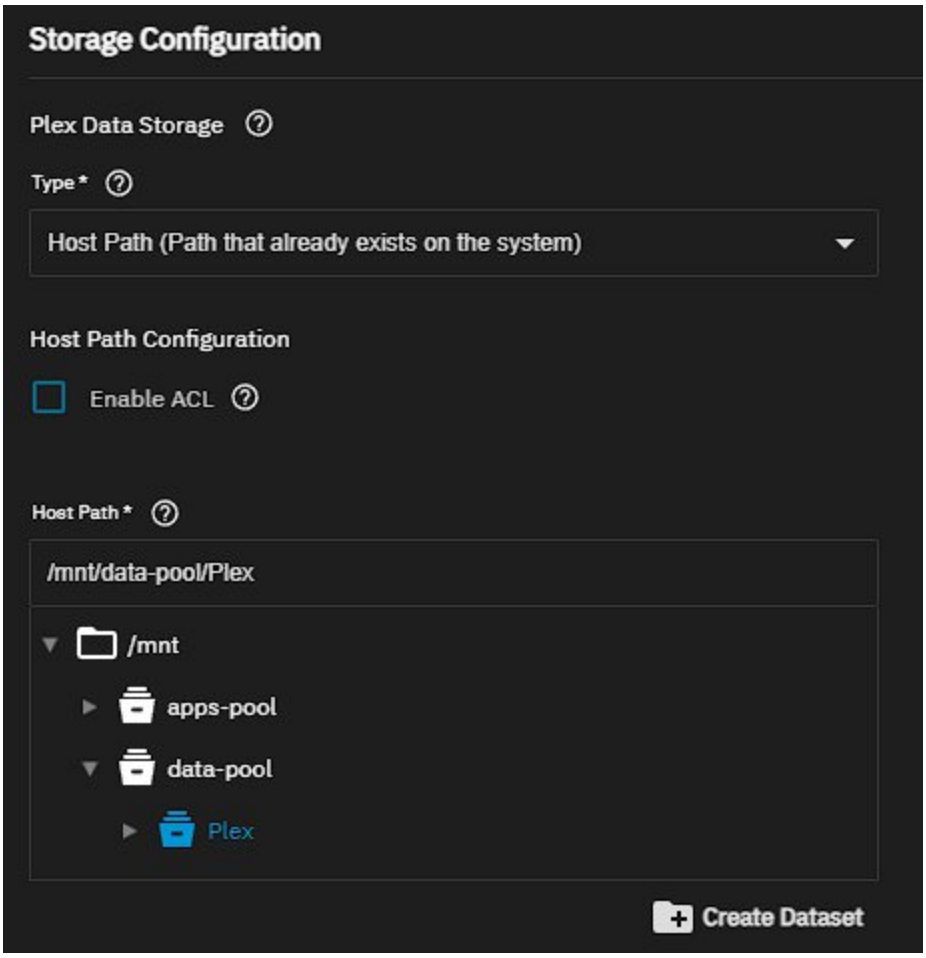


10. Type **zpool create apps-pool /dev/<name of partition 4> -f**
11. Type **zpool create data-pool /dev/<name of partition 5> -f**
12. Type **zpool export apps-pool**
13. Type **zpool export data-pool**
14. Type **reboot** to reboot the pc.
15. Import the created pools in the TrueNAS Web UI via **Storage** -> **Import Pool** -> Import apps-pool and data-pool.

NOTE: If you saw errors above about read only partitions, don't worry. The zpool create command blows away any current formatting on the partitions.

NOTE2: When installing apps, manually set the apps-pool for apps and the data-pool for data. See below.

NOTE3: Lots of people contributed to figuring out the proper process. @maxgomez89 on GitHub wrote the text that encouraged me to make the process more approachable and do screenshots.


Storage Configuration
Plex Data Storage
Type *
Host Path (Path that already exists on the system)
Host Path Configuration
Enable ACL
Host Path *
/mnt/data-pool/Plex
/mnt
apps-pool
data-pool
Plex
Create Dataset