An EndeavourOS based Simple Home Server.

Backing up enosServer.
Preparing an External Storage Device

rsync should have been installed during installation.
The /serverbkup mount point should have been created and permissions & ownership set during installation.

ssh into enosServer and login as root

pacman -Q | grep rsync (should list rsync as installed, if not install with pacman)
ls -l \ (check for /serverbkup mount point, permissions, and ownership)
drwxrwxr - - root users serverbkup (edited for clarity)

If /serverbkup does not exist
mkdir /serverbkup
If the permissions and ownership are incorrect:
chown root:users /serverbkup
chmod 774 /serverbkup

Partition and format the BKUP USB3 SSD

Ideally the backup USB 3 SSD drive should be the same size as the DATA SSD drive.
Do a blkid without the BACKUP SSD connected.

```
 # blkid
/dev/sda1: LABEL="BOOT" UUID="4ef4b6af-a09b-4c70-a518-5d448e5a9a84" TYPE="ext4"
/dev/sda2: LABEL="ROOT" UUID="3dd67729-0fa6-4aa9-840d-809ea6452531" TYPE="ext4"
/dev/sda3: UUID="12a2fd05-7aa3-4182-9963-20f26e0d1aad" TYPE="swap"
/dev/sdb1: LABEL="DATA" UUID="dc3efc10-19d6-47dd-943c-49f4e16dd45b" TYPE="ext4"
```

It should be obvious that sda is the OS device, and sdb is the DATA device
Connect the external BACKUP SSD drive to a USB 3 port.

```
 # blkid
/dev/sda1: LABEL="BOOT" UUID="4ef4b6af-a09b-4c70-a518-5d448e5a9a84" TYPE="ext4"
/dev/sda2: LABEL="ROOT" UUID="3dd67729-0fa6-4aa9-840d-809ea6452531" TYPE="ext4"
/dev/sda3: UUID="12a2fd05-7aa3-4182-9963-20f26e0d1aad" TYPE="swap"
/dev/sdb1: LABEL="DATA" UUID="dc3efc10-19d6-47dd-943c-49f4e16dd45b" TYPE="ext4"
/dev/sdc1: UUID="1bc57ec3-9437-46c1-b0e3-a6ccfe2e236d" TYPE="ext4"
```

The new line in the blkid output is sdc1. That will be the DATABKUP SSD. If the enosServer is an ARM device, or you get different results from what is listed, adjust your device name accordingly. For the example, /dev/sdc1 will be used.

```
# fdisk /dev/sdc
   Command: o              (thats lower case letter o --create an new empty DOS partition table)
   Command: n              (add a new partition)
       Partition type:  p      (primary partition)
       Partition number:  1          (first partition)
       First sector:                 (Enter to accept default)
       Last sector:                  (Enter to accept default)
           Partition #1 contains a xxxx  signature.      (this warning may not appear, if so yes)
           Do you want to remove the signature? yes
Command: w                                              (write table to disk and exit)

# mkfs.ext4 -L DATABKUP /dev/sdc1       (the -L option sets the volume label for the partition)
```

The DATABKUP USB 3 SSD is now partitioned as a single partition and formatted to ext4

PERFORMING A BACKUP OF THE DATA DRIVE

To do a backup connect the external DATABKUP SSD drive to an available USB port
ssh into enosServer as root

ll /server
  should show a bunch of folders on your DATA SSD as it was mounted to /server at boot up
ll /serverbkup
   Total 0

Should show Total 0 since the DATABKUP SSD is not mounted yet

Determine which device is being used for the USB DATABKUP Drive. Most likely /dev/sdc
 # blkid
 /dev/sda1: LABEL="BOOT" UUID="4ef4b6af-a09b-4c70-a518-5d448e5a9a84" TYPE="ext4"
 /dev/sda2: LABEL="ROOT" UUID="3dd67729-0fa6-4aa9-840d-809ea6452531" TYPE="ext4"
 /dev/sda3: UUID="12a2fd05-7aa3-4182-9963-20f26e0d1aad" TYPE="swap"
 /dev/sdb1: LABEL="DATA" UUID="9d4522a3a91a" TYPE="ext4" PARTUUID="edc91f-01"
 /dev/sdc1: LABEL="DATABKUP" UUID="A892-F8D7" TYPE="ext4" PARTUUID="17ae7-01"

Now you know why specific Volume labels were suggested to be used when formatting the partitions on the storage devices. This easily shows which SSD is on which /device.

Now we need to mount the DATABKUP SSD to /serverbkup

mount -t ext4 /dev/sdc1 /serverbkup   (adjust device name as required)
ll /serverbkup

The first time the device is used, you will probably only see the lost+found file.
If this device has been used previously for backups, you should see a lot of directories.
This proves the mount command was successful.

# su pshare   (IMPORTANT: preform the backup as user pshare)
$ rsync -av –delete /server/   /serverbkup   (the / at the end of /server/ is very important)
$ exit   (Exit back to root)
# umount /serverbkup
# ll /serverbkup
    Total 0

Shows that the DATABKUP drive was un-mounted and safe to remove

unplug the DATABKUP SSD from the USB port.