

SOP ON KENYAEMR SERVER RECONSTRUCTION USING ACLONE IMAGE

1. RESTORING THE SERVER FROM KENYAEMR Version 17.0.2 CLONE IMAGE

First, backup the database. Obtain the latest backup and store it in your external drive. Confirm the size of the backup just to be sure that the backup was successful.

Now reboot the machine to change the boot priority in the BIOS setup utility so that you can boot from the CD drive. This is done by pressing F10 at initial system boot; navigate to storage, then select **Boot Order**. Change this order ensuring that **CD/DVD Drive** is the first on that list. Once this is done, go to **file** and select **Save Changes and Exit**.

- i. Access clonezilla image of (KenyaEMR Version 17.0.2) from palladium github: <https://github.com/palladiumkenya/openmrs-module-kenyaemr/releases> and save on your flash disk or burn on a CD
Start the server using the bootable clonezilla image you saved on your flash disk or CD
- ii. choose Clonezilla live (default setting, VGA 800x600), after pressing Enter, you will see Debian Linux



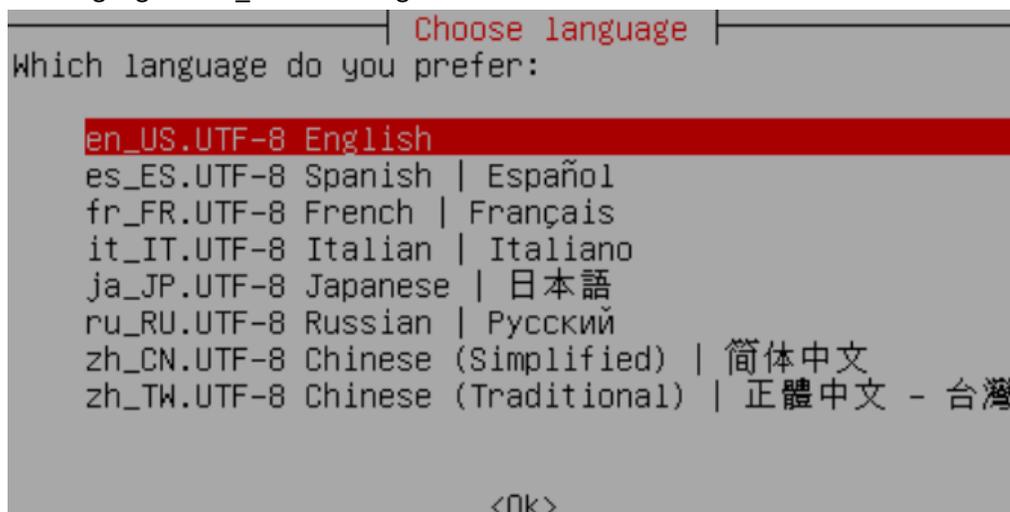
Press [Tab] to edit options:

Automatic boot in 4 seconds...

Clonezilla live version: 20110113-maverick. (C) 2009-2011, NCHC, Taiwan

booting process **Disclaimer: Clonezilla comes with ABSOLUTELY NO WARRANTY**

- iii. choose Language i.e en_US.UTF-8 English



- iv. Choose Keyboard Layout. Select **Don't touch Keymap** and click ok.

```
Configuring console-data
The keymap records the layout of symbols on the keyboard.

- 'Select keymap from arch list': select one of the predefined keymaps
  specific for your architecture (recommended for non-USB keyboards);
- 'Don't touch keymap': don't overwrite the keymap in /etc/console,
  which is maintained manually with install-keymap(8);
- 'Keep kernel keymap': prevent any keymap from being loaded next time
  the system boots;
- 'Select keymap from full list': list all the predefined keymaps.
  Recommended when using cross-architecture (often USB) keyboards.

Policy for handling keymaps:

    Select keymap from arch list
    Don't touch keymap
    Keep kernel keymap
    Select keymap from full list

    <Ok>                               <Cancel>
```

- v. Choose Start clonezilla and click ok.

```
Start Clonezilla
Start Clonezilla or enter login shell (command line)?
Select mode:

    Start_Clonezilla Start Clonezilla
    Enter_shell      Enter command line prompt

    <Ok>                               <Cancel>
```

- vi. Choose **device-image** option.

```
Clonezilla
*Clonezilla is free (GPL) software, and comes with ABSOLUTELY NO WARRANTY*
///Hint! From now on, if multiple choices are available, you have to press
space key to mark your selection. An asterisk (*) will be shown when the
selection is done///
Two modes are available, you can
(1) clone/restore a disk or partition using an image
(2) disk to disk or partition to partition clone/restore.
Select mode:

    device-image          work with disks or partitions usi
    device-device        work directly from a disk or part

    <Ok>                               <Cancel>
```

- vii. Choose **Local_dev** and click ok.

```

Mount Clonezilla image directory
Before cloning, you have to assign where the Clonezilla image will be saved
to or read from. We will mount that device or remote resources as
/home/partimag. The Clonezilla image will be saved to or read from
/home/partimag.

local_dev Use local device (E.g.: hard drive, USB drive)
ssh_server Use SSH server
samba_server Use SAMBA server (Network Neighborhood server)
nfs_server Use NFS server
enter_shell Enter command line prompt. Do it manually
skip Use existing /home/partimag (Memory! *NOT RECOMMENDED*)

<Ok> <Cancel>

```

viii. Now plug in the USB device with the KenyEMRC clone and wait for about 10 seconds for the server to read the USB device and press enter.

ix. Select mount point **sdb1**

```

Clonezilla - Opensource Clone System (OCS) | Mode:
Now we need to mount a device as /home/partimag (Clonezilla image(s)
repository) so that we can read or save the image in /home/partimag.
///NOTE/// You should NOT mount the partition you want to backup as
/home/partimag. The partition name is the device name in GNU/Linux. The
first partition in the first disk is "hda1" or "sda1", the 2nd partition in
the first disk is "hda2" or "sda2", the first partition in the second disk
is "hdb1" or "sdb1"... If the system you want to save is MS windows,
normally C: is hda1 (for PATA) or sda1 (for PATA, SATA or SCSI), and D:
could be hda2 (or sda2), hda5 (or sda5)...:

sda1 105MB_ntfs(In_VBOX_HARDDISK_)_ata
sda2 21.4GB_ntfs(In_VBOX_HARDDISK_)_at
sdb1 2000GB_ext3(In_EARS-00S8B1_)_usb-

<Ok> <Cancel>

```

x. Select / top_directory_in_the_local_device.

```

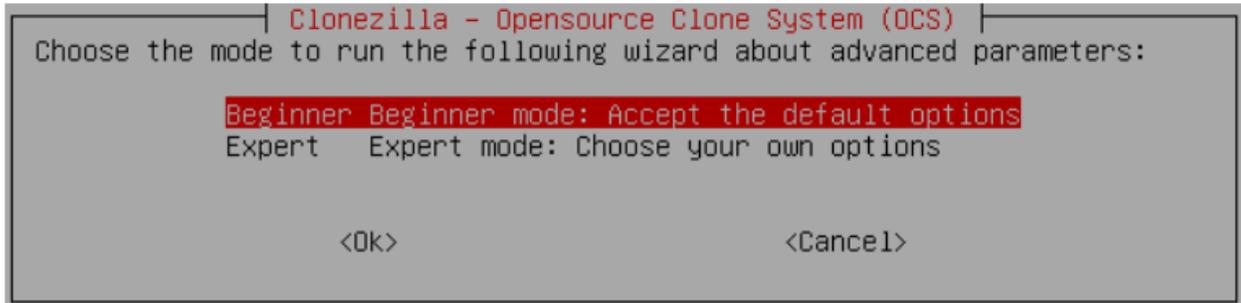
Clonezilla - Opensource Clone System (OCS)
Which directory is for the Clonezilla image (only the first level of
directories are shown, and the Clonezilla image (i.e. directory) itself will
be excluded. If there is a space in the directory name, it will _NOT_ be

/ Top_directory_in_the_local_device

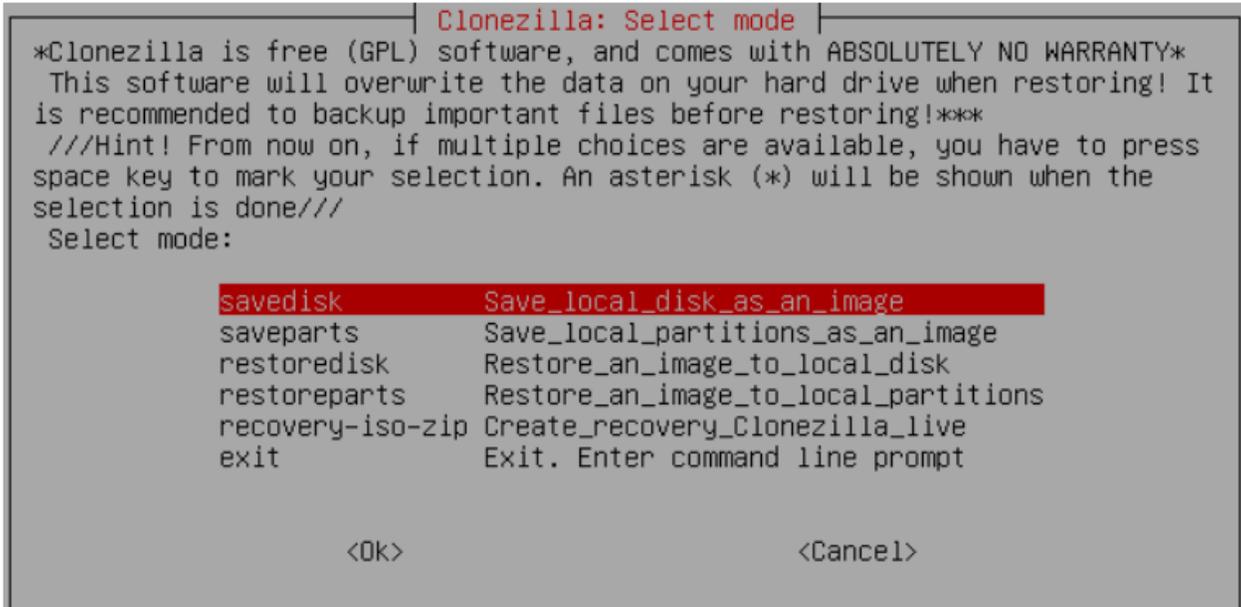
<Ok> <Cancel>

```

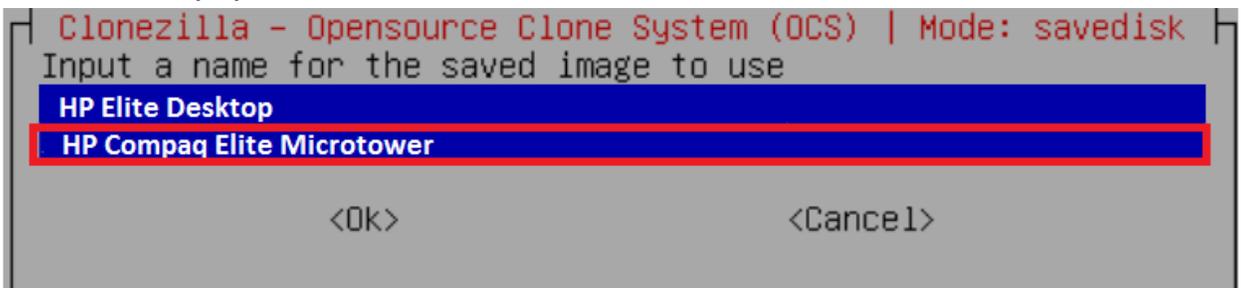
xi. Choose Beginner mode: Accept the default options



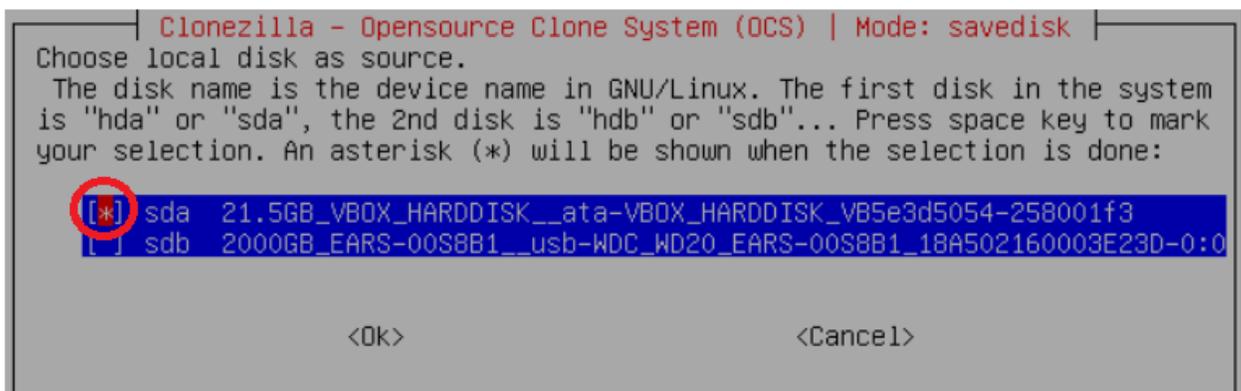
- xii. Now select **restoredisk Restore_an_image_to_local_disk**.



- xiii. Select the name of the KenyaEMRClone. **NB: We have two clone images, one for EliteDesktop and another for HP Compaq Elite Microtower.**



- xiv. Choose the target disk we want to restore i.e **sda** and enter.



- xv. Click enter to start

```
Selected device [sda] found!
The selected devices: sda
*****
PS. Next time you can run this command directly:
/opt/drbl/sbin/ocs-sr -q2 -c -j2 -z1 -i 2000 -p true savedisk enter-image-name-here sda
This command is also saved as this file name for later use if necessary: /tmp/ocs-enter-image-name-here-2011-02-19-20-17
Press "Enter" to continue...
```

- xvi. Before starting to restore the disk image to disk sda, clonzilla will ask you to confirm that twice. On “Are you sure you want to continue” type “y” and hit enter.

```
The following step is to save the hard disk/partition(s) on this machine as an image:
*****
Machine: VirtualBox
sda (21.5GB_VBOX_HARDDISK__ata-VBOX_HARDDISK_VB5e3d5054-258001f3)
sda1 (105MB_ntfs(In_VBOX_HARDDISK_)_ata-VBOX_HARDDISK_VB5e3d5054-258001f3)
sda2 (21.4GB_ntfs(In_VBOX_HARDDISK_)_ata-VBOX_HARDDISK_VB5e3d5054-258001f3)
*****
-> "/home/partimag/enter-image-name-here".
Are you sure you want to continue? ? (y/n) y
```

- xvii. When everything is done, press enter to continue.
xviii. Select power off.

You have successfully cloned your machine with **KenyaEMR version 17.0.2**

Remove the USB device and reboot the server, remember to remove the clonezilla disk from the cd drive.

Open your web browser and navigate to the URL: **localhost:8080/openmrs** to launch KenyaEMR. The application will take some time to launch this first time because it will first install KenyaEMR metadata