Cloning

Cloning Software

Software	Free and Open Source Software	Compatible Operating Systems
Ghost	no	Windows
Clonezilla	yes	Windows, Linux
Acronis	no	Windows

Clonezilla

Inveneo uses Clonezilla to create new computer images and to image existing machines

What is an Image?

An image is a copy of everything on the computer, including programs, configurations and user files. The image is created and used by Clonezilla.

Device to Image

After the first computer is configured correctly, an image of the first computer is created that can be used on the other computers.

Image to Machine

Once the image is created, it can be copied to other computers.

Necessary Hardware

Computer

External Hard Drive
Or USB Stick

USB CD-ROM

Clonezilla CD

Keeping Images Organized

Creating a naming scheme will allow you to easily find the correct image as your image library grows.

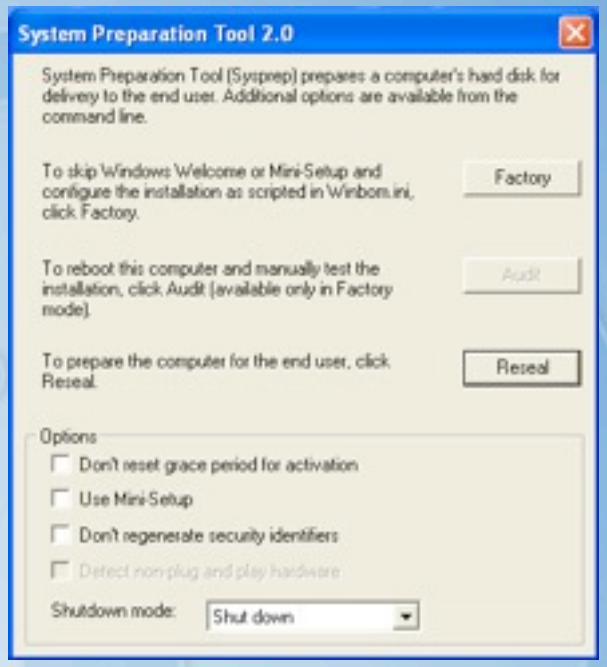
XP-UNHCR-ASUS160gb-2009-03-13

OS Name-Client-Computer&HDDsize-Date

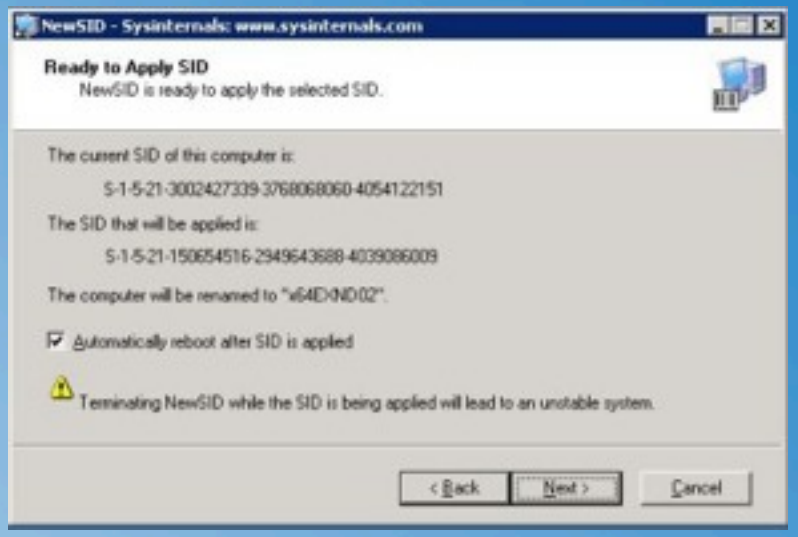
Imaging XP

Replacing the SID

Sysprep



NewSID

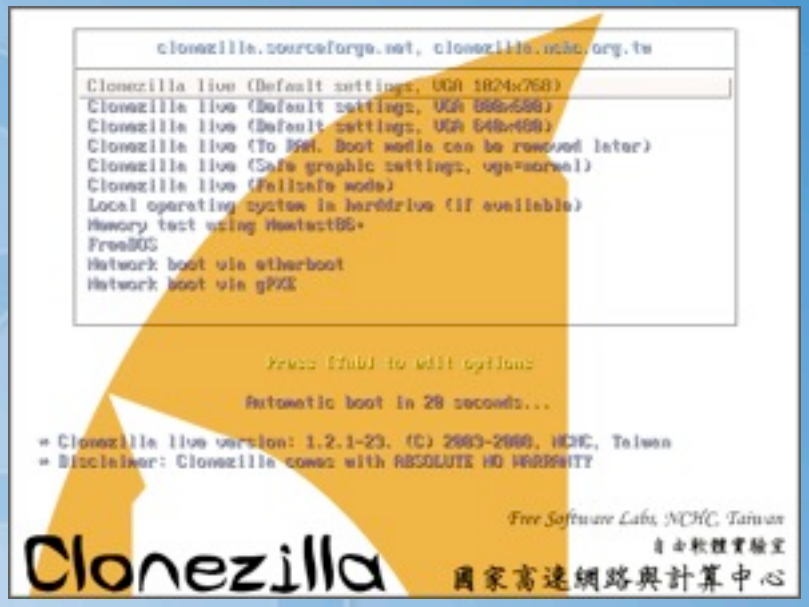


Exercise: Cloning a Computer

Now its time for you to clone a machine yourself. You will take an existing image and put it on a computer.

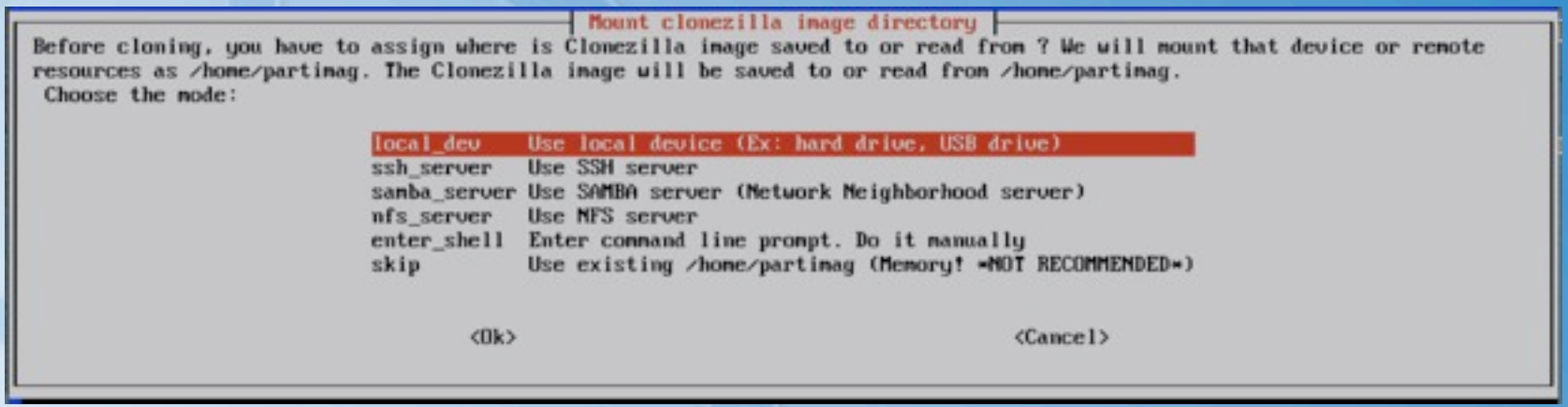
Cloning Instructions

1. Boot from the Clonezilla CD
2. Plug in an external hard drive
3. Choose the default option **Clonezilla live (Default settings, VGA 1024X768)**

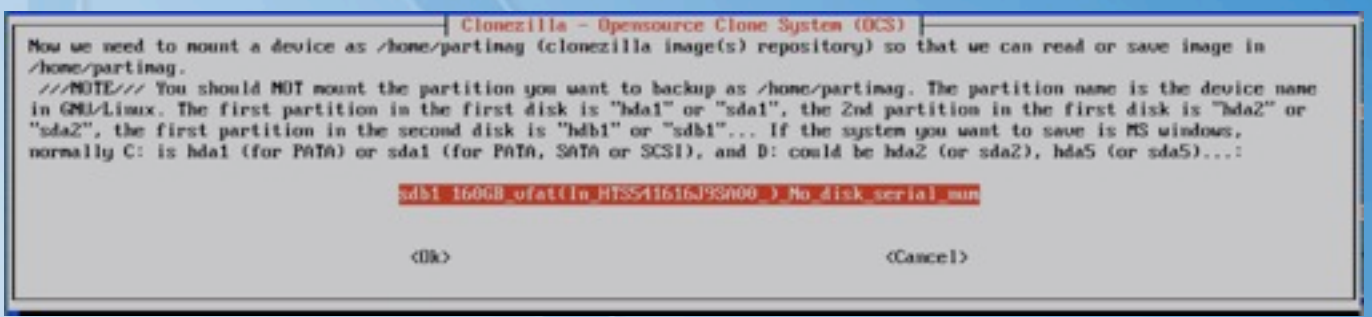


4. Choose the language settings for Clonezilla, **English**
5. Under Configure console-data, choose **Don't touch keymap**

6. Choose **Start_Clonezilla Start Clonezilla**
7. Choose **device-image disk/partition to/from image**
8. On the Mount Clonezilla Image Directory screen, Clonezilla needs to know where to copy the image from. Clonezilla can copy the image to another computer on a network. However, this method can be very complicated. The easiest way is to copy the image to an external hard drive, by selecting **local_dev Use local device** (Ex: hard drive, USB drive)

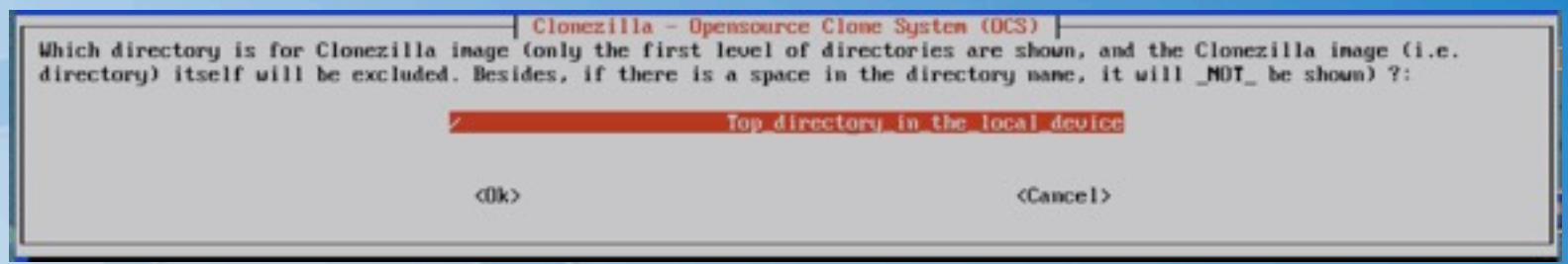


9. Verify the external hard drive is plugged into the computer. Wait 10 seconds. Press **Enter**
10. Clonezilla needs to know where the external hard drive is located. Typically, Clonezilla will display all the drives, including the drives of the computer. The computer's drive is usually listed as sda1 or hda1. Generally, the last option is the external hard drive, listed as sdb1, if the computer you are cloning only has one hard drive. Looking at the hard drive size can help determine which drive is the computer's and which drive is the external hard drive's. Select the external hard drive.



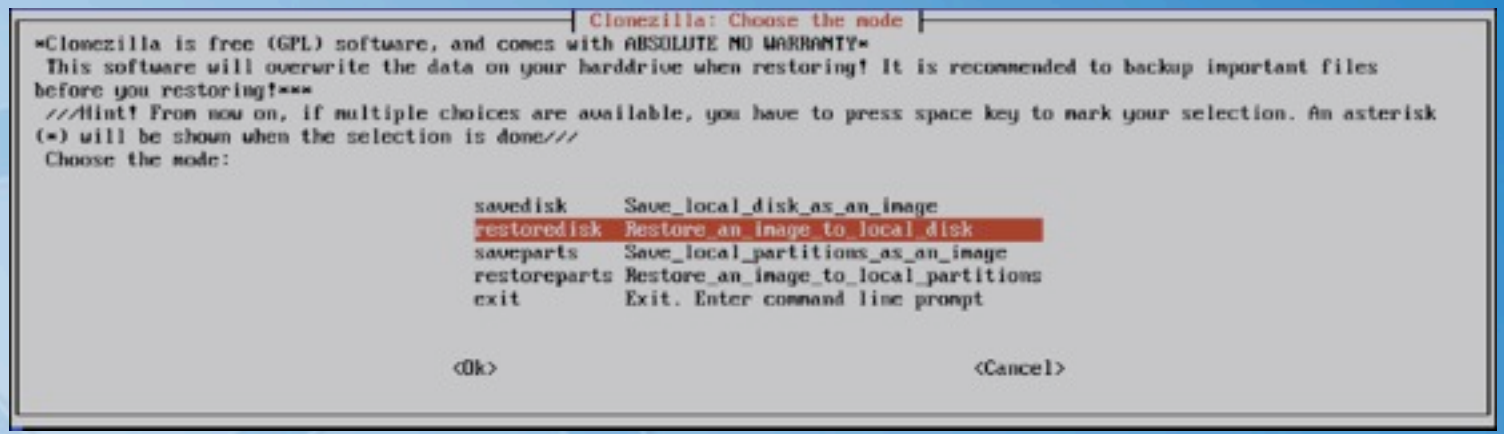
*If the external drive is formatted NTFS, Clonezilla will ask you if you are sure you want to continue. Answer **y**

11. Clonezilla needs to know where on the external hard drive to find the image. The easiest place to find the image is on the top level, not in folder. If images were placed in folder, you will need to select the proper folder, otherwise choose **/Top_directory_in_the_local_device**

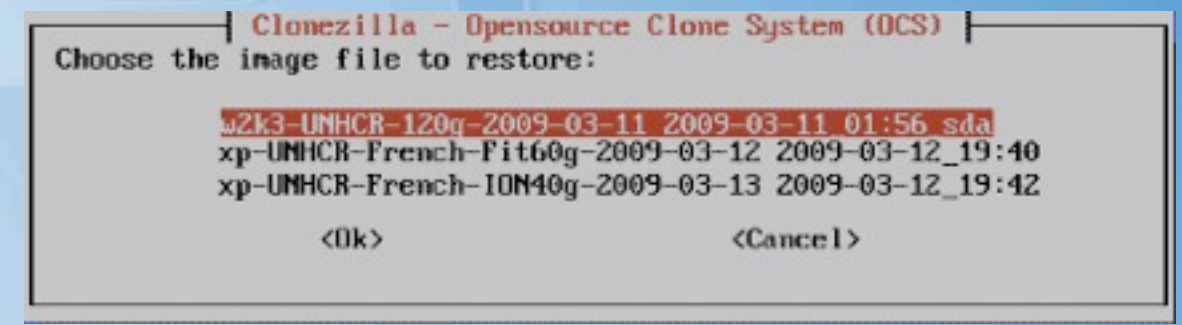


12. Press **Enter** to continue

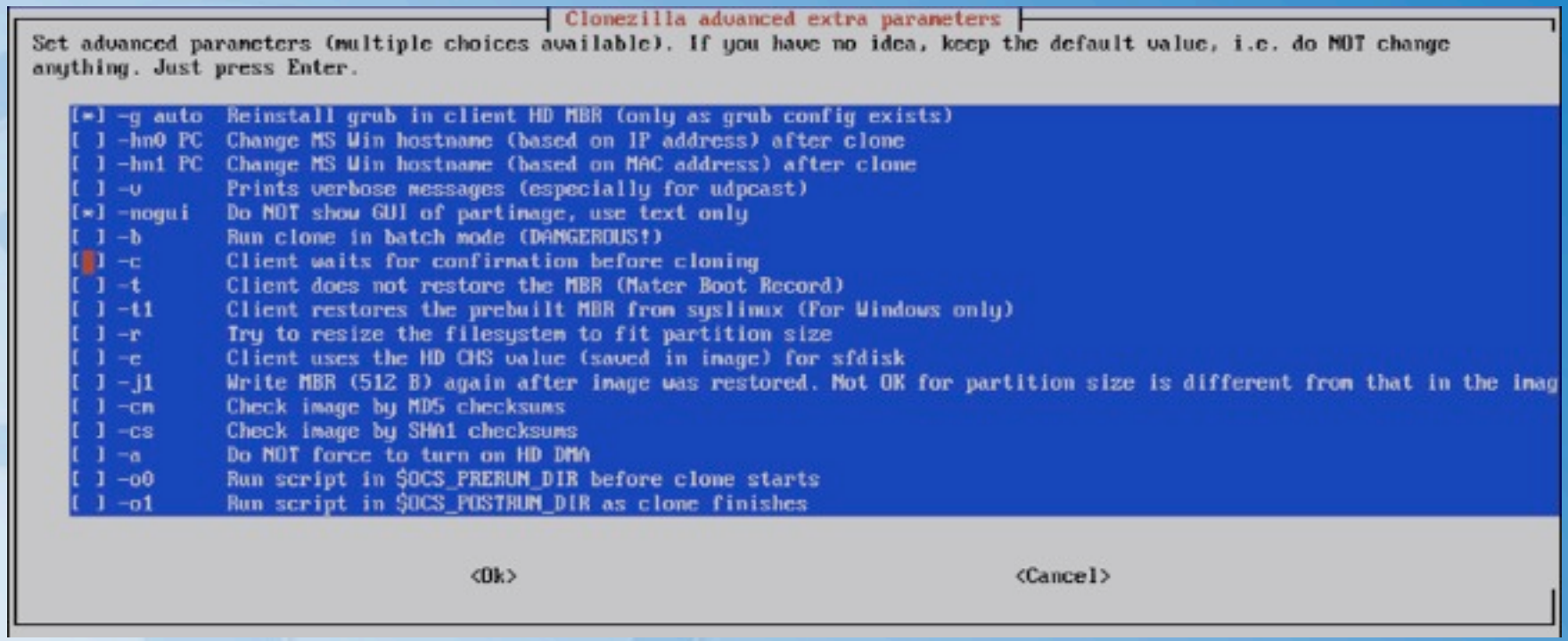
13. Clonezilla is asking if you want to create an image of the computer or put an existing image on the computer. In this case, Clonezilla will create an image of the computer and put that image on an external hard drive. Choose **restoredisk restore_an_image_to_local_disk**



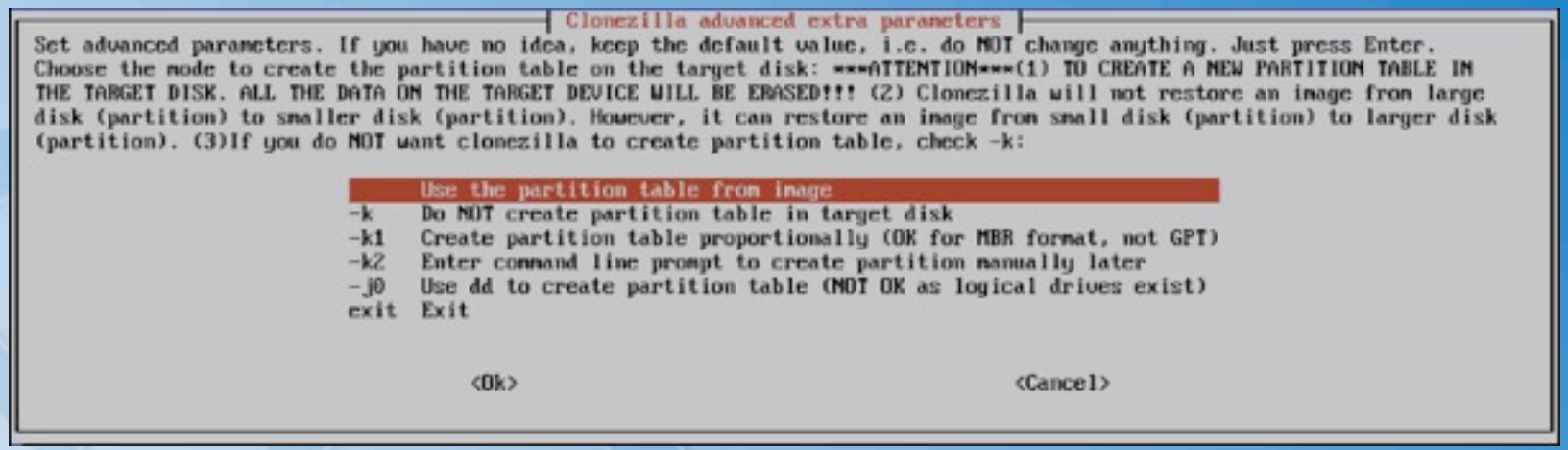
14. Press **Enter** to continue
15. Clonezilla will display a list of all the images it sees on the hard drive.



16. Select which hard drive to put the image on. If the computer only has one hard drive, only one choice will be listed.
17. Tell Clonezilla the options/parameters for copying the image on the hard drive. Select **-g auto** and **-nogui**.



18. Tell Clonezilla additional options for cloning. When cloning a Linux system, choose **Use the partition table from image**. If cloning Windows, choose **-j0 Use dd to create partition table (NOT OK as logical drives exist)**



19. After cloning, tell Clonezilla to poweroff, **-p poweroff**
20. Press **Enter**
21. Let me ask you again, Are you sure you want to continue?? **y** and **Enter**
22. Clonezilla will now image the computer

After Imaging

1. Unplug the USB peripherals.
2. Boot the computer.
3. Verify the image successfully transfered to the computer.
4. Change the boot order in the BIOS, so the hard drive is the first boot option.