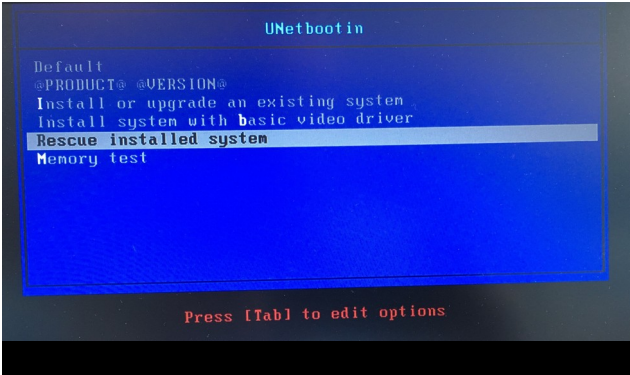
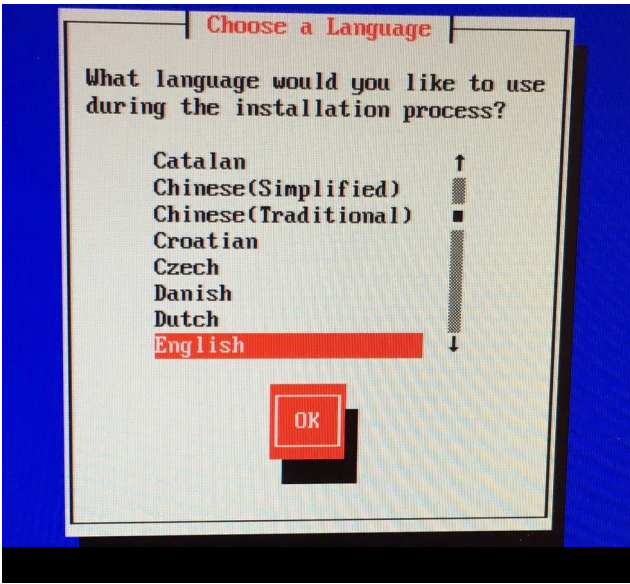
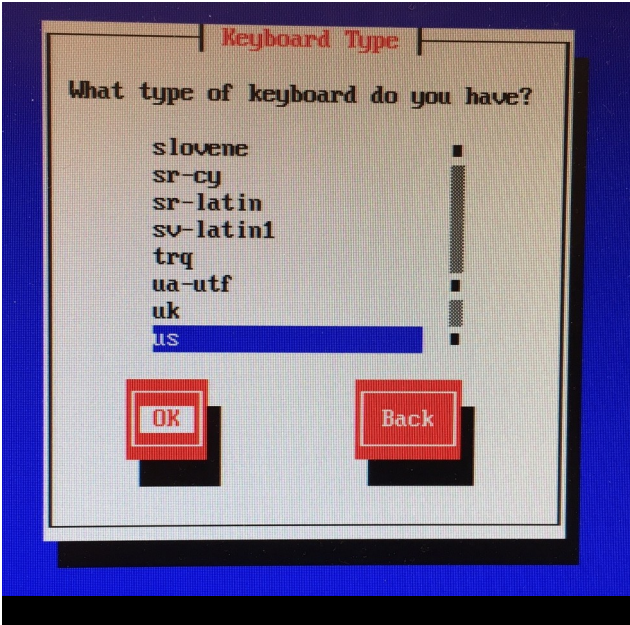


Badblocks – how to check a hard drive for bad sectors

This guide describes how to boot a computer in Linux rescue mode from a bootable USB-stick, and check the hard drive for bad sectors.

The welcoming menu, and how to select the installation image, might deviate depending on the type of media being used.

<p>Let the computer boot from the USB-stick.</p> <p>Choose “Rescue installed system” and press [Enter]</p>	 A screenshot of the UNetbootin boot menu. The title is "UNetbootin". The menu items are: "Default", "@PRODUCT@ @VERSION@", "Install or upgrade an existing system", "Install system with basic video driver", "Rescue installed system" (highlighted with a blue bar), and "Memory test". At the bottom, it says "Press [Tab] to edit options".
<p>Choose a language</p> <p>“English”</p> <p>[OK]</p>	 A screenshot of the "Choose a Language" screen. The title is "Choose a Language". The question is "What language would you like to use during the installation process?". The list of languages includes: Catalan, Chinese(Simplified), Chinese(Traditional), Croatian, Czech, Danish, Dutch, and English (highlighted with a red bar). There are up and down arrow keys on the right side of the list. An "OK" button is at the bottom.
<p>Select your preferred keyboard Layout.</p> <p>For languages with other than Latin characters, English or Norwegian is the recommend layout.</p> <p>[OK]</p>	 A screenshot of the "Keyboard Type" screen. The title is "Keyboard Type". The question is "What type of keyboard do you have?". The list of keyboard types includes: slovene, sr-cy, sr-latin, sv-latin1, trq, ua-utf, uk, and us (highlighted with a blue bar). There are "OK" and "Back" buttons at the bottom.

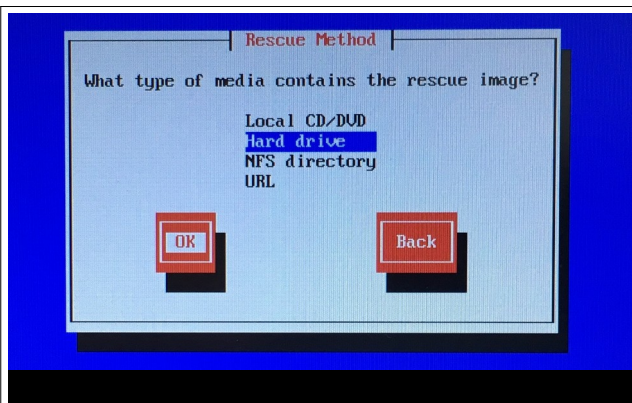
Rescue Method

Select media where to find the rescue image.

If a bootable USB stick is used, choose:

“Hard Drive”

[OK]

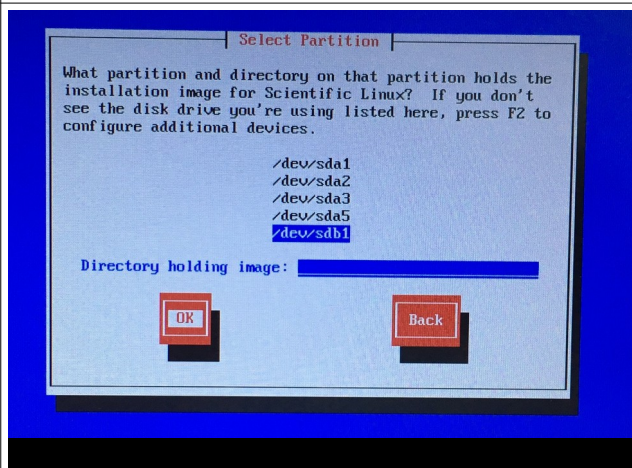


Select partition on the rescue media.

On this screen image there are four devices named /dev/sda. Those presumably represent the partitions on the hard drive, and /dev/sdb1 the bootable USB-stick.

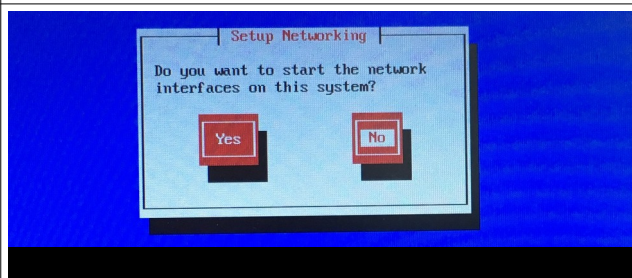
/dev/sdb1 should therefore be selected.

[OK]



Setup Networking

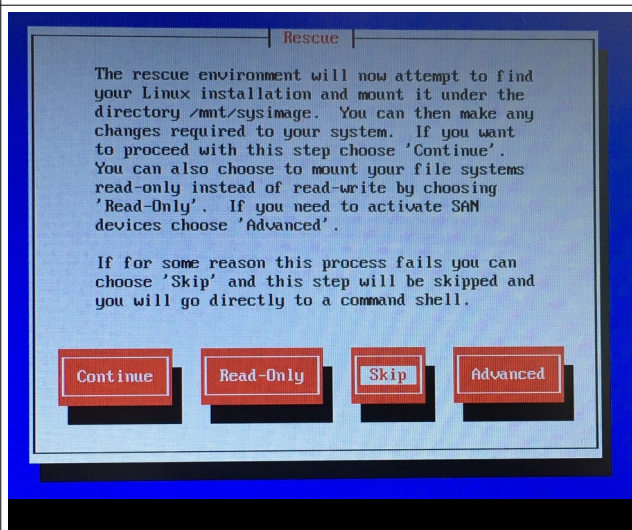
[No]

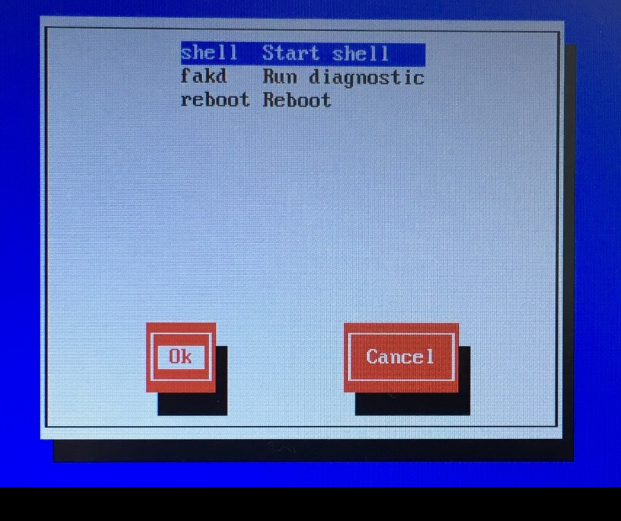


Rescue

[Skip]

[Next]



<p>Shell Start shell</p> <p>[OK]</p>	
<p>A command prompt will appear. To check the names of the partitions preform the command: fdisk -l</p>	<pre>Starting shell . . . bash-4.1# fdisk -l</pre>
<p>A list of devices will appear.</p> <p>The size of the devices indicates that the device /dev/sda is the computer hard drive and /dev/sdb is the USB-device.</p> <p>In this case /dev/sda is the one to check.</p>	<pre>Disk /dev/sda : 500.1 GB . . . Device Boot Start End . . . /dev/sda1 1 25497... /dev/sda2 * 25497 25861... /dev/sda3 26077 26077... Disk /dev/sdb: 16.0 GB . . . Device Boot Start End . . . /dev/sdb1 * 1 247662 . . .</pre>
<p>Run “badblocks -v” on /dev/sda to preform a quick reading test of the drive.</p> <p>For more thorough testing, use the more time consuming read-write test “badblocks -s -n -v”</p> <p>Any badblocks found will be listed on the screen. A hard drive with bad sectors should be replaced.</p> <p>Type “exit” to leave the shell and reboot the computer (Remember to remove the USB-stick before reboot).</p>	<pre>bash-4.1# badblocks -v /dev/sda or bash-4.1# badblocks -s -n -v /dev/sda</pre>