

Debian - Basic OS Installation from ISO (Debian/Win2019)

Image

Download an .ISO for the installation of Debian Linux.

The minimal .ISO (net install) will do, as long as the machine has network connectivity.

The current image can be found on this page: <https://cdimage.debian.org/debian-cd/current/amd64/iso-cd/>

The **netinst.iso** image is the correct one - scroll down to the bottom to select the appropriate version:

Other questions?

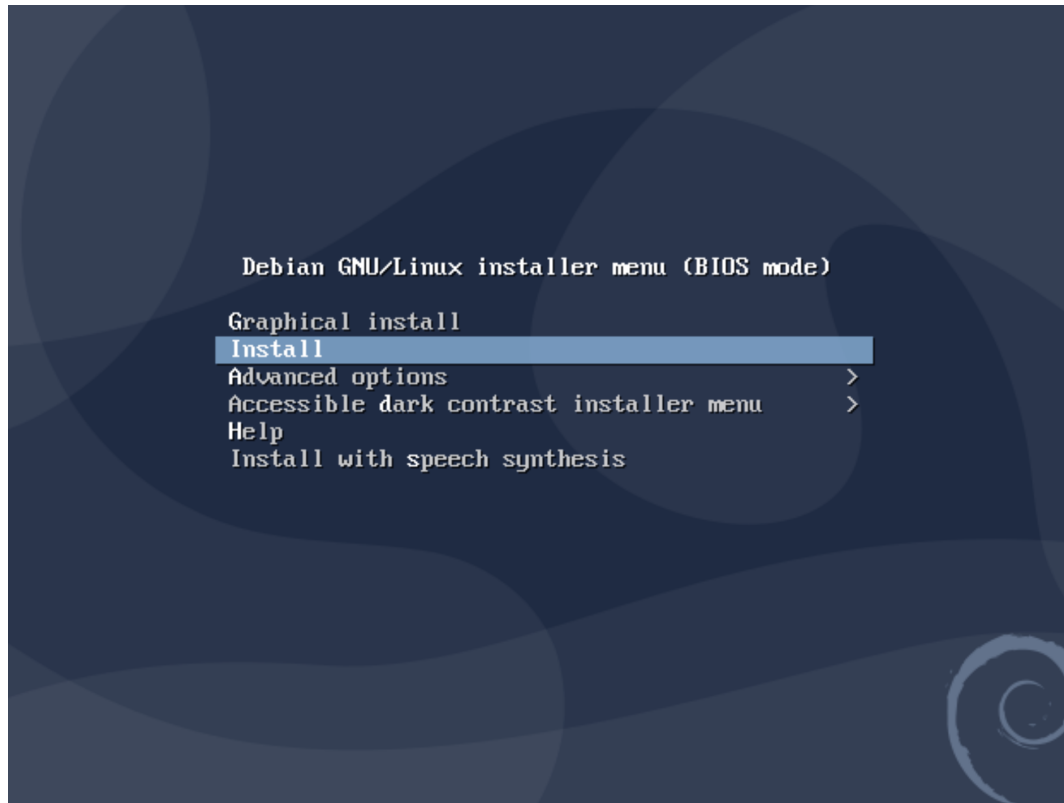
See the Debian CD [FAQ](#) for lots more information about Debian CDs and installation.

The images here were put together by the [Debian CD team](#), using debian-cd and other software.

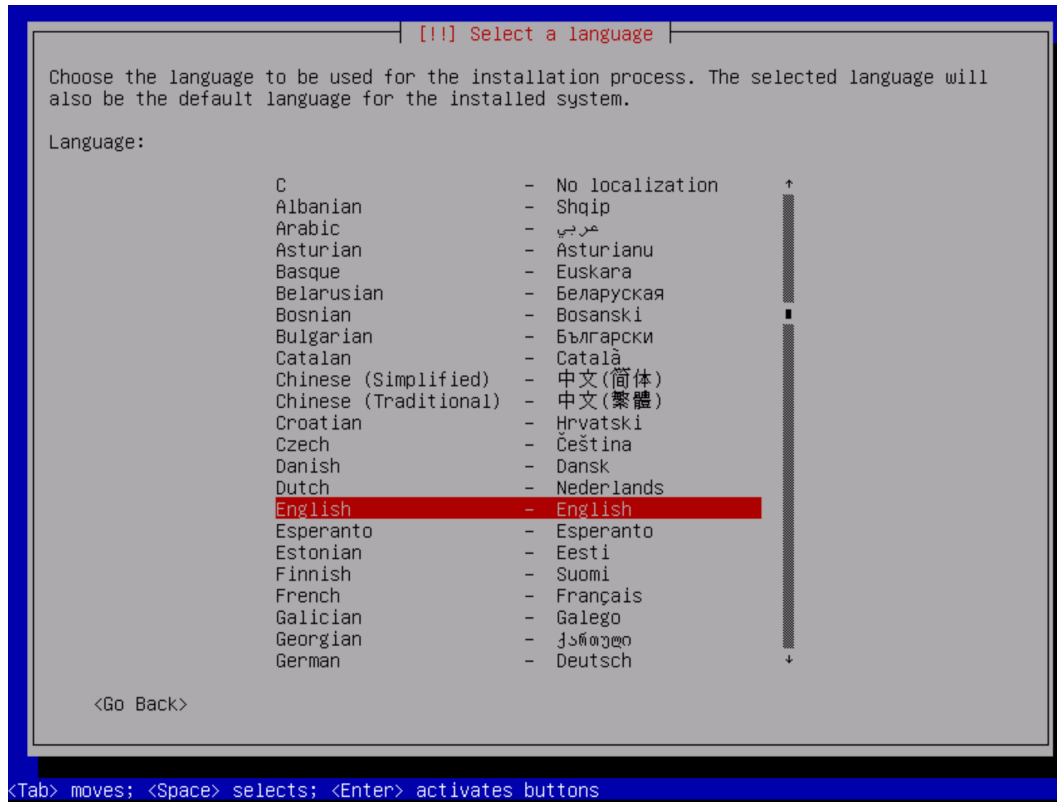
Name	Last modified	Size
Parent Directory	-	-
SHA256SUMS	2021-08-14 22:19	302
SHA256SUMS.sign	2021-08-14 22:22	833
SHA512SUMS	2021-08-14 22:19	494
SHA512SUMS.sign	2021-08-14 22:22	833
debian-11.0.0-amd64-netinst.iso	2021-08-14 13:51	377M
debian-cd-11.0.0-amd64-netinst.iso	2021-08-14 13:51	438M
debian-mac-11.0.0-amd64-netinst.iso	2021-08-14 13:51	377M

Installation

Select the **text installer**:



Select **English** as the language:



Select **other** as the location:

!!! Select your location

The selected location will be used to set your time zone and also for example to help select the system locale. Normally this should be the country where you live.

This is a shortlist of locations based on the language you selected. Choose "other" if your location is not listed.

Country, territory or area:

Antigua and Barbuda

Australia

Botswana

Canada

Hong Kong

India

Ireland

Israel

New Zealand

Nigeria

Philippines

Seychelles

Singapore

South Africa

United Kingdom

United States

Zambia

Zimbabwe

other

<Go Back>

Then select the appropriate location using the next two menus - here for Europe / Germany:

[!!] Select your location

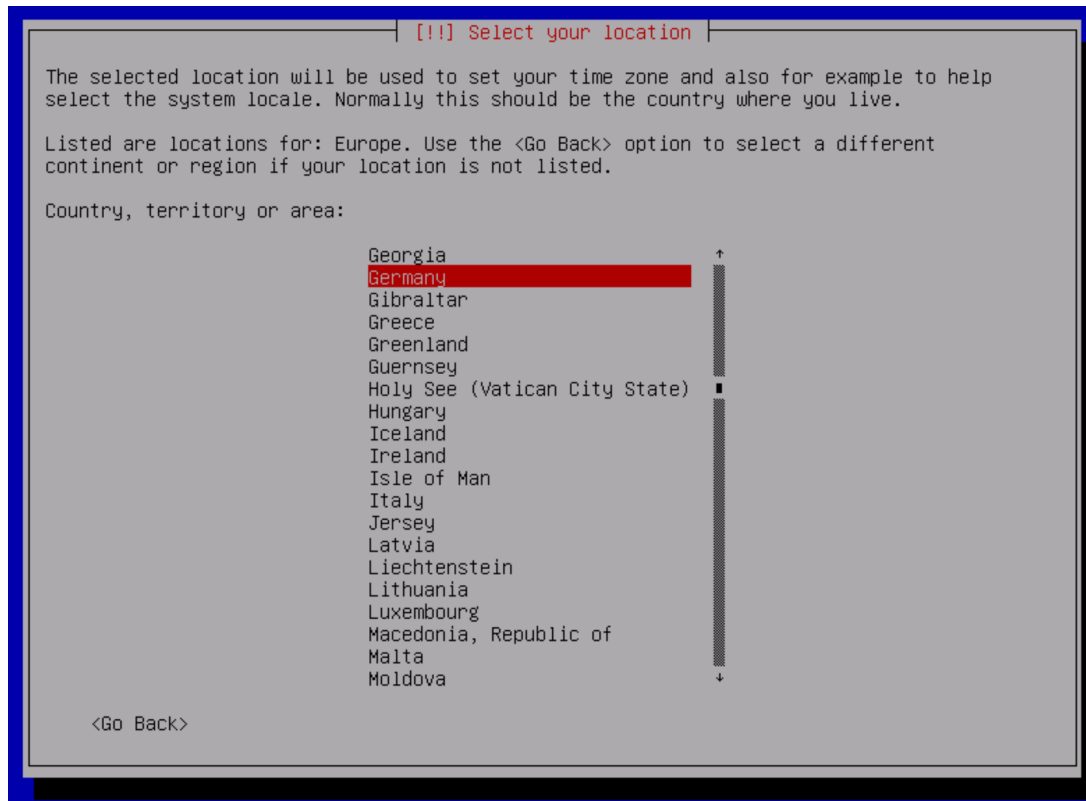
The selected location will be used to set your time zone and also for example to help select the system locale. Normally this should be the country where you live.

Select the continent or region to which your location belongs.

Continent or region:

Africa
Antarctica
Asia
Atlantic Ocean
Caribbean
Central America
Europe
Indian Ocean
North America
Oceania
South America
other

<Go Back>



Then select **en_US.UTF-8** for the locale settings:

[!] Configure locales

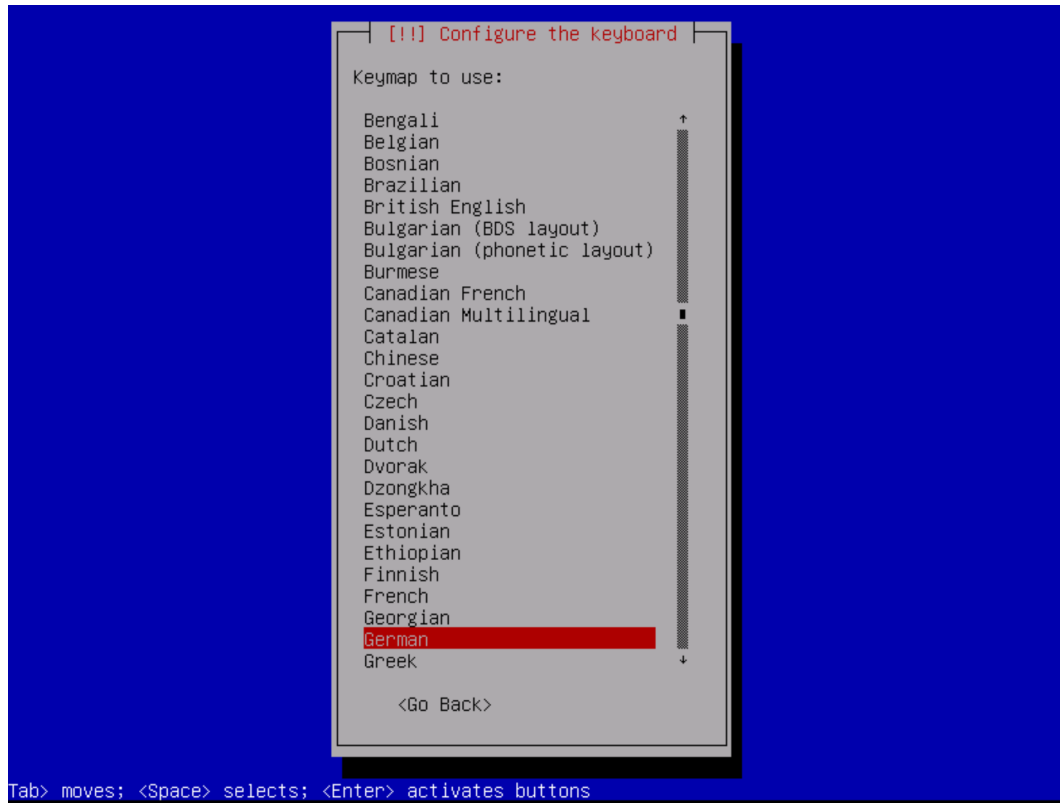
There is no locale defined for the combination of language and country you have selected.
You can now select your preference from the locales available for the selected language.
The locale that will be used is listed in the second column.

Country to base default locale settings on:

Antigua and Barbuda	- en_AG
Australia	- en_AU.UTF-8
Botswana	- en_BW.UTF-8
Canada	- en_CA.UTF-8
Hong Kong	- en_HK.UTF-8
India	- en_IN
Ireland	- en_IE.UTF-8
Israel	- en_IL
New Zealand	- en_NZ.UTF-8
Nigeria	- en_NG
Philippines	- en_PH.UTF-8
Seychelles	- en_SC.UTF-8
Singapore	- en_SG.UTF-8
South Africa	- en_ZA.UTF-8
United Kingdom	- en_GB.UTF-8
United States	- en_US.UTF-8
Zambia	- en_ZM
Zimbabwe	- en_ZW.UTF-8

<Go Back>

Select the appropriate keyboard layout (in this example **German**):



Next, the installer will try to configure the network with DHCP. If this is not possible, select **Configure network manually**:

[!!] Configure the network

From here you can choose to retry DHCP network autoconfiguration (which may succeed if your DHCP server takes a long time to respond) or to configure the network manually. Some DHCP servers require a DHCP hostname to be sent by the client, so you can also choose to retry DHCP network autoconfiguration with a hostname that you provide.

Network configuration method:

Retry network autoconfiguration
Retry network autoconfiguration with a DHCP hostname
Configure network manually

Do not configure the network at this time

<Go Back>

Then enter the appropriate details:

[!!] Configure the network

The IP address is unique to your computer and may be:

- * four numbers separated by periods (IPv4);
- * blocks of hexadecimal characters separated by colons (IPv6).

You can also optionally append a CIDR netmask (such as "/24").

If you don't know what to use here, consult your network administrator.

IP address:

10.42.22.31

<Go Back>

<Continue>

[!!] Configure the network

The netmask is used to determine which machines are local to your network. Consult your network administrator if you do not know the value. The netmask should be entered as four numbers separated by periods.

Netmask:

255.255.255.0

<Go Back>

<Continue>

!!! Configure the network

The gateway is an IP address (four numbers separated by periods) that indicates the gateway router, also known as the default router. All traffic that goes outside your LAN (for instance, to the Internet) is sent through this router. In rare circumstances, you may have no router; in that case, you can leave this blank. If you don't know the proper answer to this question, consult your network administrator.

Gateway:

10.42.22.1

<Go Back>

<Continue>

!!! Configure the network

The name servers are used to look up host names on the network. Please enter the IP addresses (not host names) of up to 3 name servers, separated by spaces. Do not use commas. The first name server in the list will be the first to be queried. If you don't want to use any name server, just leave this field blank.

Name server addresses:

10.42.16.1

<Go Back>

<Continue>

Enter the **fully qualified** host name:

[!] Configure the network

Please enter the hostname for this system.

The hostname is a single word that identifies your system to the network. If you don't know what your hostname should be, consult your network administrator. If you are setting up your own home network, you can make something up here.

Hostname:

acd-dbm-test31.jtel.de

<Go Back>

<Continue>

Next, enter and repeat the **root password**.

[!!] Set up users and passwords

You need to set a password for 'root', the system administrative account. A malicious or unqualified user with root access can have disastrous results, so you should take care to choose a root password that is not easy to guess. It should not be a word found in dictionaries, or a word that could be easily associated with you.

A good password will contain a mixture of letters, numbers and punctuation and should be changed at regular intervals.

The root user should not have an empty password. If you leave this empty, the root account will be disabled and the system's initial user account will be given the power to become root using the "sudo" command.

Note that you will not be able to see the password as you type it.

Root password:

☐ Show Password in Clear

<Go Back>

<Continue>

[!!] Set up users and passwords

Please enter the same root password again to verify that you have typed it correctly.

Re-enter password to verify:

☐ Show Password in Clear

<Go Back>

<Continue>

Next, create a **jtel** user:

[[!]] Set up users and passwords

A user account will be created for you to use instead of the root account for non-administrative activities.

Please enter the real name of this user. This information will be used for instance as default origin for emails sent by this user as well as any program which displays or uses the user's real name. Your full name is a reasonable choice.

Full name for the new user:

jtel

<Go Back>

<Continue>

[[!]] Set up users and passwords

Select a username for the new account. Your first name is a reasonable choice. The username should start with a lower-case letter, which can be followed by any combination of numbers and more lower-case letters.

Username for your account:

jtel

<Go Back>

<Continue>

Enter the password for the **jtel** user:

!!! Set up users and passwords

A good password will contain a mixture of letters, numbers and punctuation and should be changed at regular intervals.

Choose a password for the new user:

☐ Show Password in Clear

<Go Back>

<Continue>

!!! Set up users and passwords

Please enter the same user password again to verify you have typed it correctly.

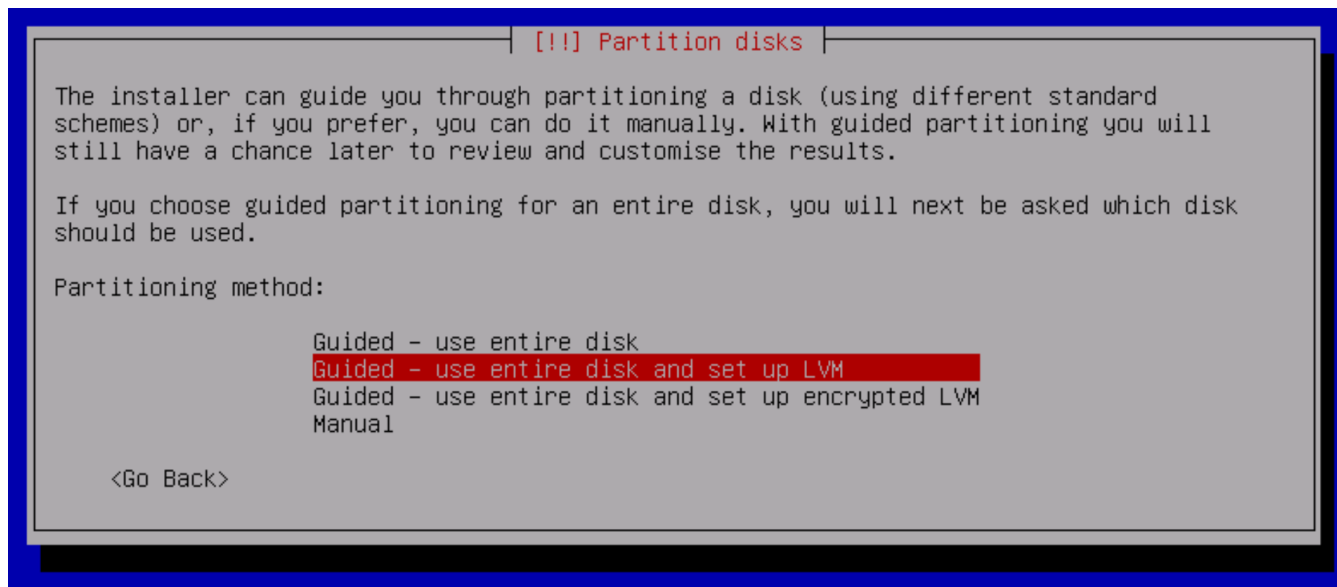
Re-enter password to verify:

☐ Show Password in Clear

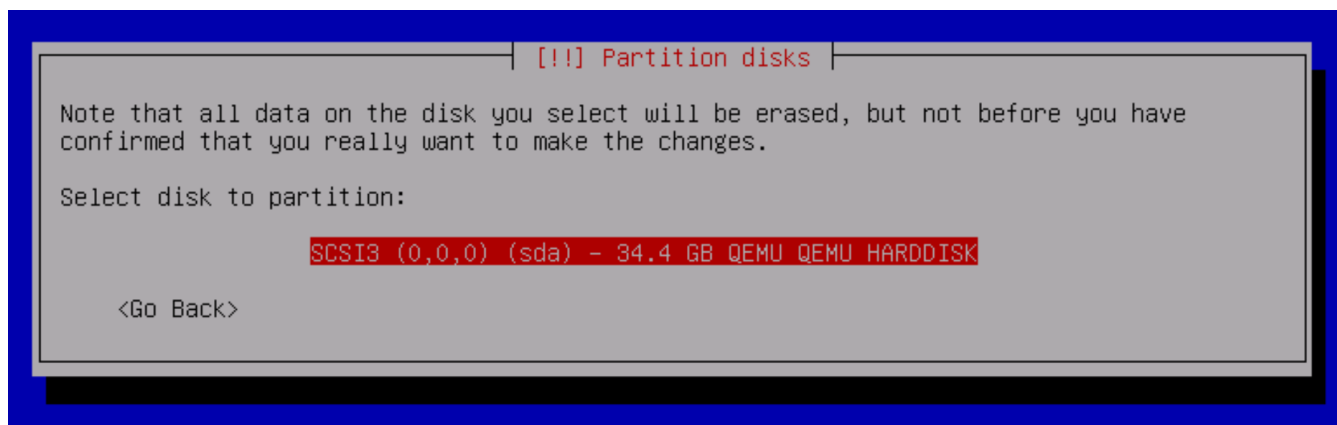
<Go Back>

<Continue>

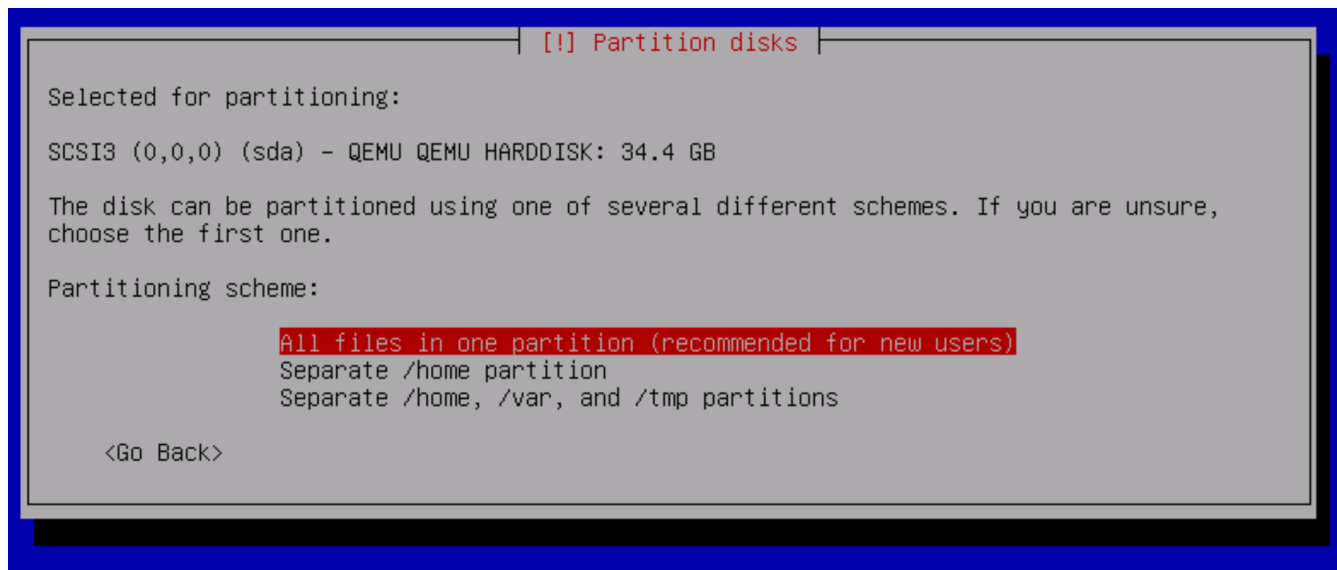
For partitioning, choose **Guided - use the entire disk and set up LVM**:



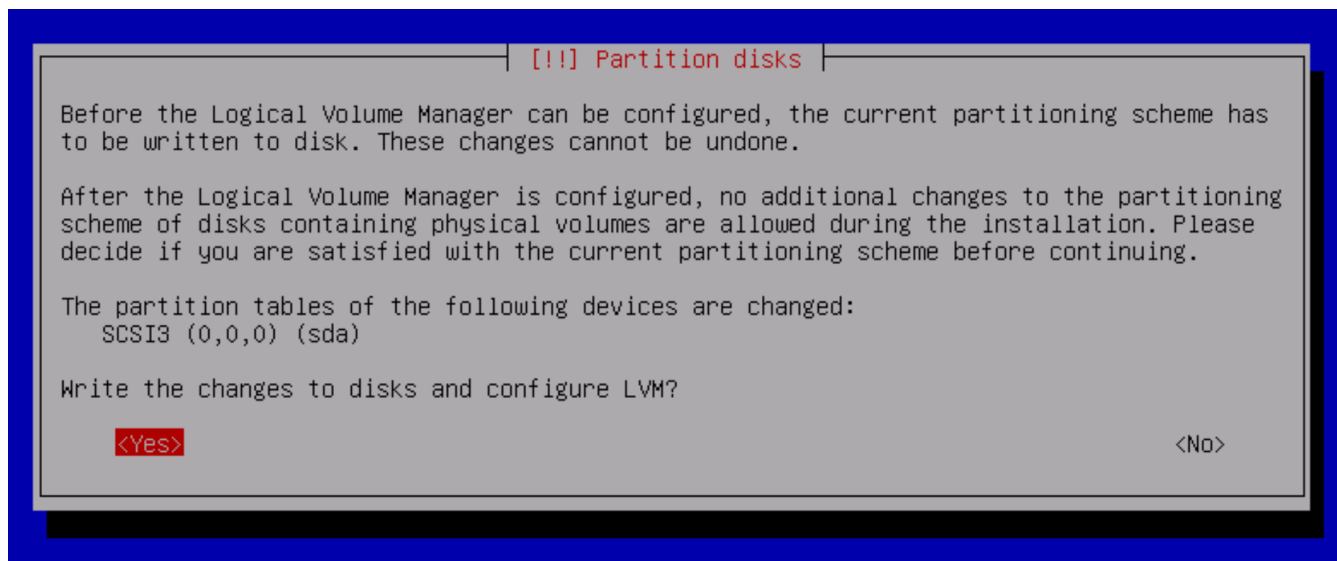
Next select the disk to partition (do not partition the data partition, if you are installing the load balancer):



For the partition layout, select **"All files in one partition (recommended for new users)"**. It will be easy enough to move things to extra disks later if the system needs it, and for most jtel systems this will not be necessary.



Choose to write the changes.



Select to use the whole volume group.

[!] Partition disks

You may use the whole volume group for guided partitioning, or part of it. If you use only part of it, or if you add more disks later, then you will be able to grow logical volumes later using the LVM tools, so using a smaller part of the volume group at installation time may offer more flexibility.

The minimum size of the selected partitioning recipe is 1.9 GB (or 5%); please note that the packages you choose to install may require more space than this. The maximum available size is 33.8 GB.

Hint: "max" can be used as a shortcut to specify the maximum size, or enter a percentage (e.g. "20%") to use that percentage of the maximum size.

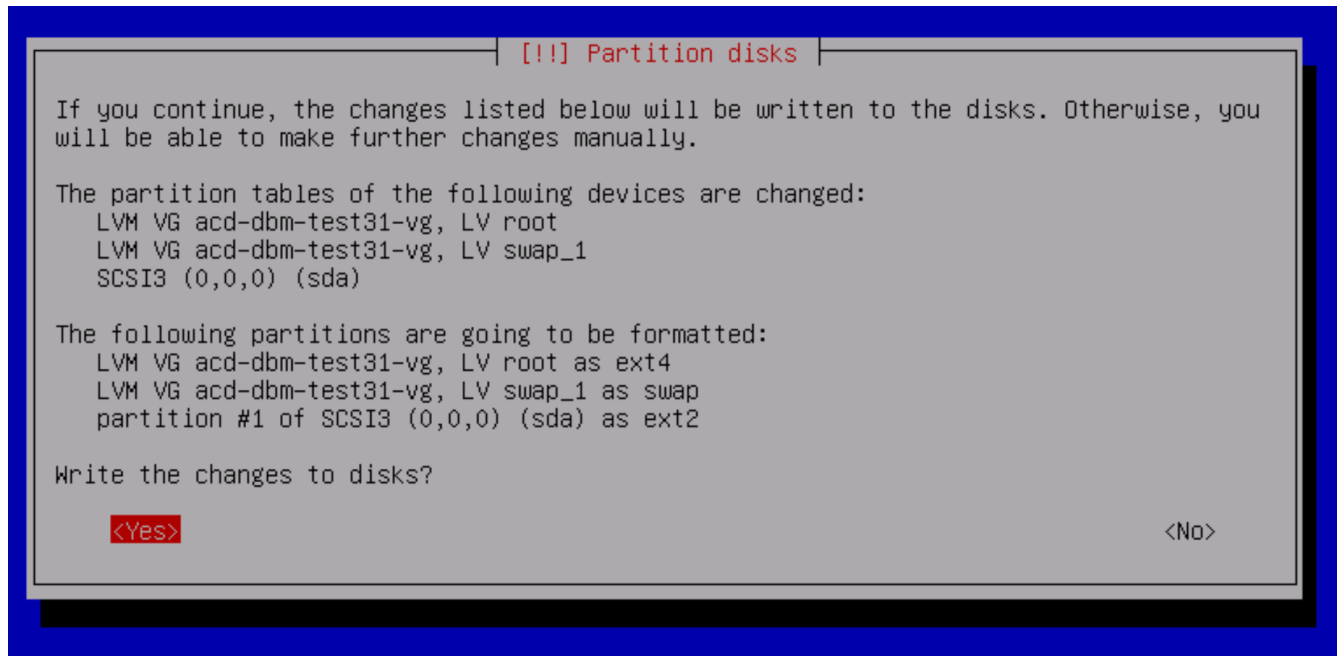
Amount of volume group to use for guided partitioning:

33.8 GB

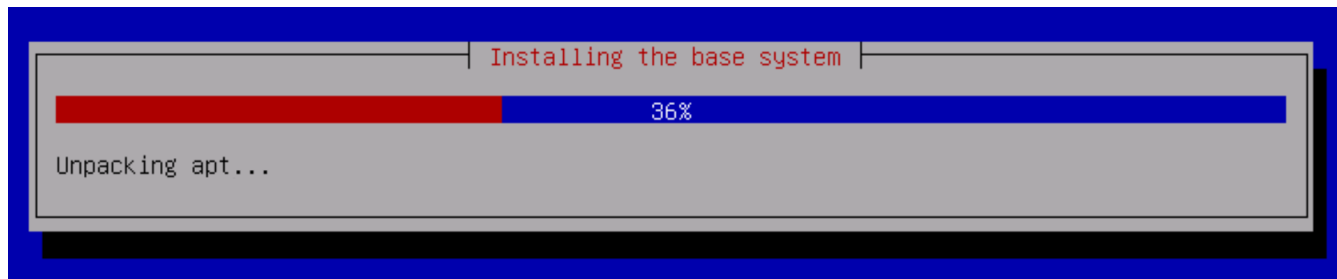
<Go Back>

<Continue>

And select to partition the disks:



The installation will now proceed:



After installing a few things, it will ask if you want to scan another CD or DVD. Say **No**.

[!] Configure the package manager

Your installation CD or DVD has been scanned; its label is:

Debian GNU/Linux 10.7.0 _Buster_ - Official amd64 NETINST 20201205-11:16

You now have the option to scan additional CDs or DVDs for use by the package manager (apt). Normally these should be from the same set as the installation CD/DVD. If you do not have any additional CDs or DVDs available, this step can just be skipped.

If you wish to scan another CD or DVD, please insert it now.

Scan another CD or DVD?

<Go Back>

<Yes>

<No>

Select an appropriate country for your repo mirrors:

[!] Configure the package manager

The goal is to find a mirror of the Debian archive that is close to you on the network -- be aware that nearby countries, or even your own, may not be the best choice.

Debian archive mirror country:

enter information manually ↑
Argentina
Armenia
Australia
Austria
Belarus
Belgium
Brazil
Bulgaria
Cambodia
Canada
Chile
China
Costa Rica
Croatia
Czechia
Denmark
El Salvador
Estonia
Finland
France
Georgia
Germany ↓

<Go Back>

Tab) moveset, <Space> selects, <Enter> activates buttons

[!] Configure the package manager

Please select a Debian archive mirror. You should use a mirror in your country or region if you do not know which mirror has the best Internet connection to you.

Usually, deb.debian.org is a good choice.

Debian archive mirror:

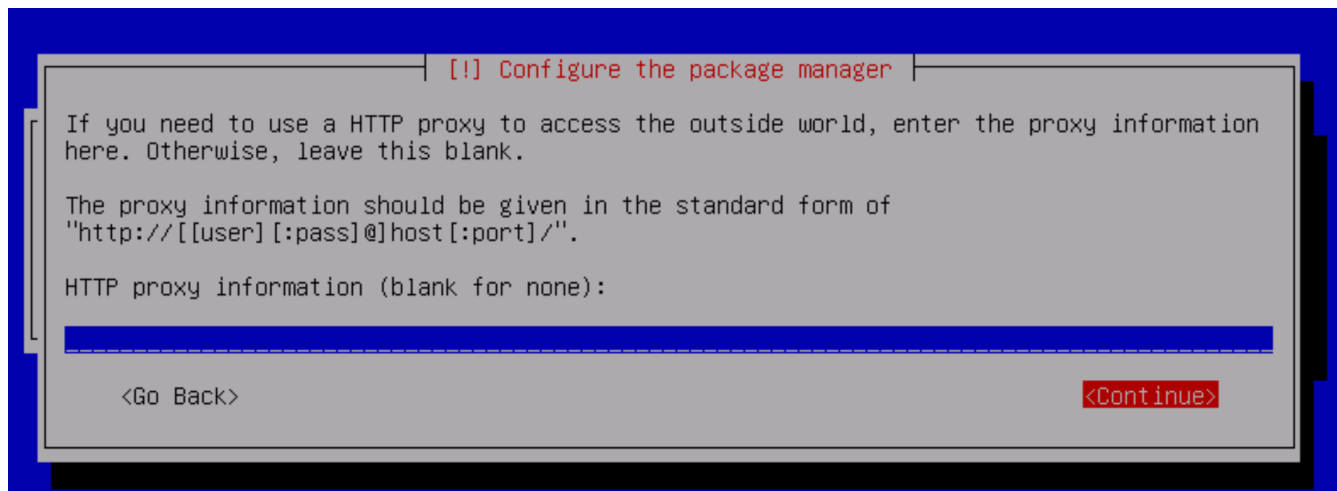
ftp.de.debian.org
debian.inf.tu-dresden.de
ftp2.de.debian.org
ftp.halifax.rwth-aachen.de
mirror.eu.oneandone.net
mirror.de.leaseweb.net
ftp.uni-kl.de
deb.debian.org
debian-archive.trafficmanager.net
debian.tu-bs.de
packages.hs-regensburg.de
debian.mirror.lrz.de
debian.mirror.iphh.net
mirror.united-gameserver.de
ftp.plusline.net
debian.charite.de
mirror.netcologne.de
artfiles.org
debian.intergenia.de
ftp.hosteurope.de
ftp.gwdg.de

↑

↓

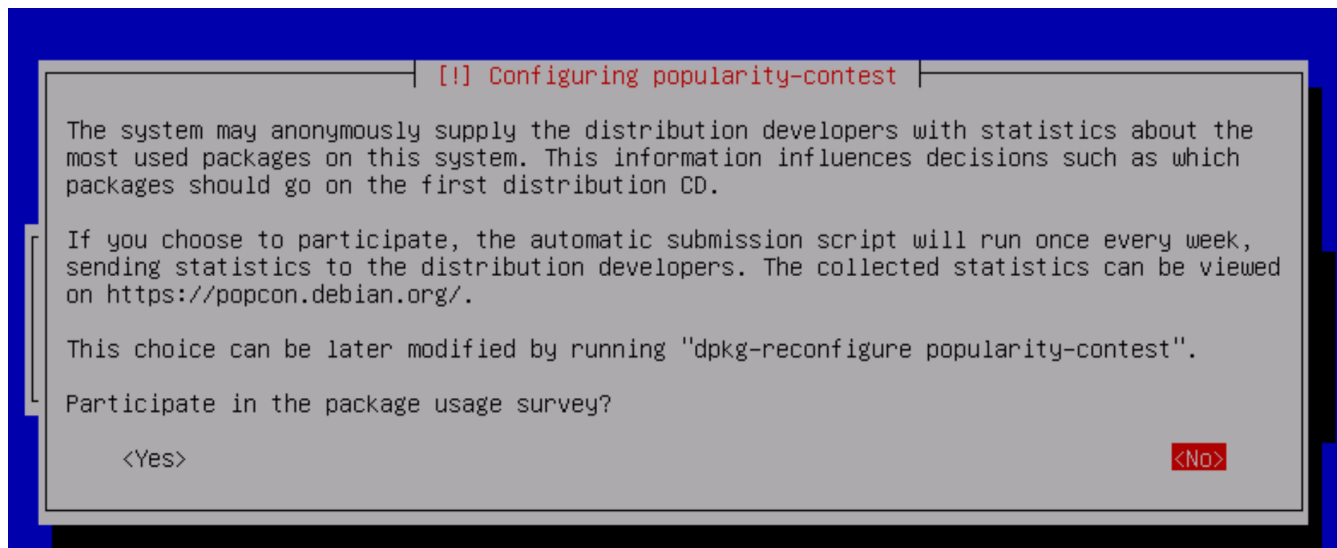
<Go Back>

Select Continue when it asks you to configure an http proxy:



It will then upgrade the software.

Next it will ask for anonymous usage statistics. Select whatever you feel comfortable with.



Next under software selection, it will ask what to install. Select only **SSH server** and **standard system utilities**:

[!] Software selection

At the moment, only the core of the system is installed. To tune the system to your needs, you can choose to install one or more of the following predefined collections of software.

Choose software to install:

```
[ ] Debian desktop environment
[ ] ... GNOME
[ ] ... Xfce
[ ] ... KDE Plasma
[ ] ... Cinnamon
[ ] ... MATE
[ ] ... LXDE
[ ] ... LXQt
[ ] web server
[ ] print server
[*] SSH server
[*] standard system utilities
```

<Continue>

Now, it will complete some more steps. When it asks whether to install GRUB as the bootloader, say **yes**:

[!] Install the GRUB boot loader on a hard disk

It seems that this new installation is the only operating system on this computer. If so, it should be safe to install the GRUB boot loader to the master boot record of your first hard drive.

Warning: If the installer failed to detect another operating system that is present on your computer, modifying the master boot record will make that operating system temporarily unbootable, though GRUB can be manually configured later to boot it.

Install the GRUB boot loader to the master boot record?

<Go Back>

<Yes>

<No>

Enter **/dev/sda** for the location of the boot loader:

[!!] Install the GRUB boot loader on a hard disk

You need to make the newly installed system bootable, by installing the GRUB boot loader on a bootable device. The usual way to do this is to install GRUB on the master boot record of your first hard drive. If you prefer, you can install GRUB elsewhere on the drive, or to another drive, or even to a floppy.

The device should be specified as a device in /dev. Below are some examples:

- "/dev/sda" will install GRUB to the master boot record of your first hard drive;
- "/dev/sda2" will use the second partition of your first hard drive;
- "/dev/sdc5" will use the first extended partition of your third hard drive;
- "/dev/fd0" will install GRUB to a floppy.

Device for boot loader installation:

/dev/sda

<Go Back>

<Continue>

Finally, it will complete the installation. Select Continue to reboot, and you should be able to ssh into the system.

[!!] Finish the installation

Installation complete

Installation is complete, so it is time to boot into your new system. Make sure to remove the installation media, so that you boot into the new system rather than restarting the installation.

<Go Back>

<Continue>

Final Steps

- Make sure you can ssh into the machine as root
- Make sure the network configuration is correct, and that you can, for example, ping www.google.de
- Provide jtel with:
 - The IP Address of the machine
 - The jtel password
 - The root password

If jtel is performing the installation, we will take over from here.