

# Ubuntu-MD April 25, 2020 Virtual Meeting

## Zoom virtual meeting

### Overview of Features Ubuntu 20.04 LTS Release

1. Focal Foca support to 2025
2. Upgrade from Ubuntu 18.04 LTS, Ubuntu 19.04 or 19.10
3. Wait a few months for upgrade option to appear on desktop
4. Force upgrade via commandline
  - sudo apt update
  - sudo apt upgrade
  - sudo apt install update-manager-core
  - sudo apt do-release-upgrade (may need to use -d to force it)

### Debian Upgrade Technique

1. Only works from Ubuntu 18.04 or 19.10
2. Change /etc/apt/sources.list to focal
  - o sudo sed -i 's/bionic/focal/g' /etc/apt/sources.list
  - o OR
  - o sudo sed -i 's/eoan/focal/g' /etc/apt/sources.list
3. Then look in /etc/apt/sources.list.d/ and change any files the same way.
4. Last step is to run the update and dist-upgrade commands
5. sudo apt update && sudo apt dist-upgrade -y

### New install is another option.

1. Backup your /home /etc /opt /var directories
2. Download Ubuntu 20.04 (64 bit only), extract iso to thumb drive and boot computer to Live session with it.
3. Make sure that networking including wireless works along with any peripherals like printers.
4. Install system over current one.

## What's Different

1. New storage options during installation → Advanced ZFS (experimental)
2. Gnome 3.36, new theme (Yaru) and faster
3. Linux Kernel 5.4
4. Amazon App and Python 2 has been removed
5. New graphics and photos for desktop
6. New Login and Lock Screen
7. Do not disturb notifications option
8. Fractional scaling option for better screen display
9. System menu new Suspend option and new layout
10. Software center now uses Snaps to install software (Can still use apt from the terminal)
11. Software channels for snaps include Stable, Candidate, Beta or Edge
12. Applications Upgraded versions
  - Thunderbird 68.6.0 with Lightning calendar extension
  - LibreOffice 6.4.2.2
  - Firefox 75.0
13. Integrates with Google C-Suite and MS Exchange
14. Biometric fingerprint recognition can be activated with the appropriate hardware.
15. Wireguard VPN

## Access Hypervisor boot menu

Key combinations for accessing Boot Menu on Hypervisors

Device	Key Combination	Comment
Oracle Virtual Box	<b>F12</b>	Automatically boots from ISO when attached via virtual machine settings
VMware Workstation	<b>Esc</b> boot menu, <b>F12</b> BIOS	Automatically boots from ISO when attached via virtual machine settings

## Access BIOS legacy

Key combinations for accessing Legacy Boot Menu

Device	Key Combination	Comment
Acer	<b>Esc</b> , <b>F12</b> or <b>F9</b>	<b>F12</b> key most likely
Asus	<b>F8</b> or <b>Esc</b>	
Compaq	<b>Esc</b> or <b>F9</b>	
Dell	<b>F12</b>	
eMachines	<b>F12</b>	
Fujitsu	<b>F12</b>	
HP	<b>Esc</b> or <b>F9</b>	
Lenovo	<b>F8</b> , <b>F10</b> or <b>F12</b>	Other possibilities: <b>Novo</b> button or <b>Fn + F11</b>
Samsung	<b>Esc</b> or <b>F2</b> or <b>F12</b>	For ultrabooks from Samsung disable the <b>fast boot option</b> in BIOS/UEFI. See next section.
VAIO	<b>Esc</b> , <b>F10</b> or	Other possibilities: <b>Assist</b> button

Device	Key Combination	Comment
	F11	
Toshiba	F12	

### Access BIOS/UEFI

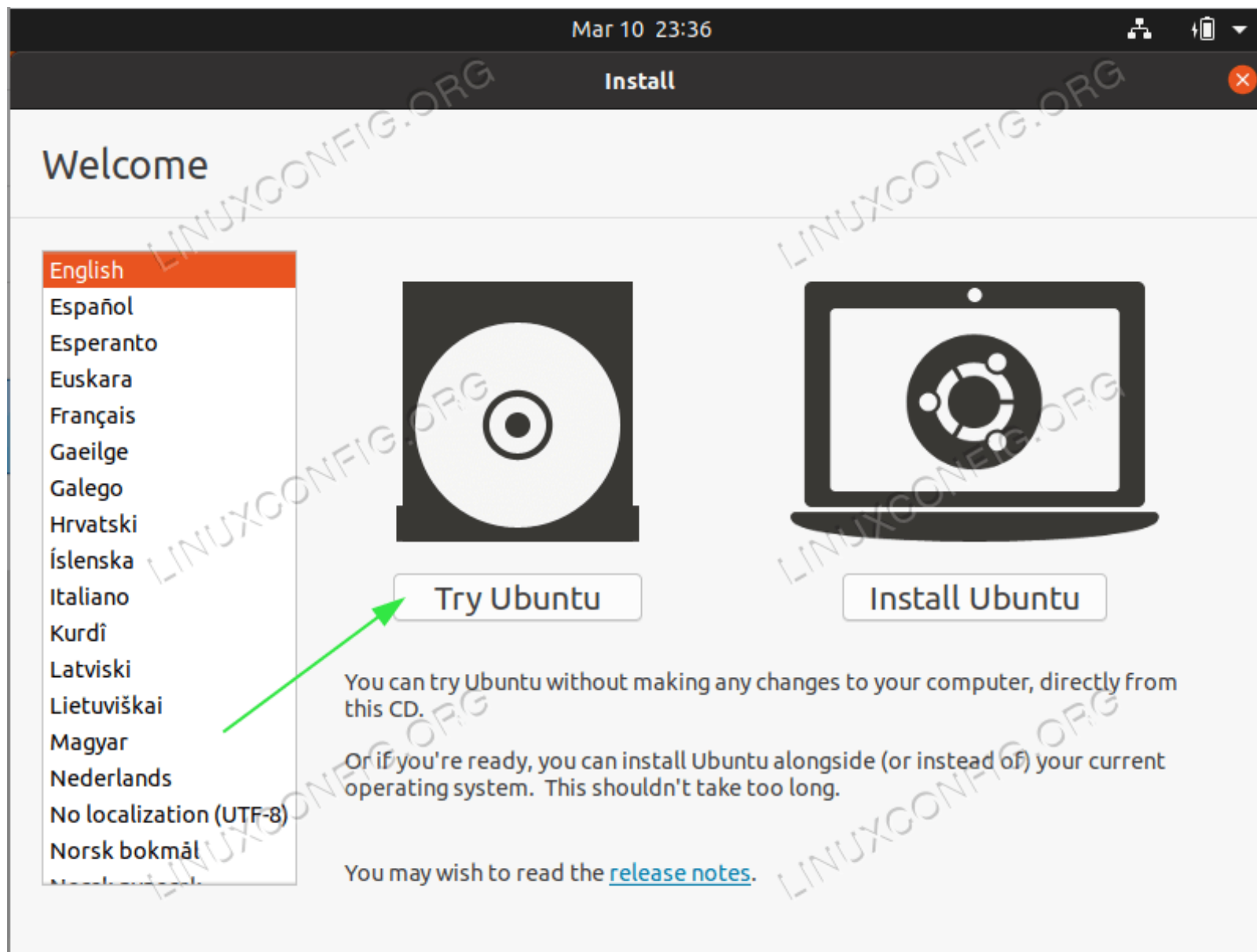
To access BIOS/UEFI on your computer you will also need to hit different keys (or combination of keys) depending on your computer type. Here is the list of possible keys you may have to press depending on your PC:

#### Key combinations for accessing BIOS/UEFI

Device	Key Combination	Comment
Acer	Del or F2	F2 key most likely
Asus	Delete or Del	
Compaq	F10	
Dell	F2	
eMachines	Tab or Del	
Fujitsu	F2	
HP	Esc , F10 , F11	Other possibilities: on Pavilion - F1
Lenovo	F1 or F2	Other possibilities: small button next to the Power button (if laptop)
Samsung	F2	For ultrabooks from Samsung it might be F10
VAIO	F1 , F2 , F3	Other possibilities: Assist button
Toshiba	F1 , F2 , F12 or Esc	



After a successful boot from the Ubuntu 20.04 installation media the installer will take some time to start



The first screen the Ubuntu installer will present, is the selection between **Try Ubuntu** and **Install Ubuntu**. Regardless, of your choice, both options eventually lead to a fully installed Ubuntu 20.04 Desktop system.

I recommend the "Try the Ubuntu" option to see how the Ubuntu 20.04 feels and loads on your hardware before performing a full install. Select the installation language and hit the [Try Ubuntu](#) button.



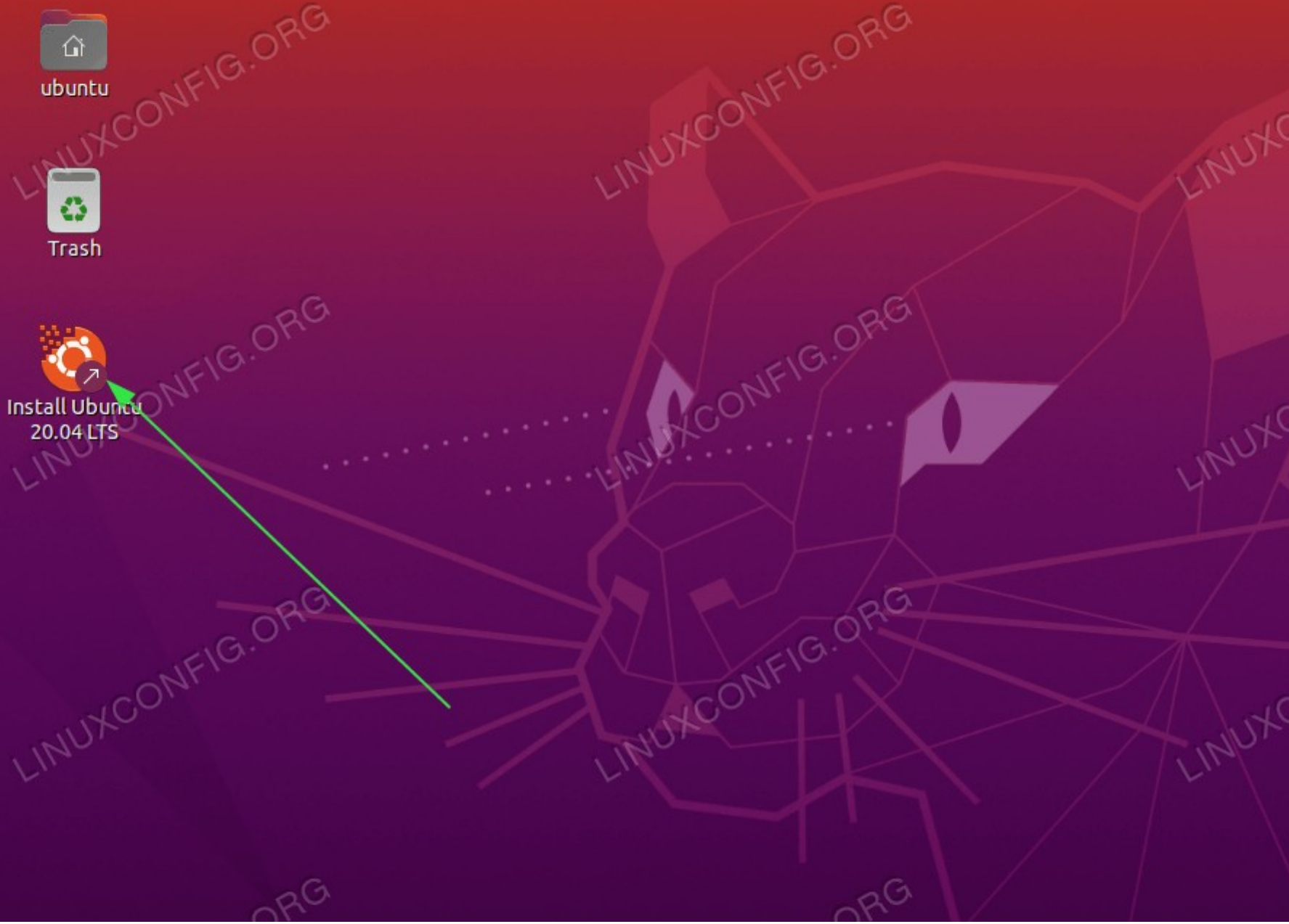
ubuntu



Trash



Install Ubuntu  
20.04 LTS





Once the Ubuntu system completes the boot sequence, you will be presented with a full, ready to use Ubuntu 20.04 Desktop Live operating system. Feel free to play with it, install some software or browse the Internet. The choice is yours!

The system loads in your physical RAM. Hence any changes you make will not affect your currently installed operating system or data stored on your hard drive. Once ready, begin the Ubuntu 20.04 installation by clicking on the **Install Ubuntu 20.04 LTS** icon on your desktop.

## 1. Installation type



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### Install

## Installation type

This computer currently has no detected operating systems. What would you like to do?

- Erase disk and install Ubuntu  
**Warning:** This will delete all your programs, documents, photos, music, and any other files in all operating systems.  
[Advanced features...](#) None selected
- Something else  
You can create or resize partitions yourself, or choose multiple partitions for Ubuntu.

[Quit](#)

Most likely, this part of the Ubuntu 20.04 installation process requires your full attention. If you are installing a new system or system which does not contain any personal data or configured software feel free to select the first option **Erase disk and install Ubuntu**.

The install will automatically partition your hard drive to use the most of the disk space and create only the required number of partitions to host the entire system. If this is your case, hit the **Install Now** button and move to .



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### Install

## Installation type

This computer currently has no detected operating systems. What would you like to do?

- Erase disk and install Ubuntu  
**Warning:** This will delete all your programs, documents, photos, music, and any other files in all operating systems.  
[Advanced features...](#) None selected
- Something else  
You can create or resize partitions yourself, or choose multiple partitions for Ubuntu.

Quit

For those interested in having more control over how many partitions or even hard drives your system will use, elect **Something else**. Usually, the most crucial part of any desktop installation is the user home mounted as **/home** directory. Therefore, separating the **/home** directory from the rest of the system might allow for a simpler system re-installation, backup or even enables the user to store the entire **/home** directory on the separate hard disk.

As an example, in the next few steps, we will create a new partition layout with a separate partition for the **/home** directory. The system will use the following partitions:

```
/ - 8 GB  
SWAP - 2 GB  
/home - rest of the available disk space
```



### Install

## Installation type

Device	Type	Mount point	Format?	Size	Used	System
/dev/sda						

+ - Change...

Device for boot loader installation:

/dev/sda ATA VBOX HARDDISK (23.4 GB)



Select the available hard drive for the installation and click on the **New Partition Table** button.





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### Install

## Installation type

Device	Type	Mount point	Format?	Size	Used	System
/dev/sda						

**Create new empty partition table on this device?**

You have selected an entire device to partition. If you proceed with creating a new partition table on the device, you will be able to undo this operation later if you wish.

+ - Change...

Device for boot loader installation:

/dev/sda ATA VBOX HARDDISK (23.4 GB)

Confirm creation of the New Partition Table



### Install

## Installation type

free space  
23.4 GB

Device	Type	Mount point	Format?	Size	Used	System
/dev/sda						
	free space		<input type="checkbox"/>	23436 MB		

+ - Change...

Device for boot loader installation:  
/dev/sda ATA VBOX HARDDISK (23.4 GB)

Select available free space and click on the  sign to create a new partition.



### Install

## Installation type

free space  
23.4 GB

Device	Type	Mount point
/dev/sda		
	free space	

+ - Change...

Device for boot loader install

/dev/sda	ATA VBOX HARDDISK (23.4 GB)
----------	-----------------------------

### Create partition

Size:  - + MB

Type for the new partition:  Primary  
 Logical

Location for the new partition:  Beginning of this space  
 End of this space

Use as: Ext4 journaling file system

Mount point:

Depending on your hard disk size, select the partition size in MB. Please note that the Minimal System installation required around 6.2GB disk space, therefore I recommend selecting minimum 8GB and above. Set mount point to .



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### Install

## Installation type

**sda1 (ext4)** 8.0 GB  **free space** 15.4 GB

Device	Type	Mount point	Format?	Size	Used	System
/dev/sda						
/dev/sda1	ext4	/	<input checked="" type="checkbox"/>	7998 MB	unknown	
free space			<input type="checkbox"/>	15436 MB		

+ - Change...

Device for boot loader installation:

/dev/sda ATA VBOX HARDDISK (23.4 GB)

Select available free space and click on the  sign to create a new partition.





### Install

## Installation type

<input checked="" type="checkbox"/> sda1 (ext4)	<input type="checkbox"/> free space
8.0 GB	15.4 GB

Device	Type	Mount p
/dev/sda		
/dev/sda1	ext4	/
free space		

+ - Change...

Device for boot loader installation:

/dev/sda ATA VBOX HARDDISK (23.4 GB)

### Create partition

Size:  - + MB

Type for the new partition:  Primary  
 Logical

Location for the new partition:  Beginning of this space  
 End of this space

Use as:

Cancel OK

Next, create a SWAP partition. The swap partition is used as virtual memory in case your system runs out of the memory (RAM). For a system with a limited amount of RAM, the rule of thumb is to create the swap partition twice the size of the actual hardware RAM.



### Install

## Installation type

Progress bar: 8.0 GB (green), 2.0 GB (orange), 13.4 GB (grey)

**sda1 (ext4)** 8.0 GB     **sda2 (linux-swaps)** 2.0 GB     **free space** 13.4 GB

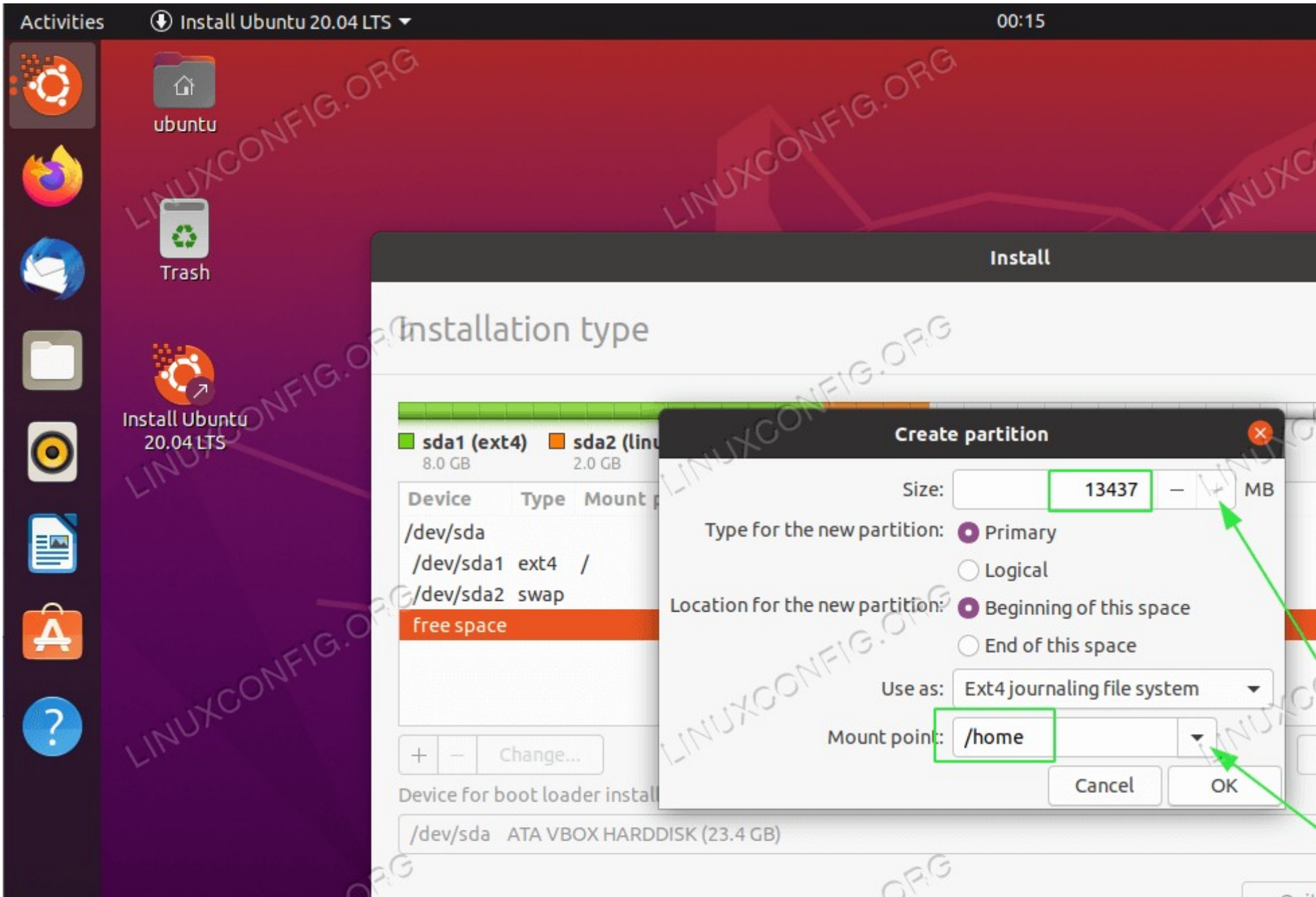
Device	Type	Mount point	Format?	Size	Used	System
/dev/sda						
/dev/sda1	ext4	/	<input checked="" type="checkbox"/>	7998 MB	unknown	
/dev/sda2	swap		<input type="checkbox"/>	1999 MB	unknown	
free space			<input type="checkbox"/>	13437 MB		

+ - Change...

Device for boot loader installation:

/dev/sda ATA VBOX HARDDISK (23.4 GB)

Select available free space and click on the  sign to create a new partition.



Use the rest of the disk space to create `/home` partition. Set the mount point to `/home`.



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### Install

## Installation type

**sda1 (ext4)** 8.0 GB    **sda2 (linux-swap)** 2.0 GB    **sda3 (ext4)** 13.4 GB

Device	Type	Mount point	Format?	Size	Used	System
<b>/dev/sda</b>						
/dev/sda1	ext4	/	<input checked="" type="checkbox"/>	7998 MB	unknown	
/dev/sda2	swap		<input type="checkbox"/>	1999 MB	unknown	
/dev/sda3	ext4	/home	<input checked="" type="checkbox"/>	13436 MB	unknown	

+ - Change...

Device for boot loader installation:

/dev/sda ATA VBOX HARDDISK (23.4 GB)

All done. Review the partitions and hit the [Install Now](#) button.



**Write the changes to disks**



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### Install

## Something else

<b>sda1 (ext4)</b>	<b>sda2 (linux-swaps)</b>	<b>sda3 (ext4)</b>
8.0 GB	2.0 GB	13.4 GB

**Write the changes to disks?**

If you continue, the changes listed below will be written to the disks. Otherwise, you will be able to

The partition tables of the following devices are changed:  
SCSI3 (0,0,0) (sda)

The following partitions are going to be formatted:  
partition #1 of SCSI3 (0,0,0) (sda) as ext4  
partition #2 of SCSI3 (0,0,0) (sda) as swap  
partition #3 of SCSI3 (0,0,0) (sda) as ext4

/dev/sda ATA VBOX HARDDISK (23.4 GB)

**Think twice, cut once!** All data on your current disk will be removed. Once ready click the [Continue](#) button.

## 1. Where are you?



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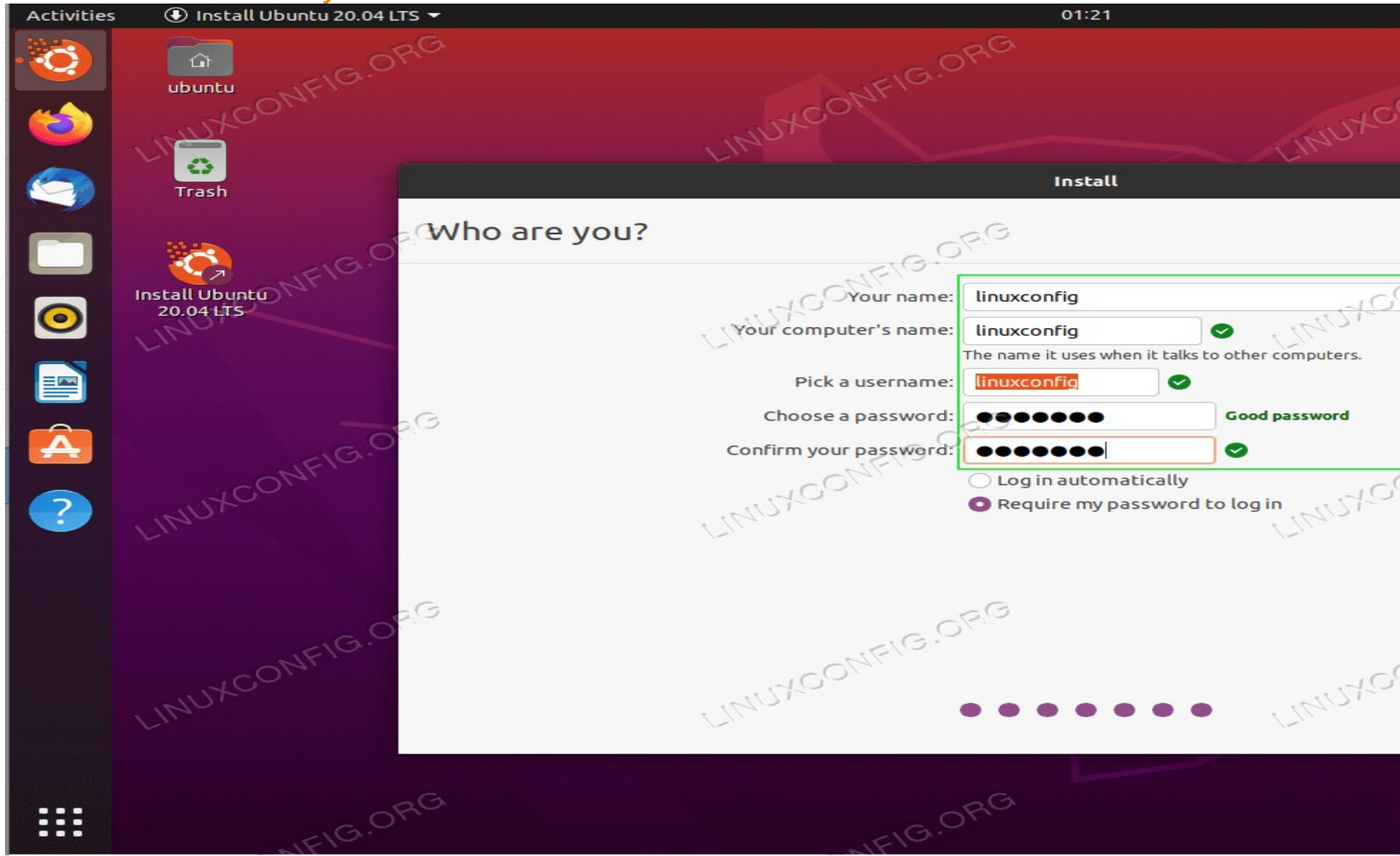
### Install

## Where are you?

Bratislava

Select your location

## 1. Who are you?



Set your credentials and computer name.

# 1. System Installation



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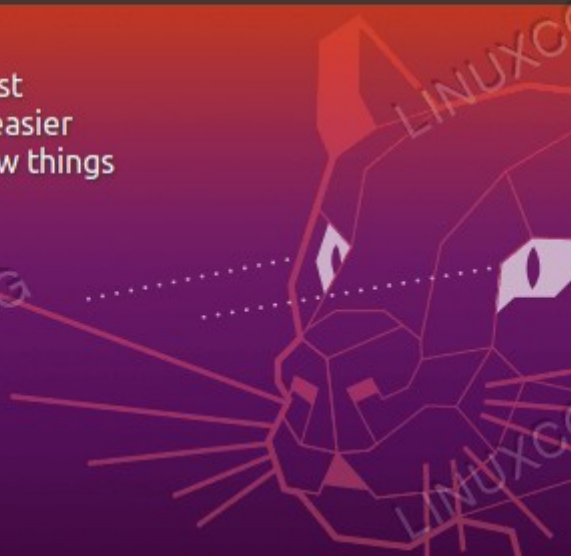


Install Ubuntu  
20.04 LTS

### Install

## Welcome to Ubuntu

Fast and full of new features, the latest version of Ubuntu makes computing easier than ever. Here are just a few cool new things to look out for...





Sit back, relax and wait for the installation to complete.

## 1. Ubuntu 20.04 Installation complete



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**Installation Complete**

 Installation has finished. You can use Ubuntu now, but until you restart, changes you make or documents are preserved.

[Continue Testing](#)

Ubuntu 20.04 Installation is complete. Click on the [Restart Now](#) button.