

Linux distribution

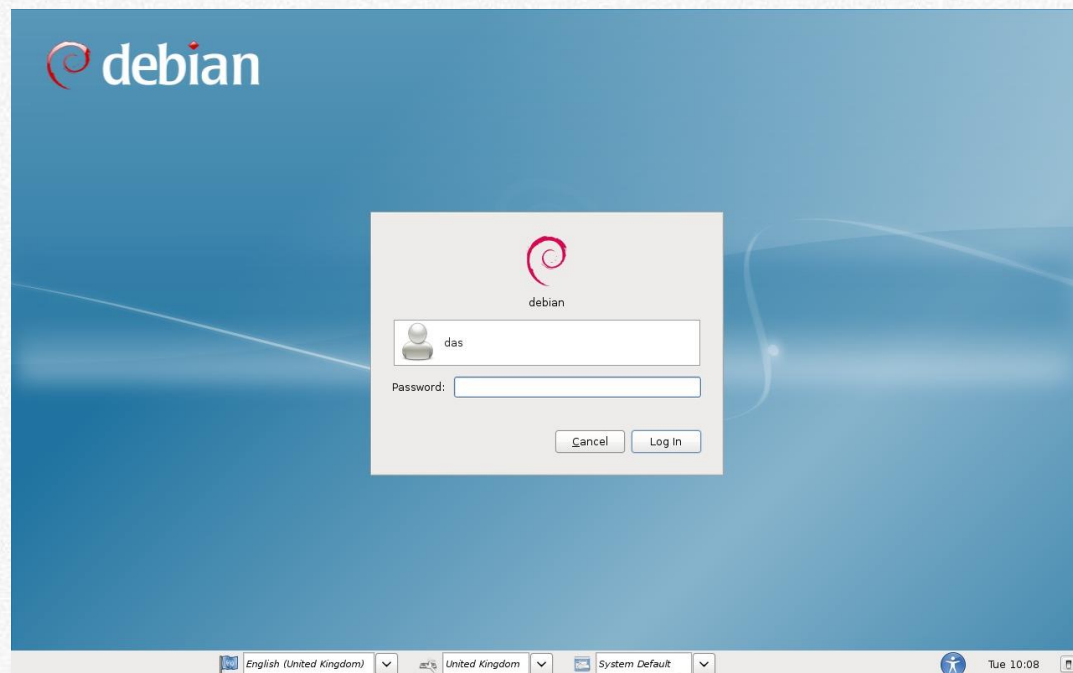
What is a Linux distribution?

- The name Linux concerns only the system kernel, the operating system using this kernel is correctly named a Linux Distribution
- A single distribution includes:
 - Linux kernel
 - A set of software from various projects which cooperate with one another (packages)
 - Package management system
 - System installer
- Distributions may be a base for other distributions and even a single distribution may have several versions
- Further in the course we'll use a common mental shortcut, understanding the term Linux as its distribution



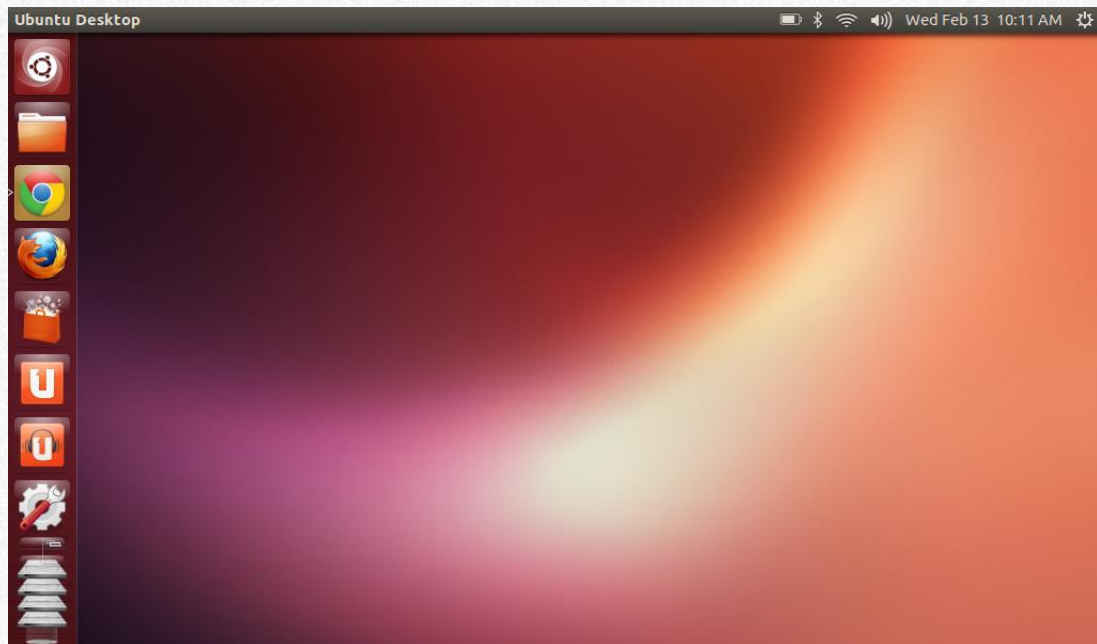
Most popular non-commercial distributions

- Debian (<http://www.debian.org/>)



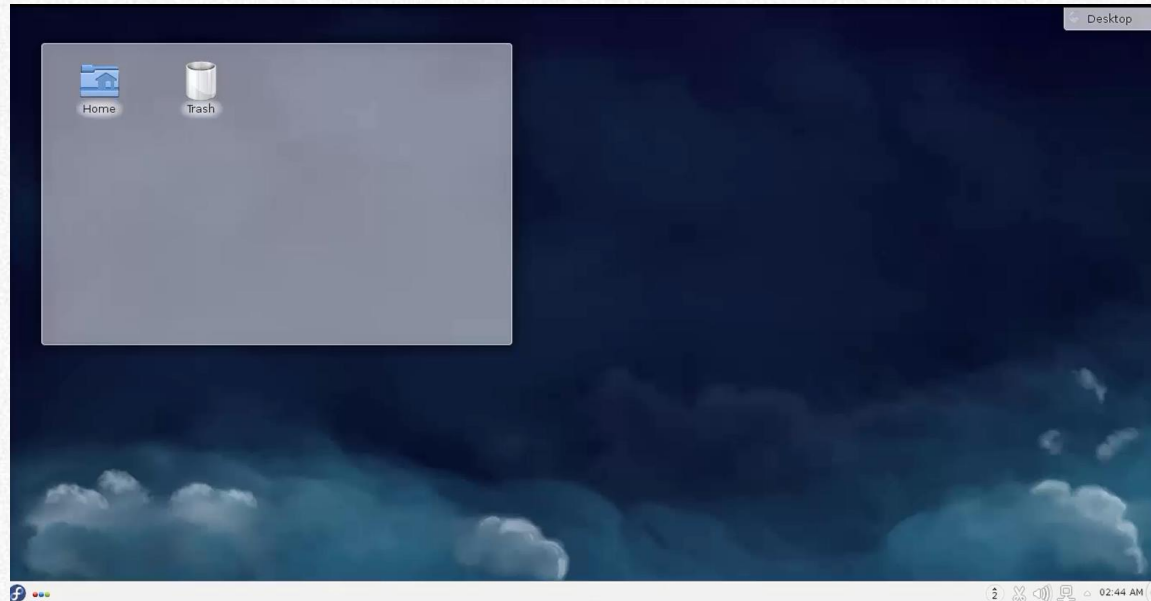
Most popular non-commercial distributions

- Ubuntu (<http://www.ubuntu.com/>)



Most popular non-commercial distributions

- Fedora (<http://fedoraproject.org/>)



Most popular non-commercial distributions

- openSUSE (<http://www.opensuse.org>)



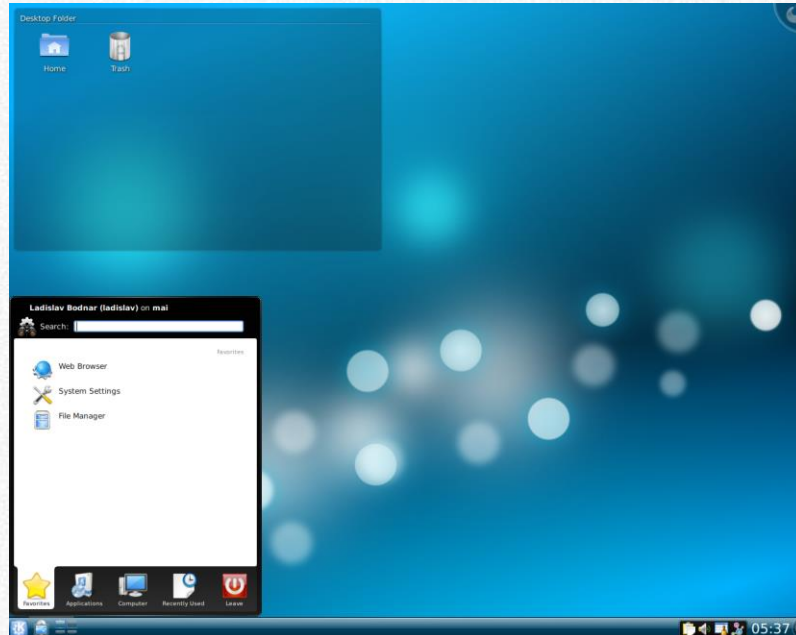
Most popular non-commercial distributions

- Gentoo (<http://www.gentoo.org/>)



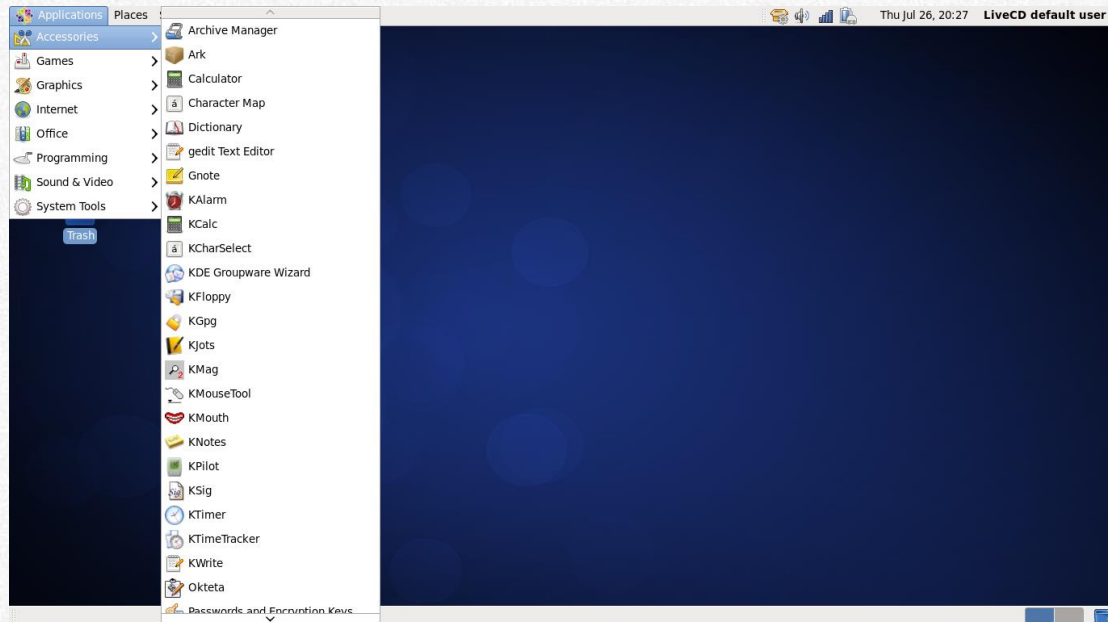
Most popular non-commercial distributions

- Slackware (<http://www.slackware.com/>)



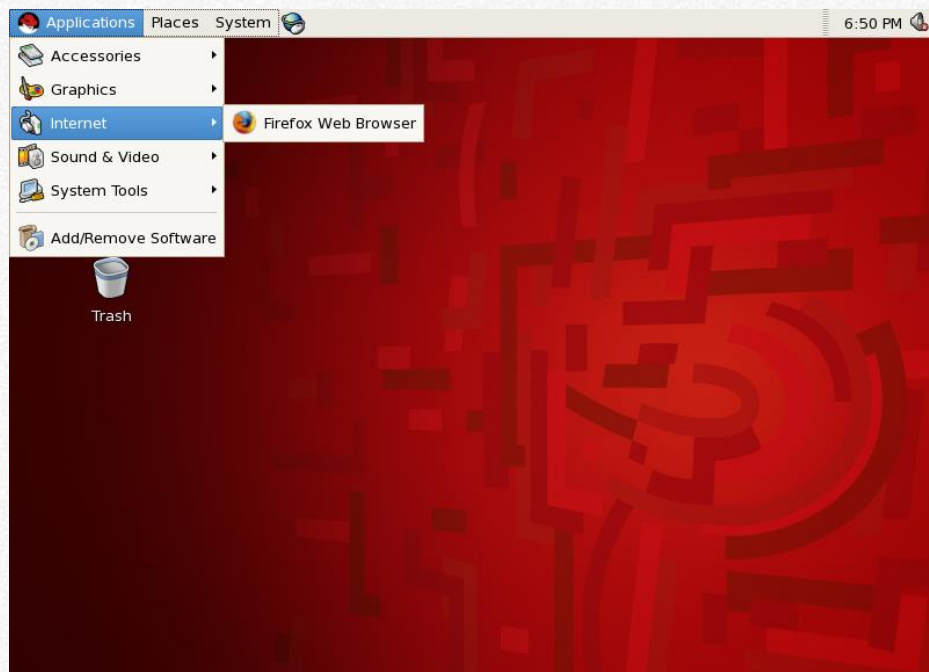
Most popular non-commercial distributions

- CentOS (<http://centos.org/>)



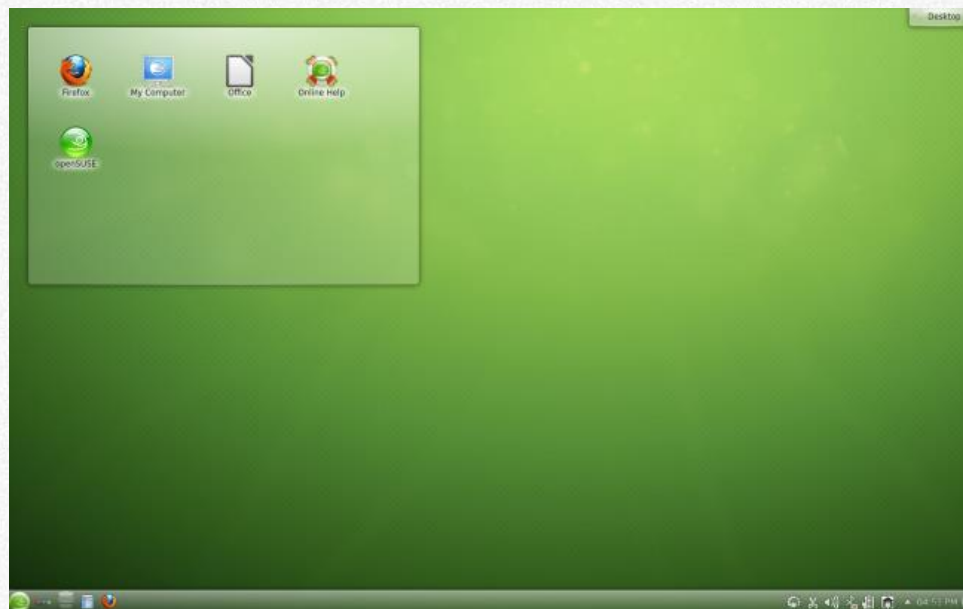
Most popular commercial distributions

- RedHat Enterprise (<http://www.redhat.com/>)



Most popular commercial distributions

- SUSE Enterprise (<http://www.suse.com/>)



Most popular distributions

- A list of common distributions can be found under the address: <http://linuxiarze.pl/dystrybucje/>, and the <http://distrowatch.com/> website describes all existing distributions



Which distribution to choose?

- The choice of a distribution depends on our personal preferences
- Each distribution is characterised by a certain set of tools the purpose of which is to facilitate the system management, and a characteristic graphic design or preferred window manager (Fedora, Ubuntu – Gnome, Kubuntu – KDE, openSUSE Gnome and KDE etc.)
- Some distributions also introduce non-standard solutions, which can make using them easier, or harder
- Currently, most popular beginner-friendly distributions are Fedora, openSUSE, Ubuntu



Which distribution to choose? (continued)

- For beginners I wouldn't recommend distributions of types Debian or CentOS, because their main field of application are server environments and the available software has been tested, but not necessarily in the later versions
- Gentoo or Slackware distribution types are intended for very advanced users
- I also don't recommend commercial distributions, because they don't add anything useful for ordinary users and are intended to be used with business environments, servers etc.



Distribution version

- Before downloading a distribution you should get to know the architecture supported by our computer
- The most popular ones are x86 (32bits) and x86_64 (64bits, also known as AMD64)
- As opposed to the Windows system, a 32 bit system is able to support more than 3.5GB RAM
- If we have a processor which supports 64 bits, I highly recommend this choice, but the 32-bit version will work just as well



How much does it cost?

- All non-commercial distributions are distributed free of charge
- Companies which create them are usually non-profit organisations which are supported by donations of corporations that benefit from the results of work of such organisations
- Part of distributions are also a kind of a "test site" for their commercial counterparts (SUSE and openSUSE, RedHat and Fedora)
- Commercial distributions require a purchase of a license which grants permission to use the updates and technical support



Where to get the chosen distribution from?

- The simplest way is to get it from a dedicated WWW site
- Very often CDs/DVDs with distributions are added to various magazines on Linux
- Discs with distributions can also be ordered at the distribution website. Usually, we only pay for the delivery, but the time of completing the order can be very long
- The Fedora distribution, which we'll use when presenting examples during the course, can be downloaded from <https://fedoraproject.org/pl/get-fedora-all> both as a Live-CD and an ISO image of the DVD installation disc

