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CLASSACTS

Starting with the 2007 release of the XO Laptop, 2008/2009 One Laptop per Child (OLPC) internships in South America, summer 2009 OLPCorps deployments in villages across Africa, a recently overhauled Contributors Program providing free XO-1 and XO-1.5 laptops to community innovators worldwide -- we are now almost two years after the world-renowned Give 1 Get 1 program. The time arrived for OLPC/Sugar support community to gather some of our most illustrative classroom experiences, case studies and best practices. Our work is to enable other teachers to empower students with the visionary OLPC XO computer -- making it much easier to create a proposal, justify it to funders, administrators, IT staff, parents and children. Then we will use our 2 years of Community Support experience to ease community implementations by providing tips and tricks to allow the teacher (techie or non!) to spend more time teaching, and learning from their students!

Please join us. You too can invest in redefining 21st century learning, and standing up tall to communicate to others how this is possible: http://wiki.laptop.org/go/Support_Gang

(FULL INTRO FORTHCOMING!)

1) Read all about our background here, and why so many different kinds of people are coming together to communicate touchstone community deployment projects from around the world:

<http://wiki.laptop.org/go/ClassActs>

<http://wiki.laptop.org/go/ClassActs/Resources>

2) Please ignore the GPL labels temporarily at the top of this booklet's chapters. This booklet will in fact be licensed "CC-BY-SA 3.0" (<http://creativecommons.org/licenses/by-sa/3.0/>) as discussed by its creators on the support-gang@laptop.org and discuss@lists.flossmanuals.net mailing lists, eg:

<http://lists.flossmanuals.net/pipermail/discuss-flossmanuals.net/2009-September/002126.html>

WHAT IS VOIP?

VoIP is short for "Voice over Internet Protocol". It sums up the process of delivering voice over the internet in a manner similar to using a telephone. Actually, it is possible to use VoIP in many circumstances where you might have a computer network or you are connected to the internet. Voice over IP is a very specific type of Internet Telephony or IP Telephony. These latter two refer to any service using the internet that is similar to established "telephone" type services. For example, faxing, or sending messages (eg. SMS-like services) over the internet is "IP Telephony" whereas "VoIP" is only used to refer to *voice* over IP.

VoIP is on the rise with the popularisation of softwares like Skype (<http://www.skype.com/>) , OpenWengo (<http://www.openwengo.com>) , ichat (<http://www.apple.com/ichat/>)and Gizmo (<http://www.gizmoproject.com/>). Although these may seem like relatively recent phenomenon, VoIP geeks and commercial developers have been experimenting with this type of software for a long time. There are very many softwares available for making internet phone calls. Increasingly too these applications are branching into video delivery for video chat, and video conferencing.

What is VoIP used for?

Typically VoIP is used for making calls over the internet. You can do this using software telephones ("softphones") or hardware similar to traditional telephone handsets. If you use a VoIP software you can call other people from your computer and talk to them. Most often the person you call will also be using a softphone but in some circumstances it is possible to make calls to mobile phones, or other telephones. Services like Skype offer this kind of functionality. Skype is a softphone but the owners of Skype also offer services for making calls to 'landlines' or mobile phones. While computer to computer calls are often free in this kind of controlled telephony network, the latter services are charged for and this forms part of the business model for the service.

What many people don't realise is that services like Skype (etc) are closed networks, you cannot call people on other VoIP networks and other people on other VoIP networks cannot call you. So if you have an account on Wengo you cannot call someone on Skype etc. VoIP doesn't have to be this way, it is merely a strategy the businesses have developed to tie you into their networks and services, and its very similar to the way that traditional telephony providers (phone companies) have operated, for example, mobile phone companies often charge more calling mobile phones on competitive networks.

There is a growing number of VoIP services that operate using standards-based technology for creating accounts and making calls. Ideally, this means you could have an account with one VoIP service and call anyone using another service similar to how email works. If you have an email account with an internet provider you can send email to anyone with an email account no matter who provides their email services. Imagine if this were not the case, if email worked with a model like Skype you would only be able to email people using your service provider. XS4ALL (Internet Service Provider in the Netherlands) would only be able to email other people that had an account with XS4ALL. This would be ridiculous and would change the nature of the internet as we know it. So why do we accept VoIP providers that are trying to do exactly this? We don't have to and services like free-voip (<http://freevoip.gedameurope.com/>) are being established with a more open model.

What is a "softphone"?

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A softphone is the software you can use for making VoIP calls. There are very many of these softwares available, they are getting about as diverse as email applications. It is increasingly possible to also use a softphone embedded in your browser so you can make calls from your web browser without having to install any tricky software. There are too many softwares to list here but for a good list (although far from comprehensive) please look at the IPTEL websites listing:

<http://www.iptel.org/info/products/sipphones.php>

Softphones usually need some configuring to work and you will need to first have some form of VoIP account before you can configure the software.

Many softphones use a technology called SIP. This variety of softphone is sometimes also referred to as a sipphone. SIP is a series of rules that the phone follows so that others can call you and you can call them. To use SIP you need a SIP account with a VoIP service. If you create a SIP account you will get a SIP address which looks exactly like an email address. For example, your SIP address might look like this:

flossmanuals@freesip.net

If someone wanted to call this account they would use the above details to place the call, in this way the analogy with using email is very strong.

INSTALLING AUDACITY ON UBUNTU

Software name : Audacity Â

Homepage : <http://audacity.sourceforge.net>

Software version used for this installation : 1.2.6

Operating System use for this installation : Ubuntu 9.04

Recommended Hardware : 300 Mhz processor (CPU) minimum, 64 Mb RAM, internet connection

If you are used to an Operating System like **Windows** or **MacOSX** you may have installed software by downloading it from a website and double clicking on the downloaded file, and clicking through all the licence agreements, configuration options etc. This is the 'old' way of installing software. The 'new' way is much smarter - you choose what you want to install from a list and press 'go'. The rest - finding the files, downloading the files, installing software, is taken care of by Ubuntu itself while you go and get a cup of tea or work on something else. It can't get much easier.

However, new ways take a little getting used to, and so we will first look at the basic tool needed to install software this way, and then how to use it to install Audacity.

Synaptic Package Manager

The Synaptic Package Manager (SPM) is used for more than just installing software. It can also upgrade your entire operating system, and manage all software installed on your computer. However most people use SPM for just installing new software. Before you embark on this process there are a few concepts that you may wish to get familiar with. Its not crucial you understand them thoroughly, so just read the explanations and then let it soak in over time. The ideas behind SPM will become clearer with use.

What is a repository?

SPM can automate the installation of software on your computer because it has a direct connection to one or more online software repositories. These repositories are vast archives of softwares that have been pre-configured for installation on your operating system . When your computer is online SPM can connect to these archives, check what software is available for installation, and present you with a list of installable software. All you have to do is select the software from the list that you want. SPM then downloads the software from the repository and takes care of the installation process.

So SPM is actually a repository manager, it manages which repositories (there are many) you wish to access, and which softwares to download and install from those repositories.

SPM allows you to choose which repositories it accesses through its settings. The default repositories used by Ubuntu can be extended through the SPM settings so you can access a wider range of softwares. Ubuntu calls each repository by a simple name. They are : **Main**, **Universe**, **Multiverse**, **Restricted**. By default Ubuntu only uses the **Main** online repository. If you wish to access you the other repositories you must do this by changing repository settings of SPM.

What is a package?

When SPM downloads a software for installation it is in the form known as a 'package'. This means that it is a compressed archive of the software, pre-configured so that it will install nicely on your computer. If the package has been configured nicely, and Ubuntu spends a lot of time making sure this is the case, then many of the headaches that installing software can bring are taken away - its the panadol of software installation. One of the biggest issues with installing software on any form of Linux (Ubuntu is one of many types of Linux), are **dependencies**. Dependencies are all the other softwares required by a particular software. If, for example, I want to install a audio editor, that audio editor software may use some functionality of other softwares to do its job.

SPM takes the (often) dark art of dependencies away from you, and manages this itself. So if you wish to install a software and it has dependencies (and the list can be long), you don't have to work this out yourself, SPM knows already what is needed, finds it, and installs it along with the software you have chosen.

So, SPM, as well as managing which repositories you access, is also a package management software. Hence the name - *Synaptic Package Manager*.

apt

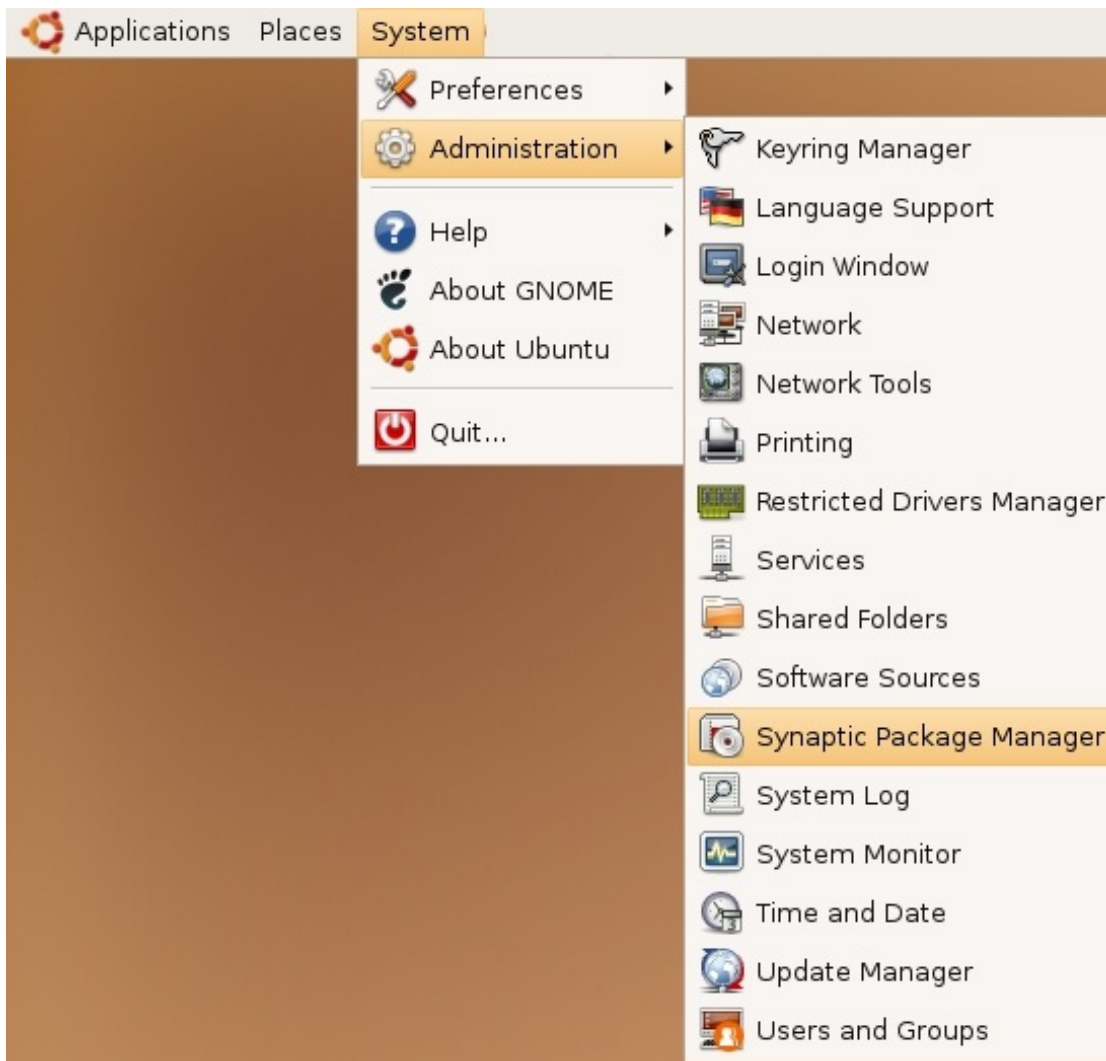
You don't really need to know about apt, so if you are on the verge of being confused then don't read this short section. If you are a geek wannabe then read on.

Ubuntu is a form of Linux that has derived from another form of Linux - Debian. This family of Linux has in common (amongst other things) the package/repository management system. Both Ubuntu and Debian use the **apt** system for managing packages. APT is actually an acronym short for **Advanced Package Tool**.

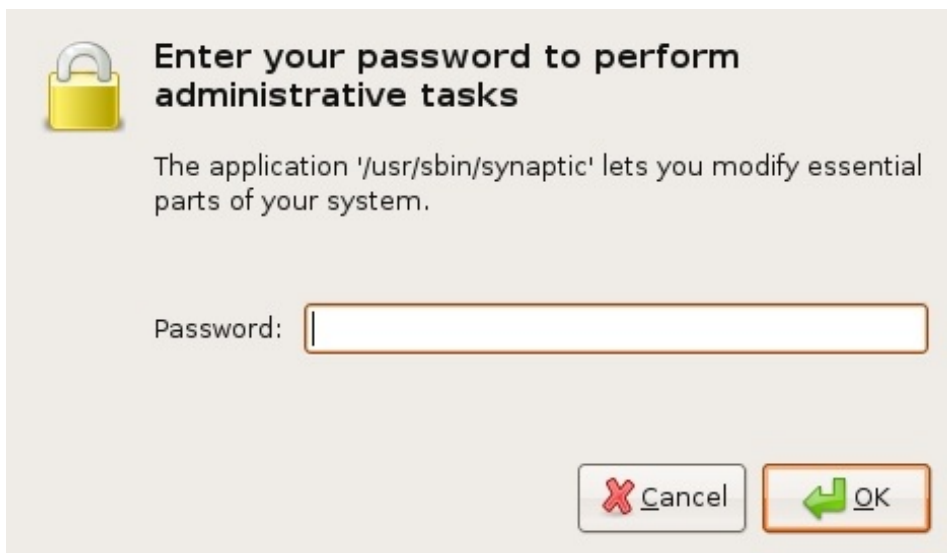
SPM is actually a 'front end' (graphical interface) for controlling apt. So SPM is the nice user interface that you see, but the real work is done by apt. There are other ways of managing apt also, such as the command line interface known as **apt-get**. In the world of Linux there are many varieties of Linux users and they have their own ways of doing things. In general its safe to say most Debian users use apt-get, and most Ubuntu users are happier using SPM.

Configuring Synaptic Package Manager for installing Audacity

To install Audacity on Ubuntu you will need to change the default repository settings of SPM as Audacity is not contained in the default repository. To do this you will need to open the Synaptic Package Manager and you can do this via the **System** menu. If you haven't changed the default Desktop of Ubuntu then the System menu can be accessed at the top left of your screen:

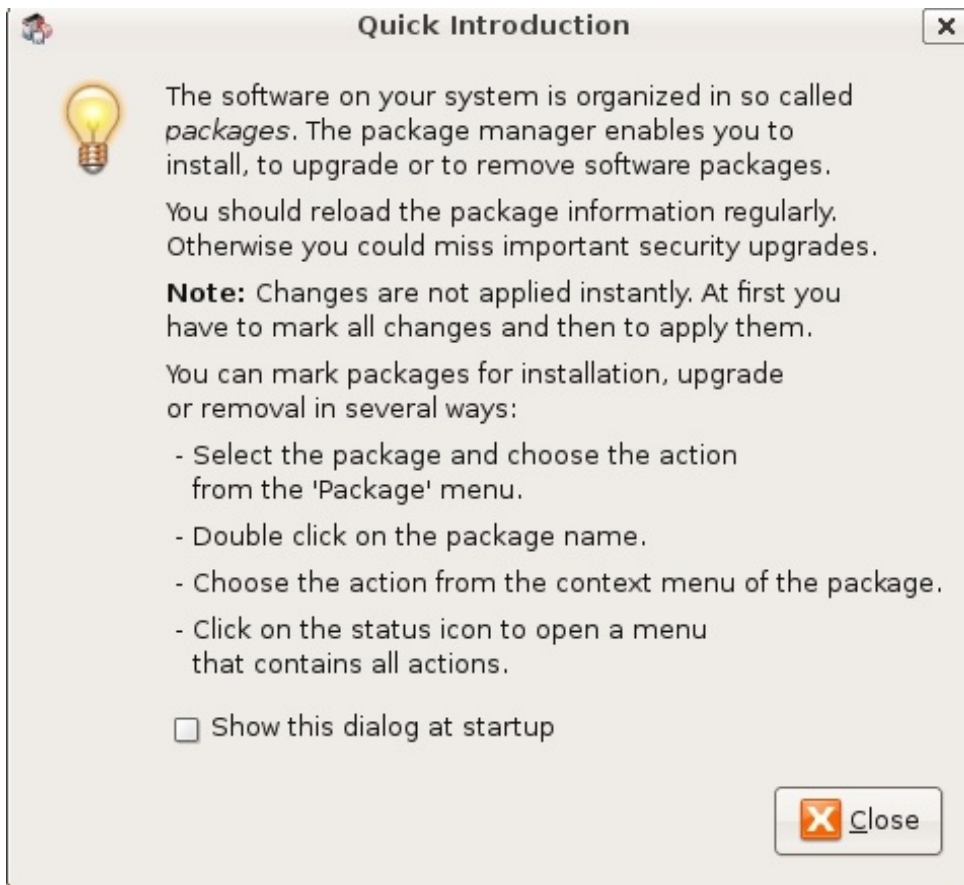


If all is good you will be prompted for a **password**.



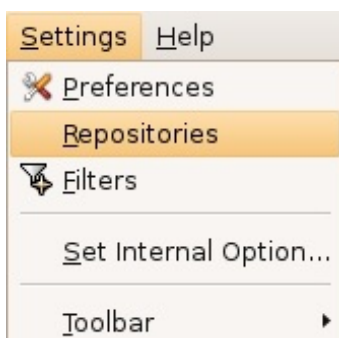
Here you must enter your password (the same one you use to log into the system). If you don't know the password then you have a problem and its probably caused by the fact that the computer you are using is not yours. In this case you have to find the computers owner and ask them for the password (which is usually not polite unless you know them well) or ask them to input the password while you look casually in the other direction.

Assuming the password entered is correct - you will now see the SPM open in front of you. It may be that you first see the following 'Quick Introduction' (this appears if you haven't used SPM before).

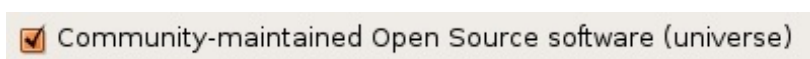


Just click **C**lose and move on. Lets look at the Synaptic Package Manager interface...

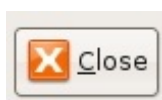
Lets not worry about the details of the interface for now. All we want to do is change the repository settings. To do this click on the **S**ettings and choose **R**epositories



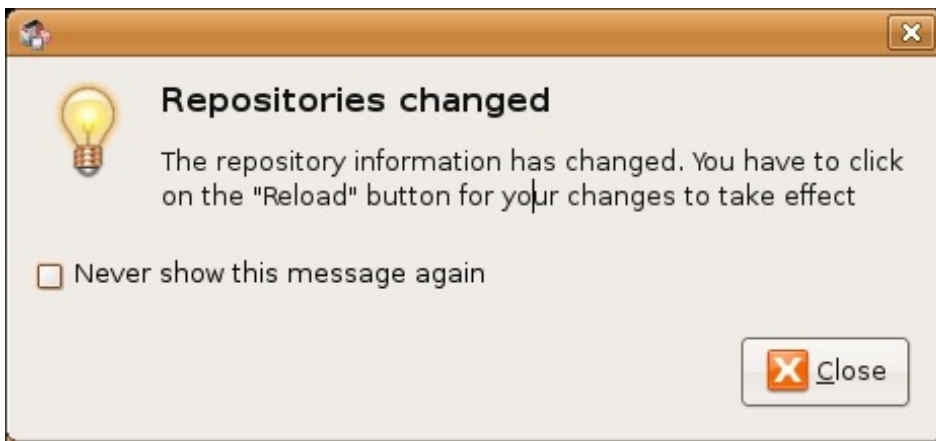
Now we get to where we can do some business. Make sure that **Community-maintained Open Source software (universe)** is checked :



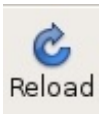
Now close that window by pressing the big close button at the bottom right.



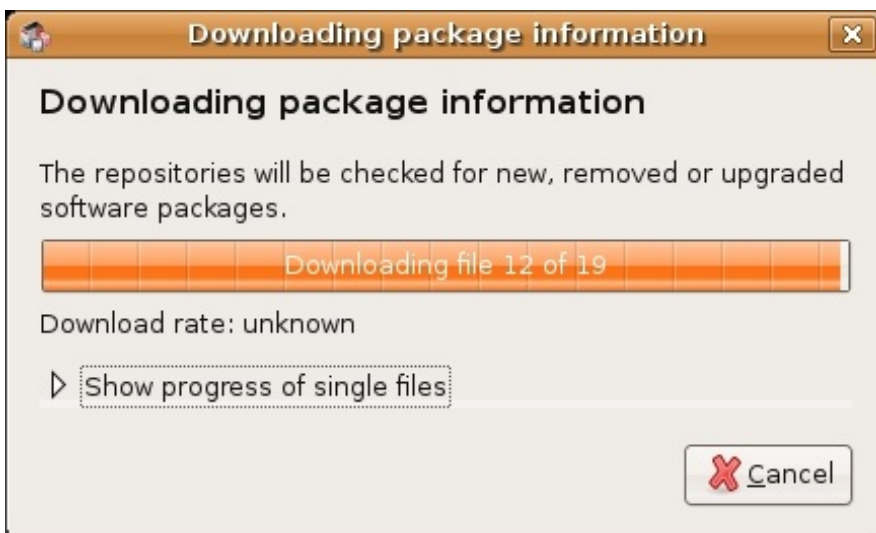
Next, you will see a warning telling you the repository has changed :



Click the **C**lose button and move on to SPM so you can refresh the repositories as the warning suggests. To do this, do as the warning says - click on **R**eload :



You should then get some feedback saying the repositories are being updated and showing the progress.



Installing Audacity with Synaptic Package Manager


Now the real business. Its pretty easy. Click on the nice big **S**earch button:




The search window will open and now enter 'audacity' in the field:



Great. Now press **Search** at the bottom right of the above window. The search should not take very long and when it is complete you will see Audacity listed :

S	Package	Installed Version	Latest Version
	audacity		1.2.6-0ubuntu1

If you highlight audacity (by clicking once on the name) you will see some information about Audacity displayed :

S	Package	Installed Version	Latest Version
	audacity		1.2.6-0ubuntu1

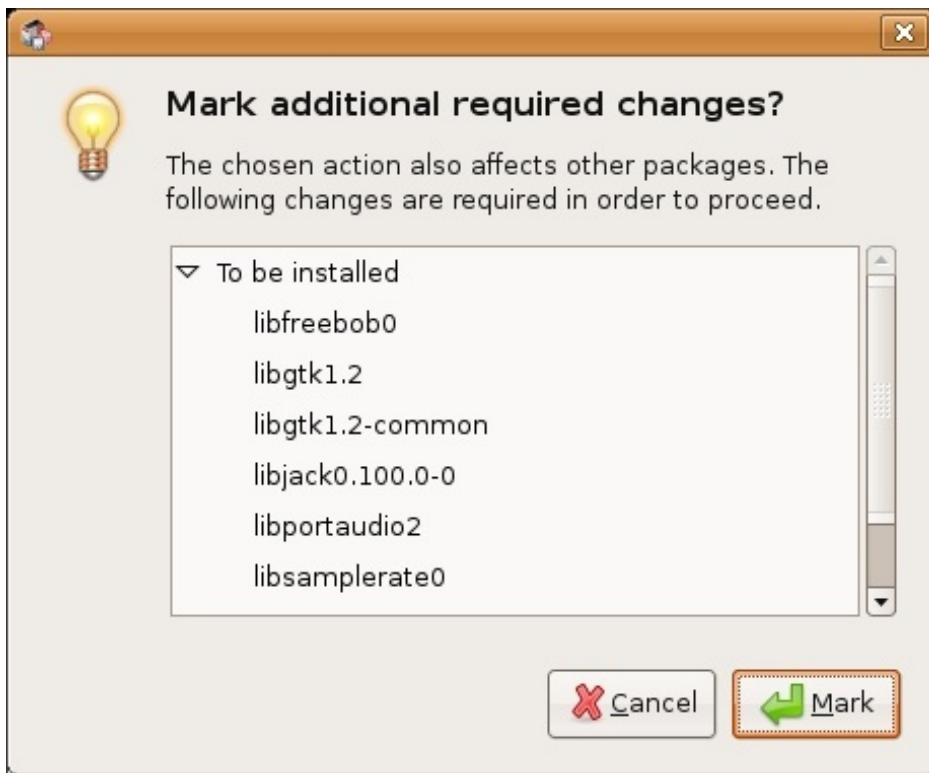
A fast, cross-platform audio editor

Audacity is a multi-track audio editor for Linux/Unix, MacOS and Windows. It is designed for easy recording, playing and editing of digital audio. Audacity features digital effects and spectrum analysis tools. Editing is very fast and provides unlimited undo/redo.

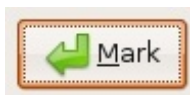
Supported file formats include Ogg Vorbis, MP3, WAV, AIFF, and AU.

For more information, see <http://audacity.sourceforge.net/>

Now you can read the information if you wish but there is nothing critical there. Best thing to do is just to double-click on **audacity**. By doing this you are 'marking' (choosing) the software for installation. If you do so then an additional window appears:



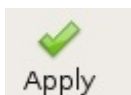
Now click **Mark**:



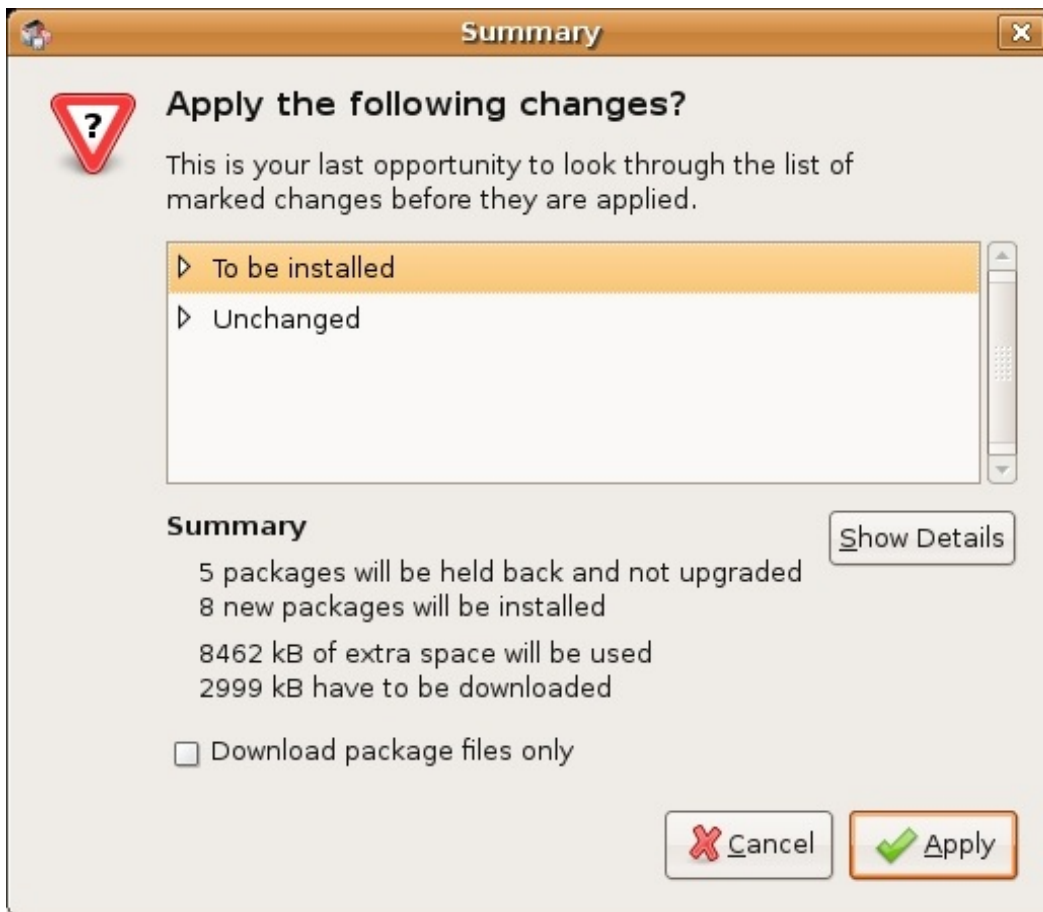
You have now told Synaptic Package Manager that you want to install Audacity. If all is well then the package will be highlighted:

S	Package	Installed Version	Latest Version
	audacity		1.2.6-0ubuntu1

Now press the **Apply** button with the nice big tick next to it :



Next SPM informs you of how much space will be taken by the installation :



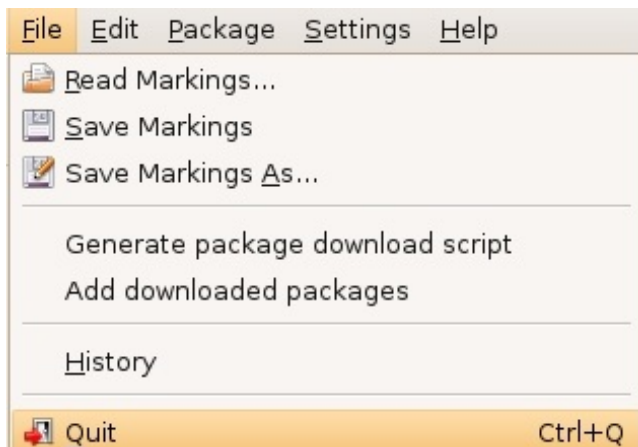
Now you can just click **Apply** at the bottom right of the screen and the installation will start. A progress bar will be shown:



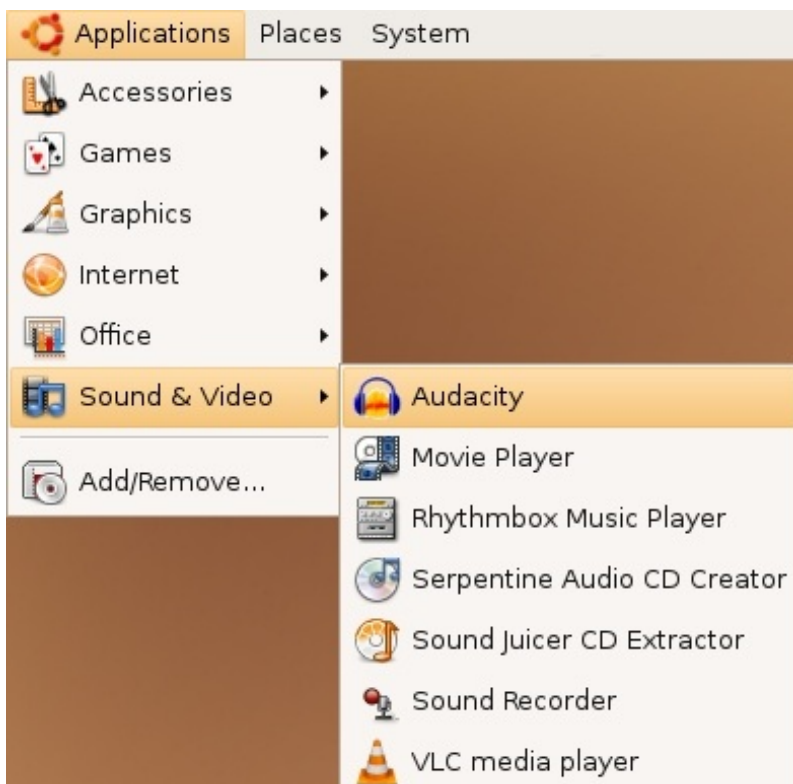
When it is completed (downloading and installing) you will have this screen :



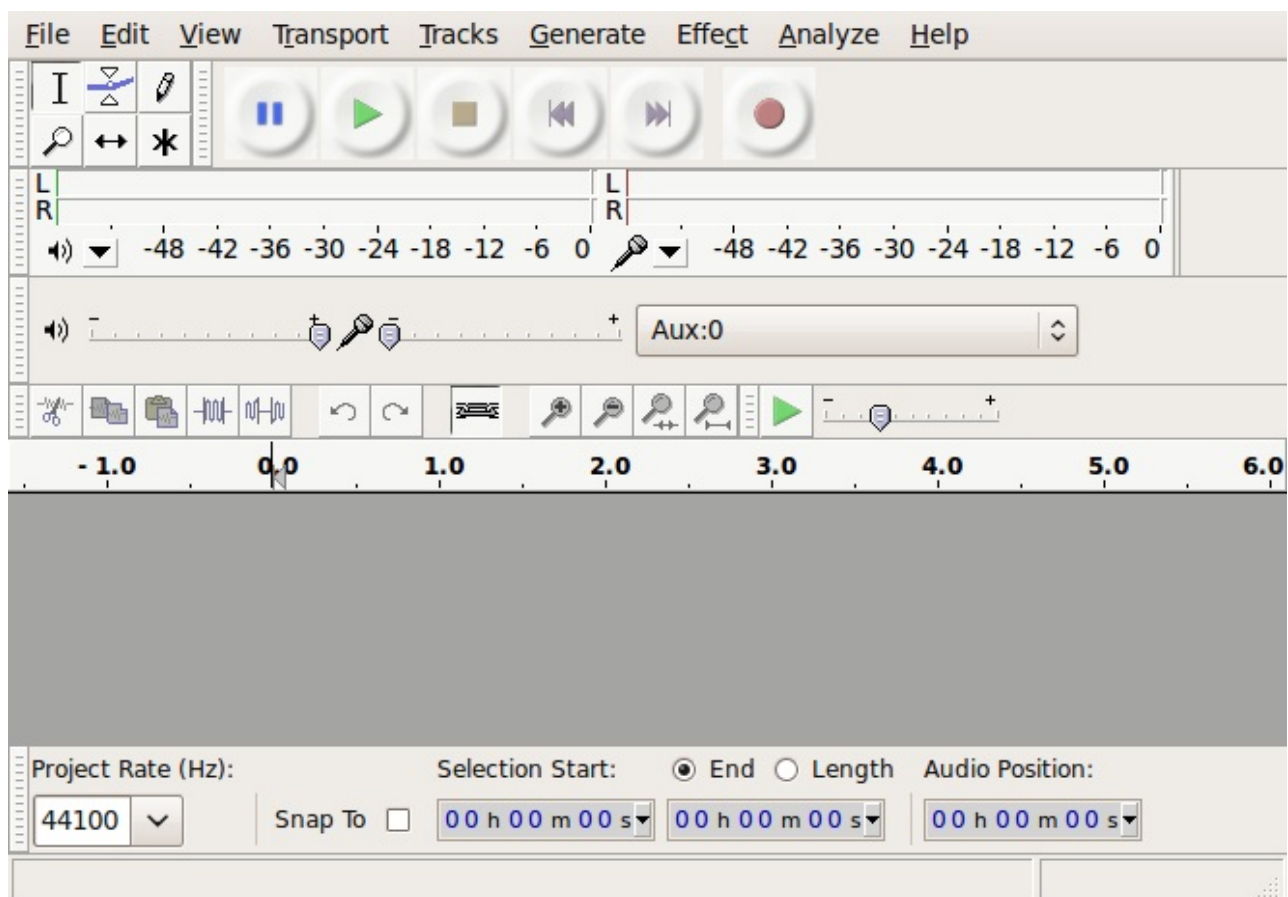
That means all is well. Pat yourself on the back and press **C**lose. Synaptic Package Manager will then return to its original state. Close it :



Now you can open audacity...just browse to the **A**pplications menu, choose **S**ound & **V**ideo, select **A**udacity and release the mouse :



If all is well you will see Audacity:



Congrats!

WHAT IS FLOSS?

FLOSS is an abbreviation for *Free/Libre/Open Source* Software. The terms *Free*, *Libre*, and *Open Source* are all used to describe software that guarantees certain freedoms both to users and to programmers. Groups that promote the use of FLOSS software often use different terms to refer to it. For example, the Free Software Foundation and the GNU project often refer to "free" software, while other groups including Debian and the Open Source Initiative promote "Open Source" software. In English, the term "free" can mean either "no-cost" or "having liberty", so "libre software" is often used to emphasize that the software provides freedom rather than simply being free of cost.

The ideas encapsulated in the terms "free" and "open" are similar but not identical. While there are dozens of variations of these terms in use, all FLOSS software shares some of the same basic ideals of software freedom, including:

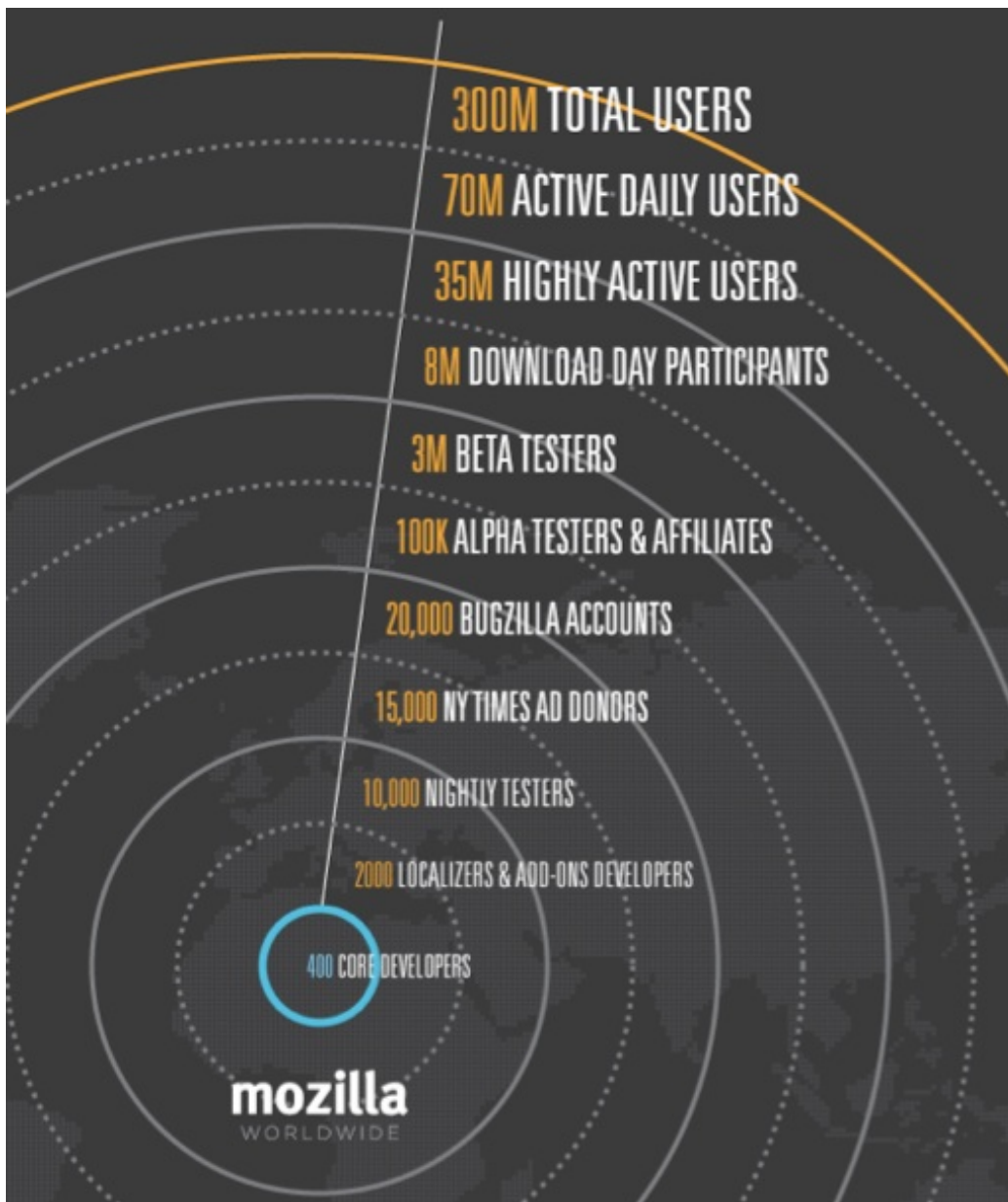
- Freedom to run the program
- Free access to complete source code
- Freedom to study the code
- Freedom to modify the code
- Freedom to redistribute the modified code

The specific freedoms provided by each software project can vary, but these ideas form the basis for most FLOSS licenses. From a user's perspective, FLOSS software is always free to use and to copy, both now and in the future. There are some unclear boundary lines and gray areas that must be kept in mind when copying or distributing FLOSS software, including trademarks and "proprietary" drivers in the Linux kernel. Each FLOSS software project includes detailed information on what rights are guaranteed by the *software license*. A wide variety of FLOSS is available for all common platforms, including Windows, Mac OS, and Linux.

Firefox

For many users, Firefox is their first introduction to FLOSS and the ideas it represents. FLOSS is a core aspect of the Mozilla project, which develops the Firefox web browser. As a result, everyone is free to use, copy, improve, and extend Firefox. Another core aspect of the Mozilla project is its *participatory development* strategy, which means anyone can get involved with making Firefox better. Millions of community members help make Firefox better every day.

Who are these people and how are they connected?



Growing the use of Firefox is a grassroots effort. With no massive advertising campaigns and mostly word-of-mouth and technology-based message passing, the user base of Firefox has reached 220 million people. One way to describe the growth is "viral" (but in a good way, not like "software viruses") – passing from developers, to bloggers, to users, to more users.

At the core, around 400 developers work on the *source code* that powers Firefox. More than 30% of Mozilla code is contributed by volunteers, with the rest being contributed by full-time contributors who are paid either by Mozilla or by other companies involved in Mozilla development. In case you were wondering, "Mozilla" was the original name of the dinosaur-like mascot created in 1994 for Netscape Communications Corporation. "Mozilla" is now the name of both the non-profit foundation and its fully owned corporation that brings us Firefox and maintains the code base that it's built on.

All participants in the Mozilla project, from volunteer coders to paid contributors, highly value the community and collaborative efforts that go into Firefox development. They want to both improve the browser itself and make the web better. Contributors to Mozilla include industry leaders in particular areas of expertise such as networking, CSS, HTML, graphics, and wide array of other technologies that power the web. Mozilla is a diverse set of people, and nearly anyone can make a big difference, whether by developing code, writing documentation, testing software, or just telling friends about Firefox!

Beyond "core" developers, many different groups of dedicated people help make the Mozilla project successful. In the Mozilla community, there are:

- More than 500 people who localize and help to deliver Firefox into over 60 languages.
- Hundreds of other developers of "add-ons", who create extensions to customize Firefox and experiment with innovation.
- 10,000 people who help to test "nightly" development releases and help to maintain quality and provide feedback during the development process.
- 15,000 people who opened up their wallets to contribute \$30 each to pay for a \$250,000 two page ad in the New York Times to promote the release of Firefox 1.0. The idea for this campaign came from a community of marketing developers that help to promote Firefox in many different ways.
- 20,000 people are active in "bugzilla", the Mozilla Project bug and feature tracking system. All these are contributing to future Firefox improvements.
- 8 Million people recently participated in "Download Day" which set a world record for the most downloads of a software package on the first day of the Firefox 3 release.

These examples demonstrate how many different communities and people with different skills all coming together can build and maintain a viable project. We hope that Firefox serves as an ideal introduction to FLOSS and to the concept of community-powered software development.

INSTALLING AUDACITY ON WINDOWS

Software name : Audacity Â

Homepage : <http://audacity.sourceforge.net>

Software version used for this installation : 1.2.6

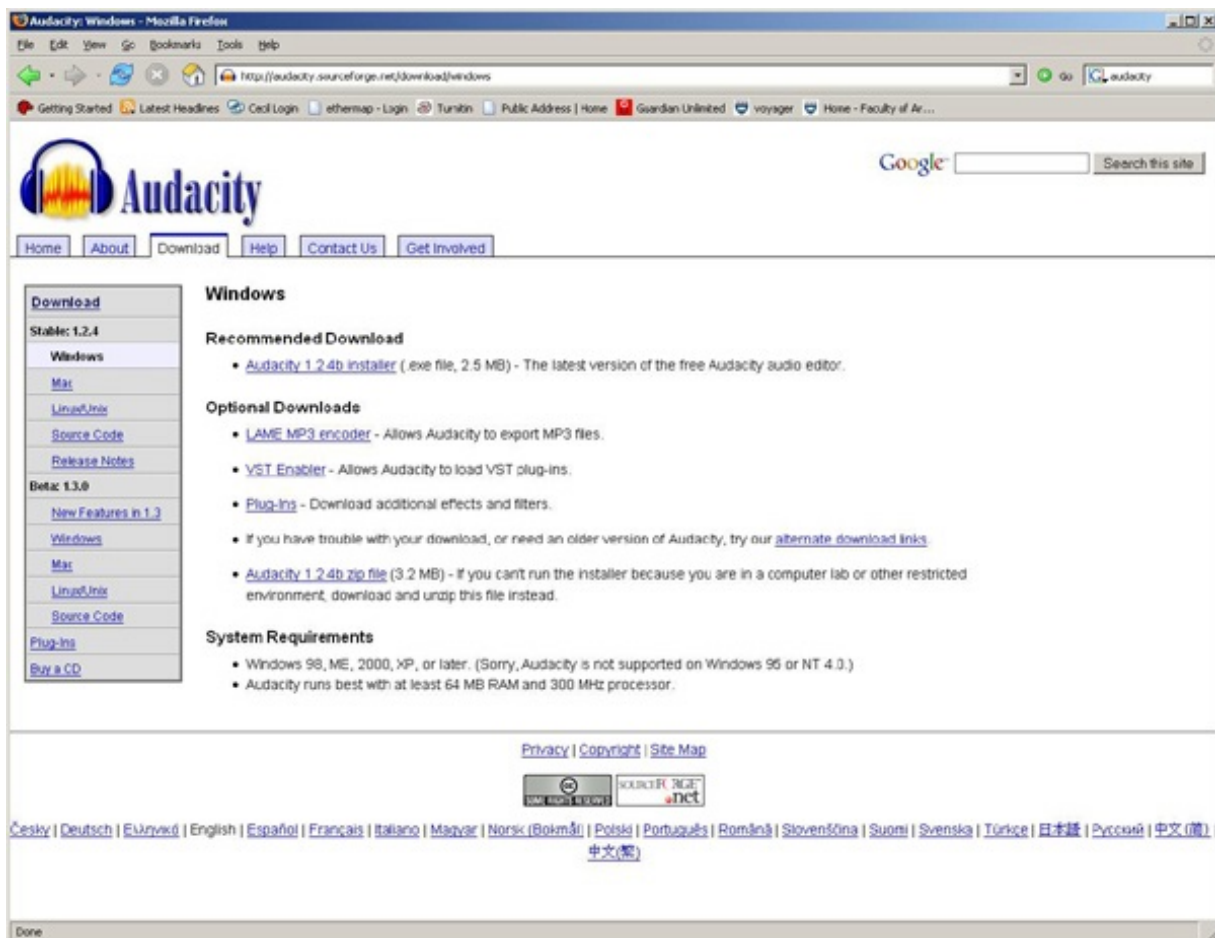
Operating System use for this installation : Microsoft Windows XP

Recommended Hardware :

Windows version	Recommended RAM/ processor speed	Minimum RAM/ processor speed
Windows 98, ME	128 MB / 500 MHz	64 MB / 300 MHz
Windows 2000, XP	512 MB/1 GHz	128 MB/300 MHz
Windows Vista Home Basic	2 GB / 1 GHz	512 MB / 1 GHz
Windows Vista Home Premium/ Business/Ultimate	4 GB / 2 GHz	1 GB / 1 GHz

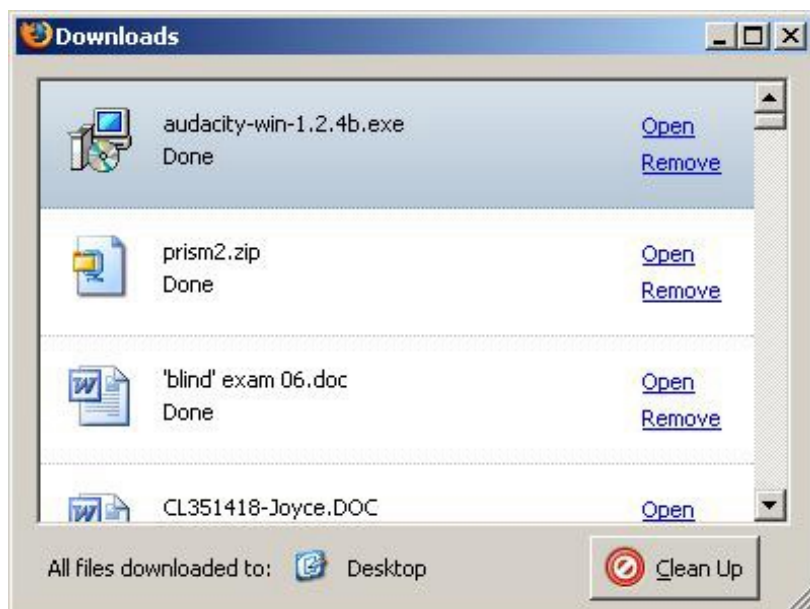
Downloading Audacity

The latest stable version of Audacity for **Microsoft Windows** can be downloaded from <http://audacity.sourceforge.net/download/windows>. The latest stable version at the time of writing this document is **Audacity 1.2.6**.



Click on the "Audacity 1.2.6 installer" link. This will take you to a download page. This page lists locations around the world where the software can be downloaded. The idea is that downloads can be faster if they come from a place near you. To begin downloading, click on the download link of the location nearest you.

Once the download is complete you should see a downloads window like this:



or something like this on your desktop:



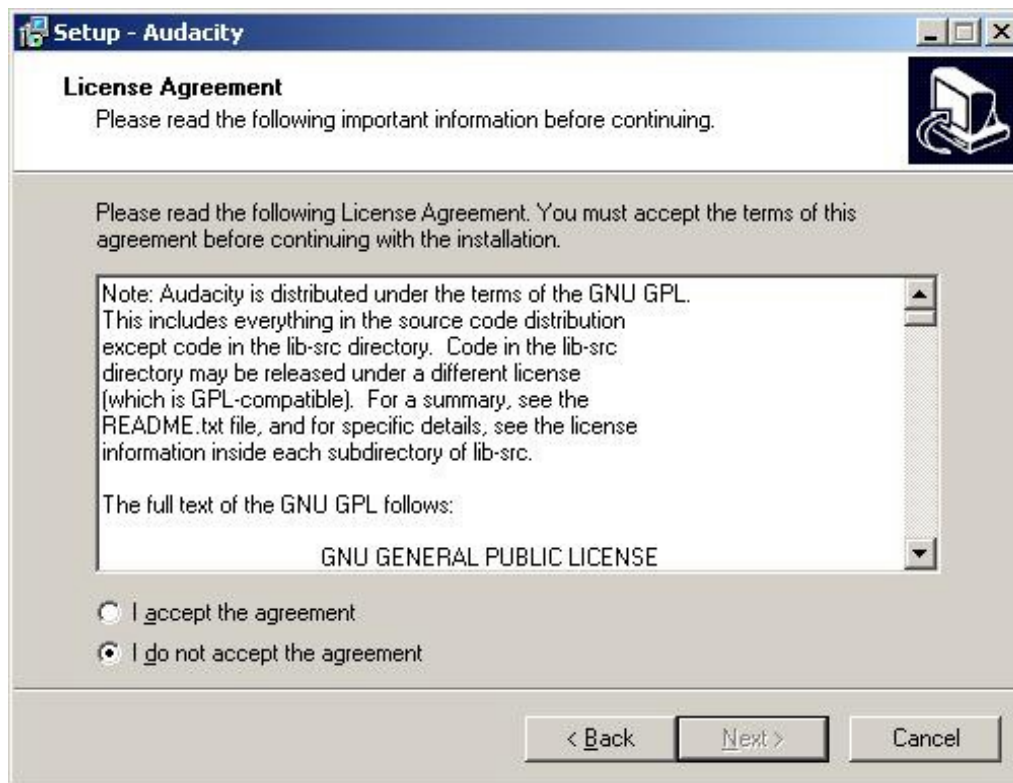
Open this file to begin installing Audacity by double clicking on the icon or clicking on "Open" on the downloads window.

You should now see a **Setup Wizard** like this:



Click "Next" to proceed.

The next step asks you to read and accept the **License Agreement**.



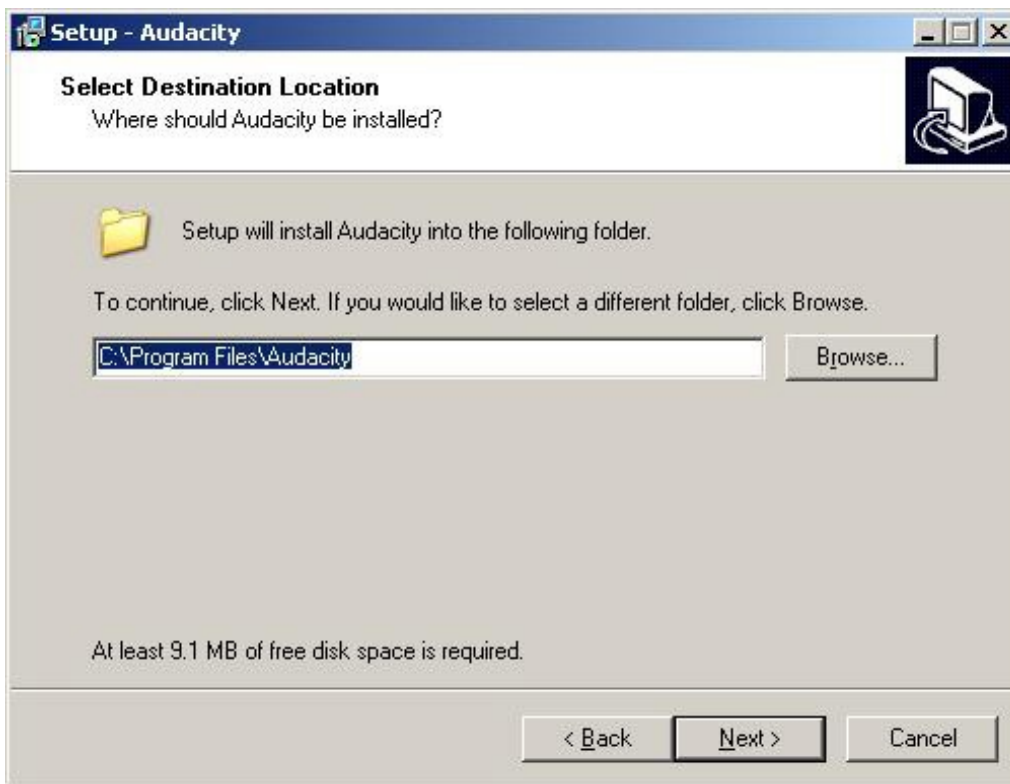
You cannot continue with the installation until you have accepted the agreement, so click on the **radio button** labelled "I acept the agreement" and then click "Next" to continue.

You should now see an **Information** window like this:



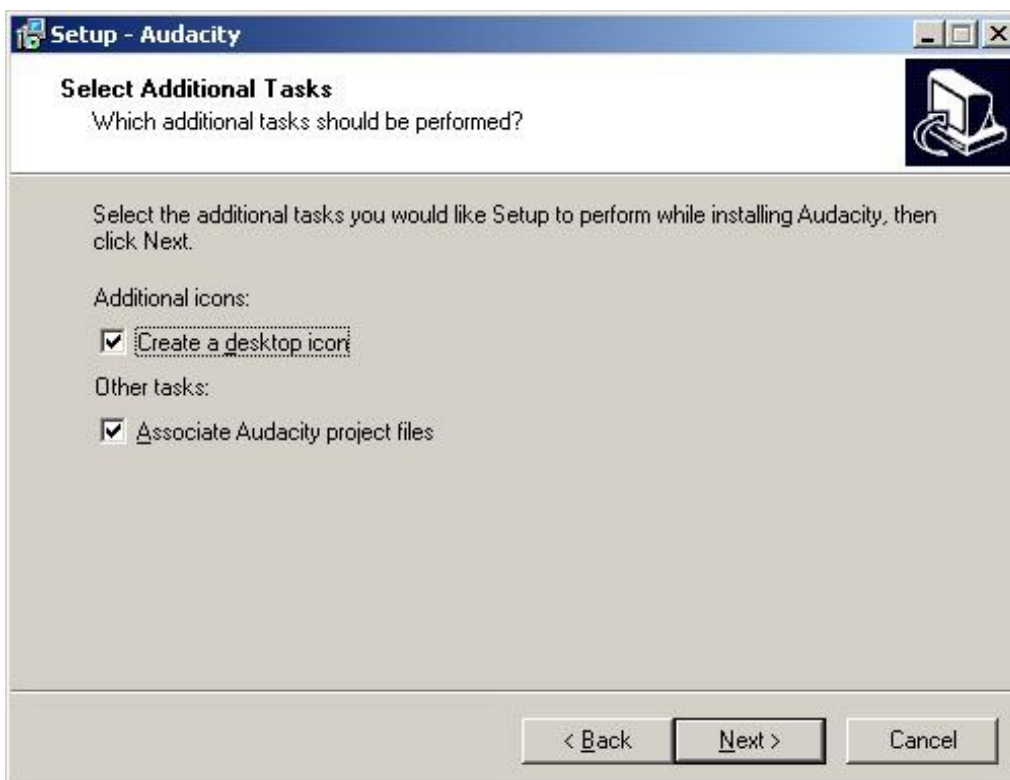
This window contains information such as credits and a changelog that you may find useful to read. Click "Next" continue.

You will now be prompted to select the folder Audacity will be installed into.



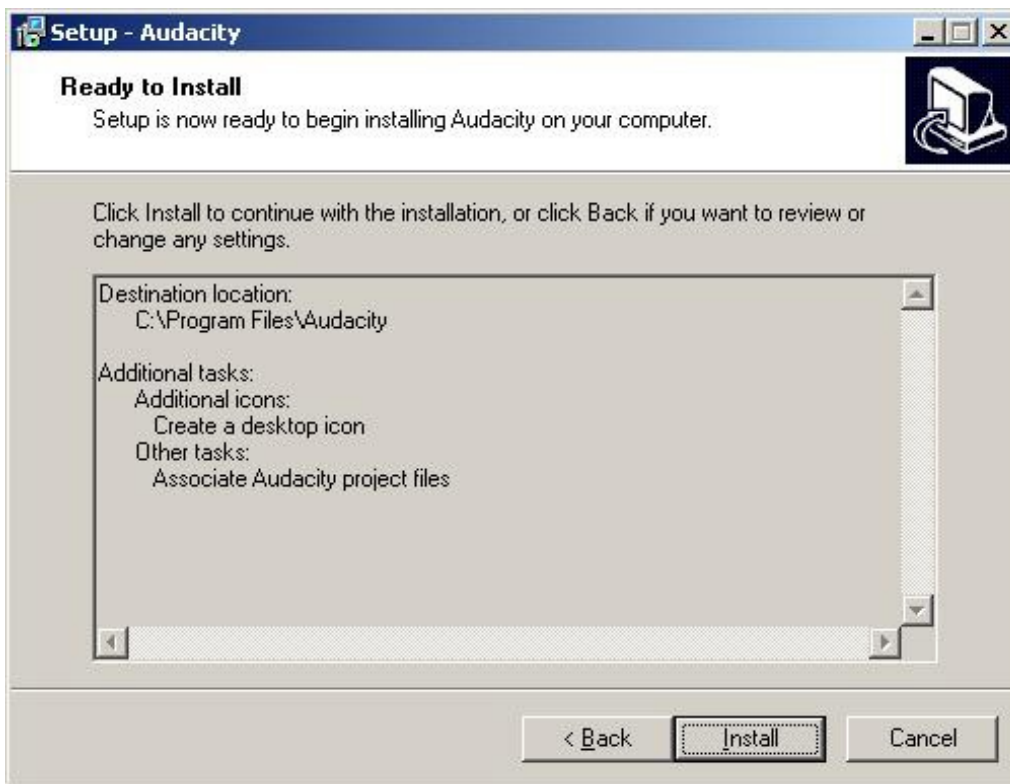
The **Setup Wizard** will automatically create a folder called "Audacity" in your "Program Files" folder so unless you want to install it somewhere else you can simply click "Next" to continue. If you wish to install Audacity somewhere else click "Browse".

You will now be asked to select which additional tasks you would like Setup to perform during the installation.



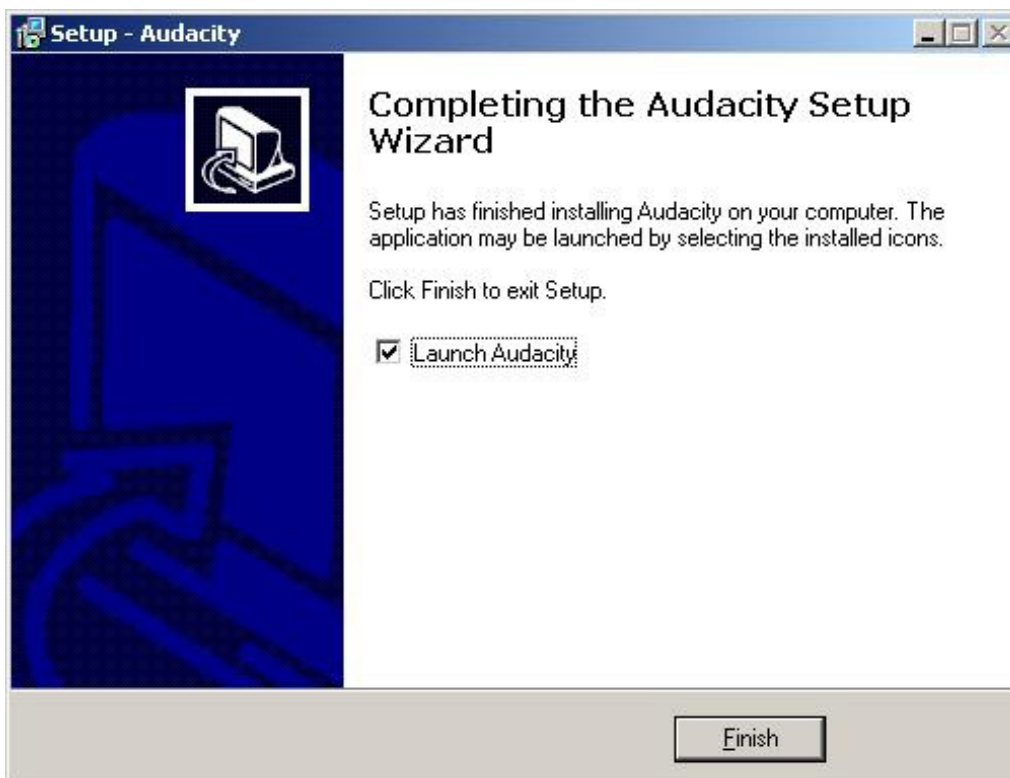
Click the check boxes to select or deselect the additional tasks then click "Next" to continue.

You will now see a window displaying the destination location and additional tasks.



Check that this information all correct and if it is click "Install" to continue. Click "Back" if you wish to change any of the installation settings.

You should now see a window like this:

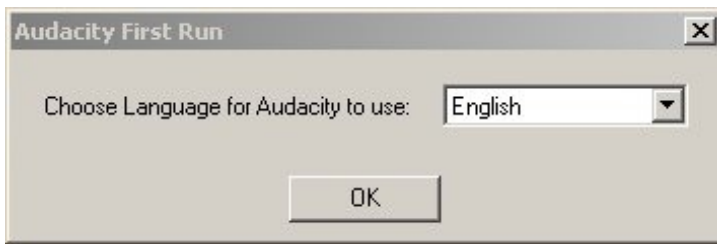


Click "Finish" to complete the installation. If the check box labelled "Launch Audacity" is ticked Audacity will open straight away.

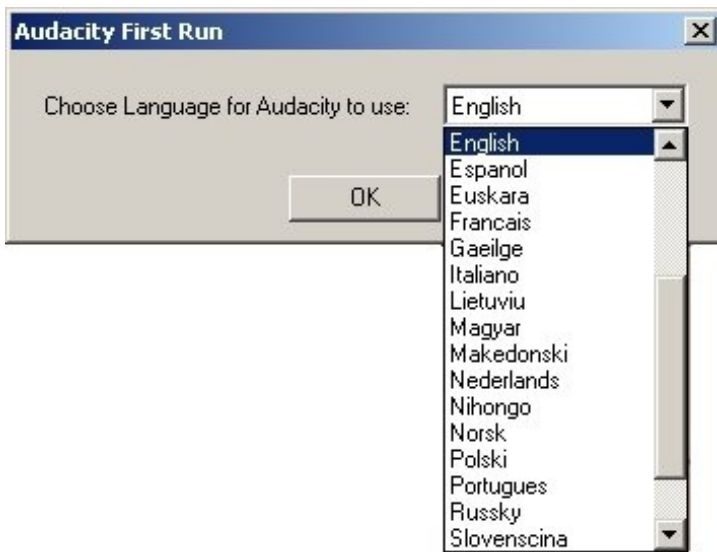
Installation is now complete. If you didn't choose "Launch Audacity" in the options above then you can launch Audacity by double clicking the following icon in the Audacity folder:



The first time you launch Audacity you will be prompted to select which language you want it to use.

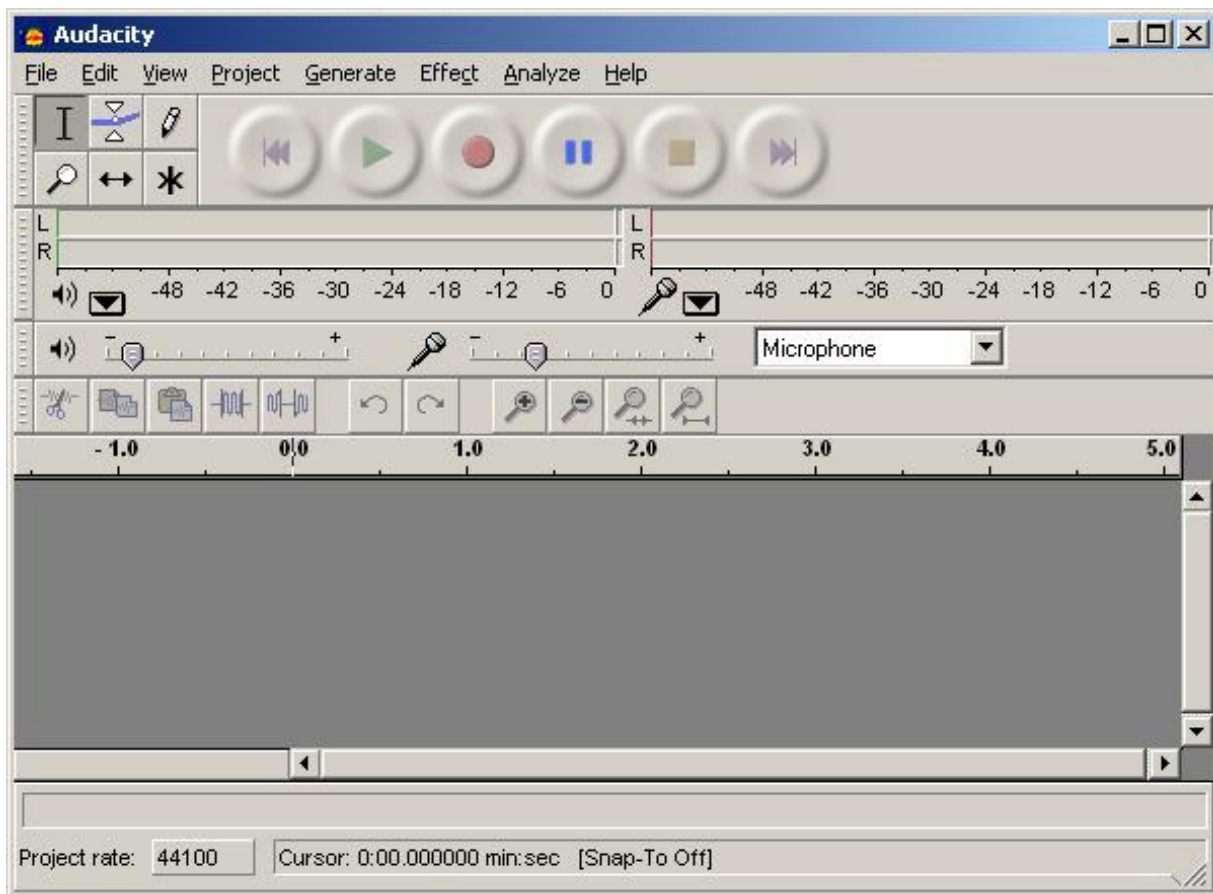


Click on the dropdown menu to select the language you want.



Once you have chosen the language you want, click on "OK" to finish launching Audacity.

The Audacity interface should look like this:



That's it! You now have Audacity up and running and can begin making and editing recordings.

You may need to install an extra library to be able to export a file as an mp3.

INSTALLING LINPHONE

Downloading

The source files for Linphone are linked from found on the softwares home site :

<http://www.linphone.org/>

The download pages are hosted on the **Free Software Foundations** software repository.

<http://download.savannah.nongnu.org/releases/linphone/>

At the time of writing the most recent stable version of the software is version **1.3.5** , the file used for writing this manual is:

<http://download.savannah.nongnu.org/releases/linphone/1.3.x/source/linphone-1.3.5.tar.gz>

HOW THE INTERNET WORKS

The **Internet** is a decentralized worldwide network of computer networks. Although many people use the terms "the Internet" and "the Web" interchangeably, the Internet is the physical connection of computer networks together with certain methods of communication. The Web is one of many ways of communicating using the Internet. You can also use the Internet for **e-mail**, **file sharing**, **Usenet news**, and **chat**.

Connecting to the Internet

The easiest way to use the Web is often to find a local Internet café or telecenter that provides Web access. If you need to set up your own computer with an Internet connection, you would, typically, open an account with an **Internet Service Provider** (ISP). You may need some extra equipment, such as a modem or a **router**, to enable your computer to connect with the ISP.

The ISP in turn may purchase its own Internet access from a national provider (unless it is a branch of a national provider). National providers may similarly receive their connection from one of the multinational companies that maintain and operate the servers and connections that are called the **backbone** of the Internet. The backbone is made up of major server installations at critical points, and global connections between them via fiber optic cables and satellites. These connections enable communications between Internet users in different countries and continents. National and international providers connect to this backbone through special **routers** known as **gateways**, which are connections that allow one network to communicate with another. Gateways, just like other routers, may be a point at which Internet traffic is monitored or controlled.

When you connect to the Internet, your computer is normally assigned a numeric **IP address**, which can be written as four numbers in the range 0-255, separated by dots. Like a postal address, it uniquely identifies a single computer on the Internet. Depending on your Internet Service Provider, your computer may be assigned different IP addresses at different times that it connects to them. All Web sites and Web servers also have IP addresses. For example, the IP address of www.frontlinedefenders.org is 217.173.101.253.

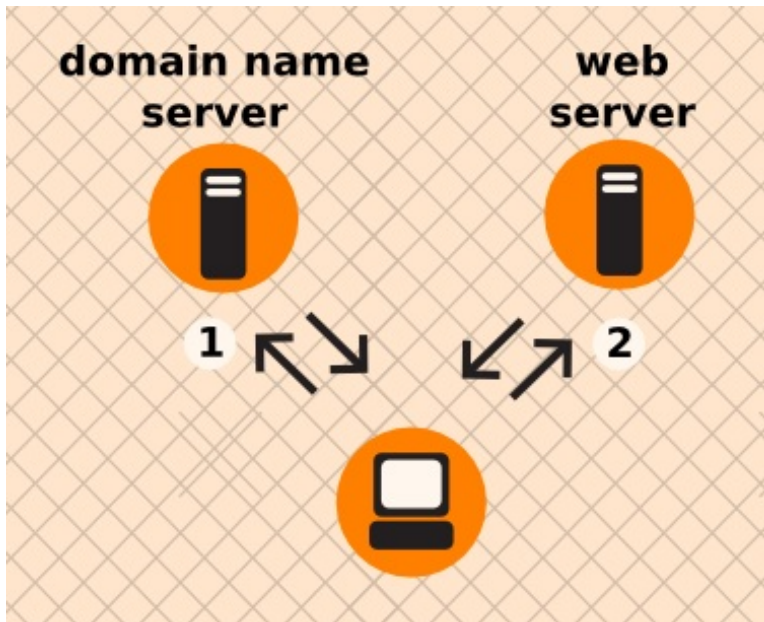
Visiting a Web site

When you want to visit a Web site, you normally type the "name" of the Web site into your browser and not the IP address. For example, to access the Frontline Web site you would type in <http://www.frontlinedefenders.org> instead of 217.173.101.253. The name of the Web site is also called the **domain** or **domain name**.

After you type the domain name into the browser, your computer sends a message with this name to the **Domain Name System** (DNS). This system consists of dedicated computers on the Internet that translate names into IP addresses. The DNS means that you need to remember only the Web site's name rather than a complex string of numbers. After the DNS server translates the domain name into an IP address, it shares that information with your computer.

Now your computer can try to connect to the Web site using its IP address. A path from your computer to the destination Web site must be found. This path may travel through countries, oceans and space; it could be thousands of miles long and could pass through numerous computers. How does it know which way to go, when there are hundreds of millions of different Web sites? The task of directing your message to the Web site (and back) is performed by routers, and the process is known as **routing**.

For our purposes, it's worth noting that routers can be given simple instructions on how to behave and can be used as a tool for censorship. Any router can be manipulated to record, re-direct, or block access to certain Web sites.



Example of what happens when you find a Web page:

1. You type in <http://globalvoicesonline.org/>. The computer sends the domain name to a selected DNS server (using its numeric address), which sends a message back, containing the IP address for the Global Voices Web site.
2. The browser then sends a request for a connection to that IP address.
3. The request goes through a series of routers until it reaches a router that finds the specific computer needed.
4. This computer sends information back to you, allowing your browser to send the full URL and receive the data to display the page.

Every connection between computers or routers that a message goes through is called a **hop**. The number of hops is the number of computers or routers your message comes in contact with along its way. Below is a sample path taken by a computer to get to www.globalvoicesonline.org. This request passes through at least fourteen computer connections (hops) before reaching its destination.

traceroute to globalvoicesonline.org (72.249.186.50), 64 hops max, 40 byte packets

- 1 192.168.1.1 (192.168.1.1) 2.425 ms 0.673 ms 0.637 ms
- 2 192.168.15.1 (192.168.15.1) 3.824 ms 1.068 ms 1.139 ms
- 3 10.92.32.1 (10.92.32.1) 10.712 ms 9.581 ms 98.359 ms
- 4 gig-5-3-lbrtnymtn-rtr1.hvc.rr.com (24.164.160.173) 10.720 ms 10.774 ms 11.147 ms
- 5 pos-3-1-nycmnya-rtr1.nyc.rr.com (24.164.160.78) 12.533 ms 12.042 ms 11.206 ms
- 6 tenge-0-3-0-nwrknjmd-rtr.nyc.rr.com (24.29.97.6) 12.456 ms 13.922 ms 13.821 ms
- 7 ae-4-0.cr0.nyc30.tbone.rr.com (66.109.6.78) 15.844 ms 22.984 ms 14.024 ms

8 ae-1-0.pr0.nyc20.tbone.rr.com (66.109.6.163) 14.605 ms 14.592 ms 43.455 ms
9 207.88.182.73.ptr.us.xo.net (207.88.182.73) 14.707 ms 14.437 ms 22.936 ms
10 te-4-0-0.rar3.nyc-ny.us.xo.net (207.88.12.26) 24.168 ms 16.683 ms 16.947 ms
11 207.88.14.9.ptr.us.xo.net (207.88.14.9) 45.446 ms 45.360 ms 46.136 ms
12 207.88.14.10.ptr.us.xo.net (207.88.14.10) 70.949 ms 69.782 ms 70.112 ms
13 207.88.185.38.ptr.us.xo.net (207.88.185.38) 70.162 ms 73.824 ms 73.137 ms
14 switch19.rimuhosting.com (65.99.204.18) 70.630 ms 70.344 ms 70.264 ms
15 server1.globalvoicesonline.org (72.249.186.50) 72.347 ms 72.747 ms 74.179 ms

Destination reached!



If you have used the Internet, you know that normally all of these complex processes are hidden and you don't need to understand them in order to find the information you need. However, when people or organizations attempting to limit your access to information interfere with the operation of the system, your ability to use the Internet may be restricted.

Why This Matters

Censorship can occur at different points in the Internet infrastructure, covering whole domains or subdomains, individual protocols, or specific content identified by filtering software. The best method to avoid censorship will depend on the specific censorship technique used. You may need to understand these differences in order to use the appropriate measures to use the Internet effectively and safely.

"IF IT CAN WORK HERE... IT CAN WORK ANYWHERE..."

In war ravaged Afghanistan during the rebuilding from multiple partner organizations the challenge was not just implementing an XO program of 11,000 [] XOs across Afghanistan, but communication the tips and tricks to get it working, localizing for two more languages, Activity and content development, adding the Koran, starting game development, and teacher culture change on a large scale.*



Since the fall of the Taliban 8 years ago, millions of children have gone back to school. Rote learning is the norm and many in the education system have little faith in teachers. Access to resources beyond the standard text books is unusual. Even those teachers who wanted to encourage their students to look further were often stumped for where to look.

The key is to find those 2 or 3 teachers in the school that really identify with it. Then train them / motivate them further to be champions within the school.

Before deployment doubts were naturally cast as to whether or not 60+ year old teachers from a traditional conservative part of the country would be able to adapt. The first signs were mixed...

Yet there were teachers there who were clearly passionate about the opportunity that the XO provided to improve the education for the children. Could it be that by giving these teachers additional training they could help the others along?

Less than a month later the answer came back; YES! All the teachers of grade 4,5,6 in Istiqlal high school in Jalalabad used the XO as a tool in their day to day classes. Children were naturally enthusiastic and from day one started exploring.

On the basis of what we learned in Jalalabad more than 3,000 XO laptops have been successfully deployed across Afghanistan in Kabul, Jalalabad and Herat. Parents and teachers have become enthusiastic as well and family health information / opportunities to increase family income are also being made available via the XO Laptops. Even the troubled Zabul province through co-operation with the Provincial Reconstruction Team may soon receive XO laptops.

To support the school a little more and build an ecosystem we started to hire part time computer science interns from the university to visit the school more regularly than we could to support students and teachers.

"I often want to learn something at home but at home there's no books and no teacher. But this [XO] itself is like a teacher..."

4th Grade school girl, Sayed Jamaludin School, Kabul

A comprehensive monitoring effort is underway to measure improvements in educational accomplishment, thinking skills, health and economic status of the family against baseline measurements taken before deployment. The XO can be a catalyst to radically improve education and addressing the wider environment around the children in which that learning ultimately takes place.

Mike Dawson and <http://olpc.af> were the sources for this document.

** 11,000 XOs from <http://wiki.laptop.org/go/Deployments>, though implementations of 396 in first stage, 2,000 in second phase, so 11,000 is probably a goal number.*