

# From Zero to Hero –

Build your own  
IBM Client for Smart Work  
Demonstration based on Ubuntu



Open Home x

Search All Mail

Click here for Home Page options

Lotus Notes 8.5 Home

Mail New

Sametime Contacts

Available

Type to find name

Work (1/1)

Maik Weber

File Edit View History Bookmarks Tools Help

http://www-01.ibm.com/software/lotus/openclient/

Most Visited Getting Started Latest Headlines IBM

Google

United States [change]

Home Solutions Services Products Support & downloads My IBM

IBM Client for Smart Work

Software > Lotus >

Search

Welcome [ IBM Sign in ] [ Register ]

Related links

- Lotus Domino Solutions Catalog
- Collaboration Solutions for SMB
- Business Process Management
- Service Oriented Architecture

## IBM Client for Smart Work



Are you looking to work smarter? Collaborate in context, leverage Service Oriented Architecture? Expand Business Impact and raise the ROI of IT by optimizing your workspace? Consider the IBM Client for Smart Work.

The IBM Client for Smart Work solution includes open standards-based email, productivity editors, real time communication, social computing and other software that can be used on a variety of

Smart Work for a Smarter Planet

Work Smarter with Collaboration Solutions

Find out more!

Press releases

IBM Press announcements

find tags

activities?

provides a you can are, and even if that s several

Online

# IBM Client for Smart Work

- The IBM Client for Smart Work is IBM's vision of an “open” client solution providing our customers the right client platform based on their requirements:
  - Based on open technologies
  - Open the choice for operating system – Microsoft Windows, Linux or Mac OS X
  - Implementable in an open architecture ... either as desktop, laptop or a virtual client in a Cloud environment



---

## Objective

- This presentation will guide you through the installation and configuration of Ubuntu Desktop Linux and Lotus collaboration software.
- If you follow these instructions, at the end you will have YOUR OWN copy of an IBM Client for Smart Work based on Ubuntu.

---

## Steps

- Check the prerequisites
- Install Ubuntu Linux Desktop 10.04
- Customize your Ubuntu Linux Desktop
- Lotus Notes 8.5.2
- Lotus Symphony 3
- Lotus Sametime
- Lotus Connections (Activities)
- Appendix

---

## Steps

- **Check the prerequisites**
- Install Ubuntu Linux Desktop 10.04
- Customize your Ubuntu Linux Desktop
- Lotus Notes 8.5.2
- Lotus Symphony 3
- Lotus Sametime
- Lotus Connections (Activities)
- Appendix

## Prerequisites – Hardware

- Desktop PC or Laptop
- Modern CPU, for example Intel Core 2 Duo
- Memory 1GB, for a better user experience at least 2GB are recommended
- Disk space > 7GB
  - We recommend to use the entire disk to avoid re-partitioning
  - Attention: Any additional installed operating system will be erased during the installation of Ubuntu
- Working connection to the Internet to get updates and additional software
  - Connection via Ethernet recommended to avoid “chicken or egg” problem with download of proprietary drivers which might be required for some wireless cards

## Prerequisites – Ubuntu

- Ubuntu 10.04 LTS (Long Term Support)
- Choose the 32Bit version (64Bit version is not recommended)
  - PAE support in Ubuntu allows access to memory larger than 3GB (details see Appendix > PAE Kernel)
- Get your FREE copy here  
<http://www.ubuntu.com/desktop/get-ubuntu/download>

## Prerequisites – Lotus Notes

- Lotus Notes 8.5.2
  - Earlier versions of Lotus Notes like 8.5 or 8.5.1 are not recommended for installation on Ubuntu 10.04
  - Lotus Notes 8.5.2 is officially supported on Ubuntu 10.04  
<http://www.ibm.com/support/docview.wss?uid=swg27019218>
- Trial version of Lotus Notes 8.5.2 is available here:  
[http://www.ibm.com/developerworks/downloads/ls/lsndad/?S\\_TACT=105AGX13&S\\_CMP=NANDD](http://www.ibm.com/developerworks/downloads/ls/lsndad/?S_TACT=105AGX13&S_CMP=NANDD)
  - Ensure to select and download “IBM Lotus Notes Client 8.5.2 for Linux (Debian Install) English – evaluation CZJ1NEN.tar”
- Active account on a Lotus Domino server for setting up Lotus Notes

## Prerequisites – Lotus Symphony

- We recommend to use Lotus Symphony 3!
  - Based on and compatible with OpenOffice 3
- You can get Lotus Symphony 3 here: <http://symphony.lotus.com/>
- The Ubuntu Partner repository contains the older Lotus Symphony 1.3 standalone client – currently only for Hardy/Intrepid/Jaunty/Karmic, but not for Lucid.
- By default, Lotus Notes 8.5.2 provides Lotus Symphony 1.3 as embedded client.

## Prerequisites – Lotus Sametime

- Lotus Notes 8.5.2 includes embedded Sametime client based on Lotus Sametime 8.0.2 – no further software required
- Active account on a Lotus Sametime server
  - Alternative: You can get an account in Lotus Greenhouse which provides Lotus Sametime for demonstration purposes

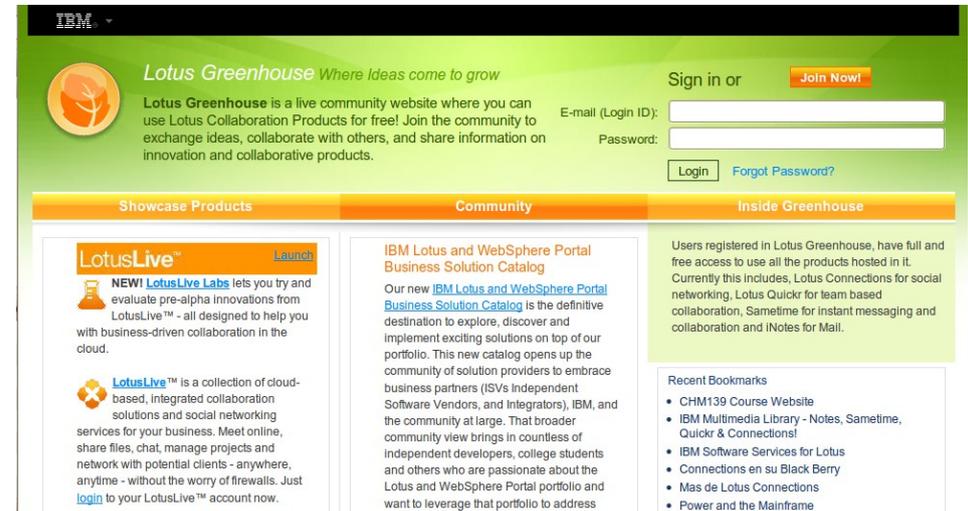
---

## Prerequisites – Lotus Connections

- Lotus Notes 8.5.2 contains Activities widget which allows you to synchronize activities with Lotus Connections
- Active account in Lotus Connections – Activities
  - Alternative: You can get an account in Lotus Greenhouse which provides Lotus Connections for demonstration purposes

# Lotus Greenhouse

- Lotus Greenhouse is a live community website where you can use and demonstrate Lotus Collaboration products for free!  
<http://greenhouse.lotus.com>
- Create account using the self-nomination form (“Join now”)
- Lotus Greenhouse hosts Lotus Sametime and Lotus Connections Activities ... and many more



## Steps

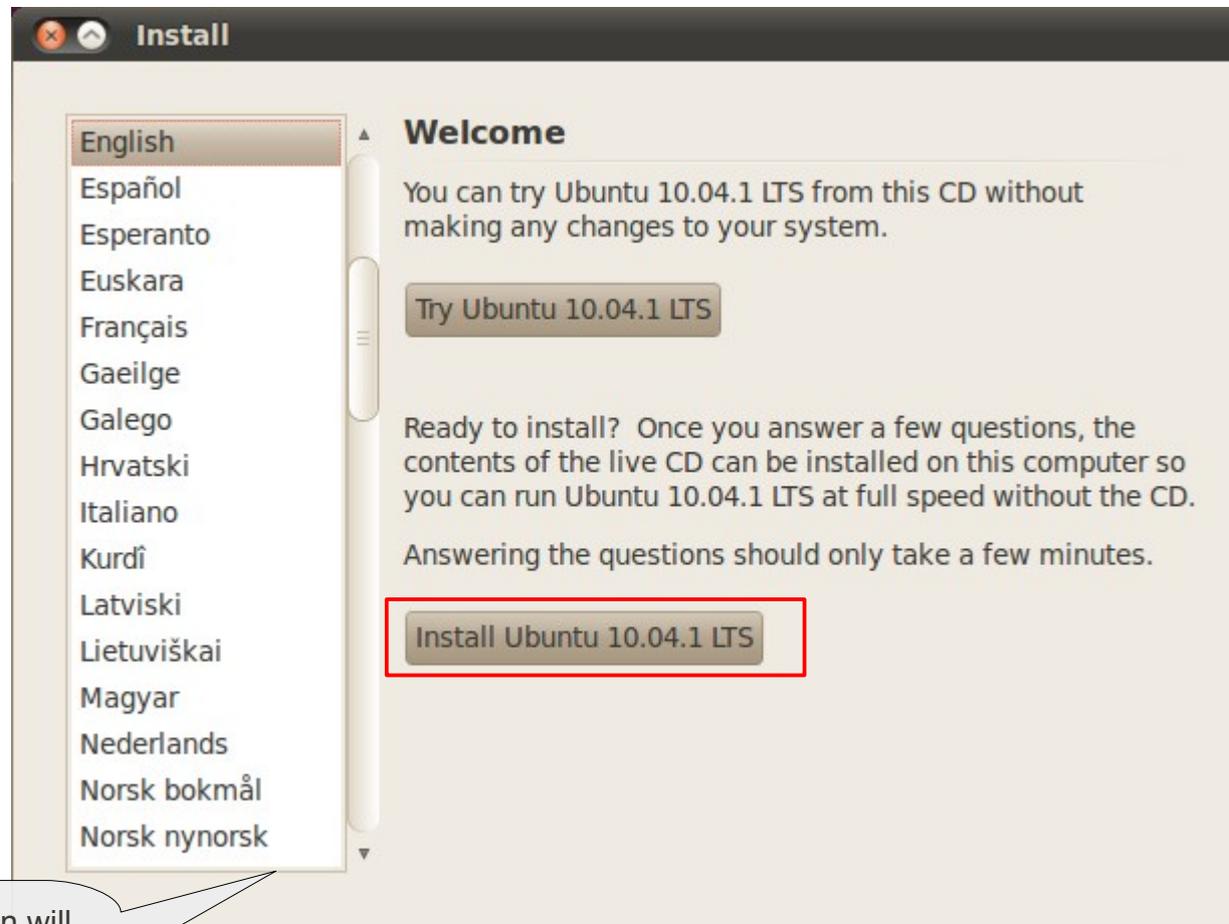
- Check the prerequisites
- **Install Ubuntu Linux Desktop 10.04**
- Customize your Ubuntu Linux Desktop
- Lotus Notes 8.5.2
- Lotus Symphony 3
- Lotus Sametime
- Lotus Connections (Activities)
- Appendix

## Boot the installation CD



Insert the Ubuntu installation CD into your PC and boot your system

Let's begin ...



The Welcome screen will be displayed. Click the button labeled "Install Ubuntu 10.04 LTS"

## Define your timezone

**Install**

### Where are you?

Select your location, so that the system can use appropriate display conventions for your country, fetch updates from sites close to you, and set the clock to the correct local time.



Region:  Time Zone:

Step 2 of 7

The Ubuntu installation wizard will guide you thru several questions. At first, define your timezone ...

## Define your keyboard layout

... in the next step you define your keyboard layout.

**Install**

### Keyboard layout

Which layout is most similar to your keyboard?

Suggested option: USA

Guess keymap:

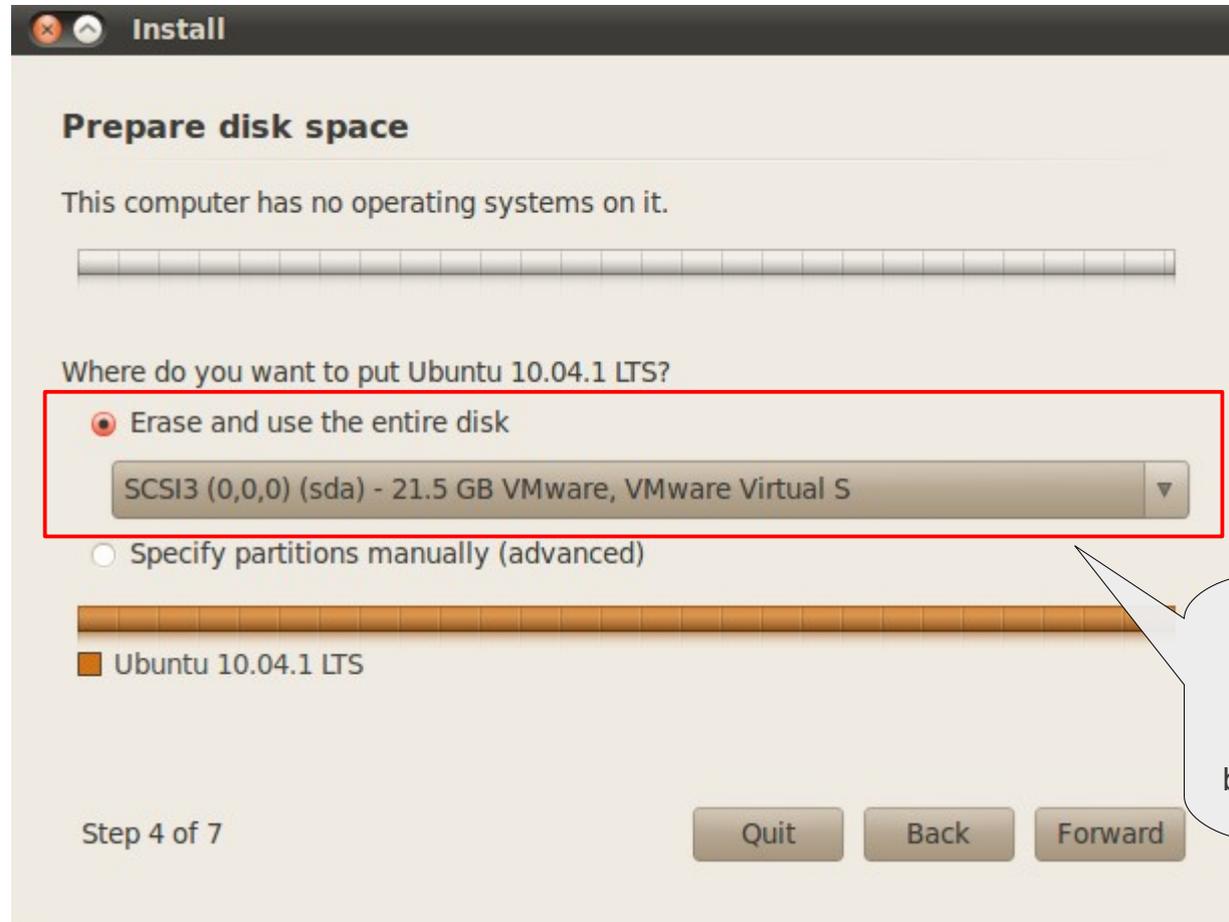
Choose your own:

France	Germany
Georgia	Germany - Dead acute
Germany	Germany - Dead grave acute
Ghana	Germany - Dvorak
Greece	Germany - Eliminate dead keys

You can type into this box to test your new keyboard layout.

Step 3 of 7

## Define the disk for Ubuntu



We recommend to use a PC where you can erase the entire disk. Other options are also possible, but require more attention.

## Define your Ubuntu account

**Who are you?**

What is your name?  
Tux Penguin ✓

What name do you want to use to log in?  
tux ✓

If more than one person will use this computer, you can set up multiple accounts after installation.

Choose a password to keep your account safe.  
●●●●●●●● ●●●●●●●● **Strength: weak**

What is the name of this computer?  
tux-desktop ✓

This name will be used if you make the computer visible to others on a network.

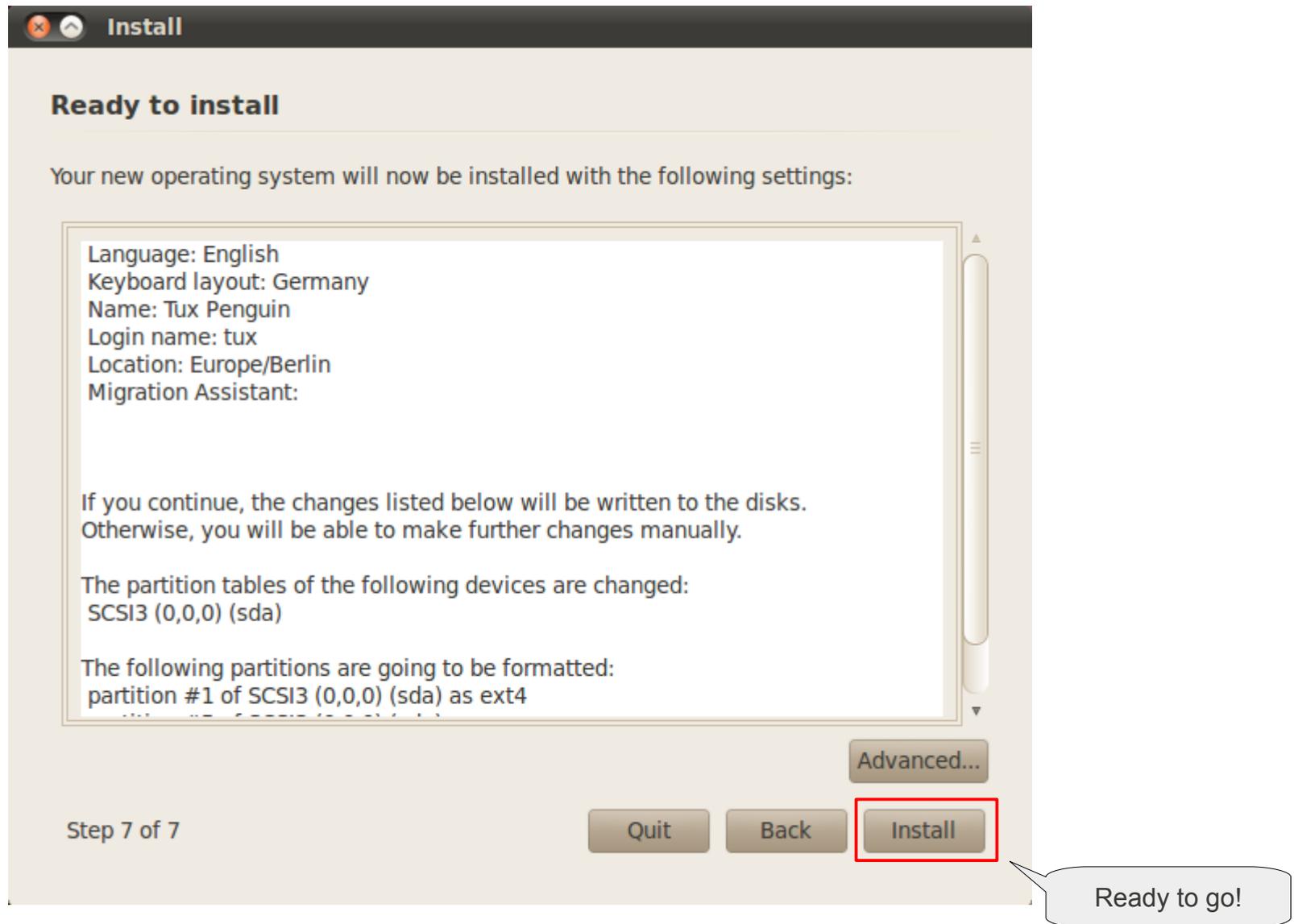
Log in automatically  
 Require my password to log in  
 Require my password to log in and to decrypt my home folder

Step 5 of 7

Quit Back Forward

Every system needs an user account.

## We are ready for installation



## Grab a coffee ...

Installing system

# Welcome



- Thank you for choosing Ubuntu 10.04 LTS.
- This release marks a major milestone in the Ubuntu project. It is easier and more reliable than ever, with hundreds of improvements including a new video editor, integrated social networking and a growing selection of extra software.
- Whether you're new to Ubuntu or a long-time user, we're sure there is something you will enjoy. While Ubuntu is installed, this slideshow will show you around.

**Ubuntu is designed to be easy. Feel free to explore!**

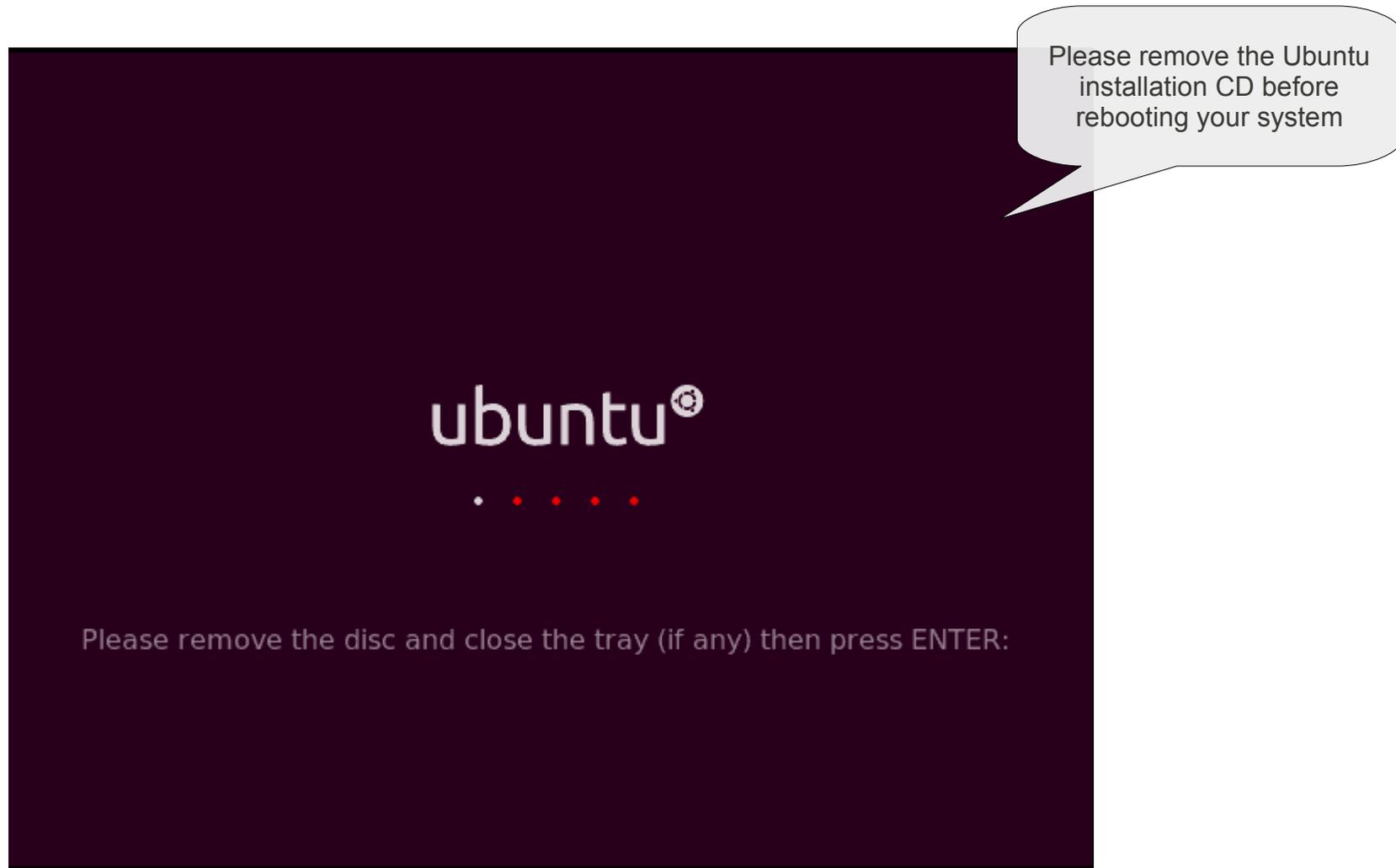
Copying files...

24%

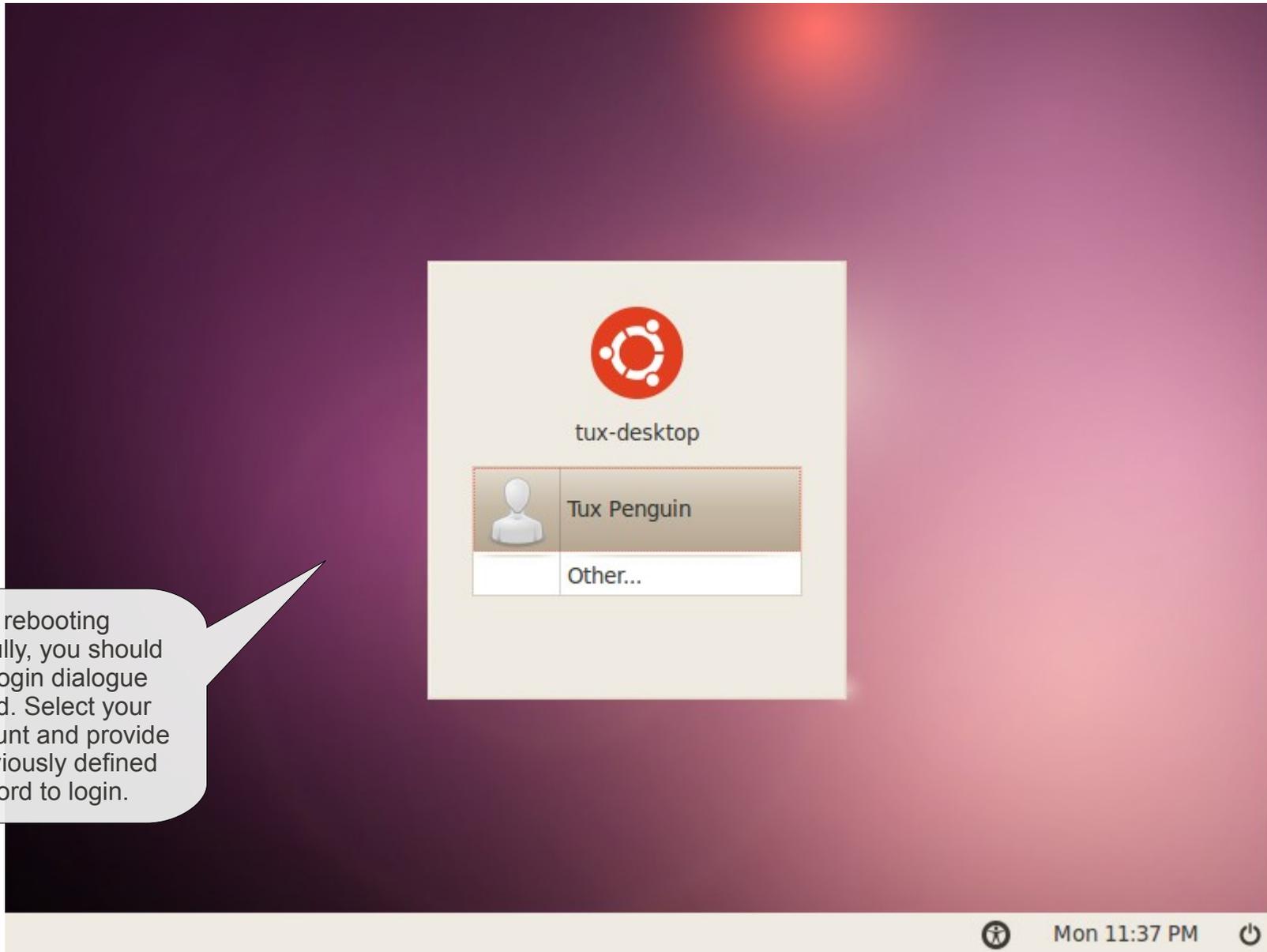
We cannot wait any longer ...



## Cleanliness must be ...

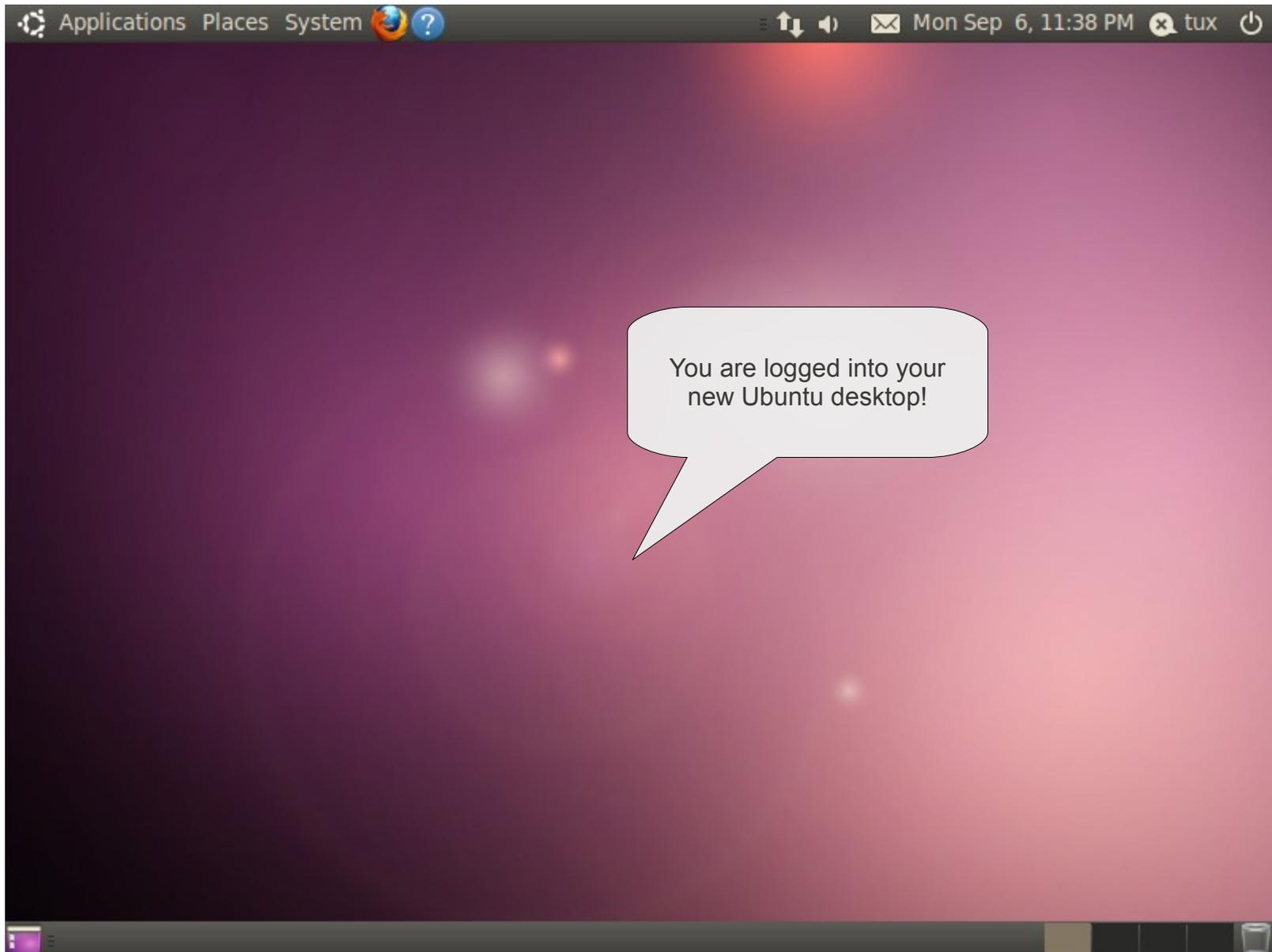


## Let's login ...



After rebooting successfully, you should get the login dialogue displayed. Select your user account and provide your previously defined password to login.

# Welcome to your Ubuntu desktop!



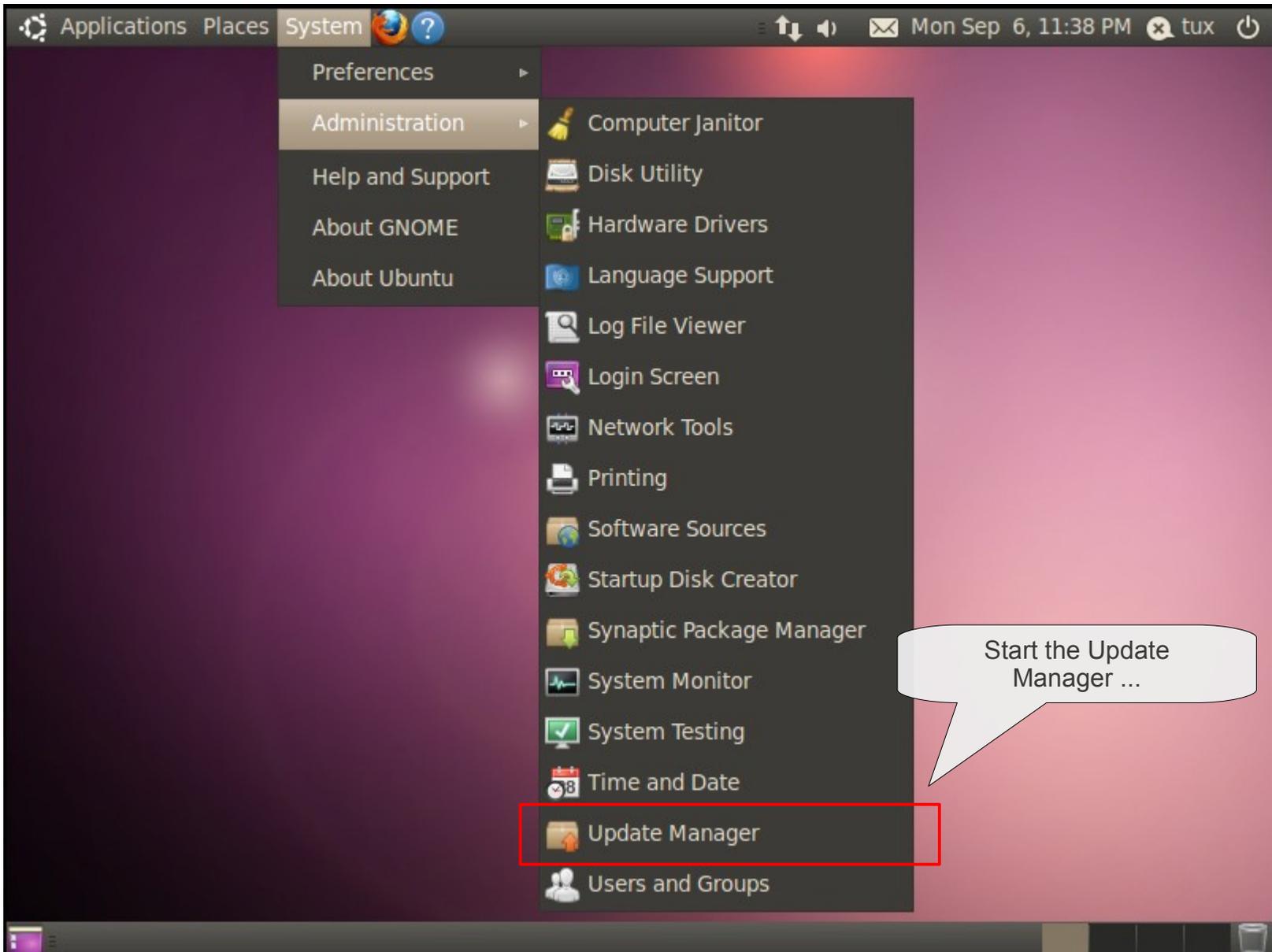
## Network connection established



This symbol displays that you have a working network connection over Ethernet.

Further help in case of connectivity problems are available here  
<https://help.ubuntu.com/10.04/internet/C/index.html>

## Let's check for updates ...



# ... and install them ...

... who is automatically checking for available updates at startup.

**Update Manager**

**Welcome to Ubuntu**  
 These software updates have been issued since Ubuntu was released. If you don't want to install them now, choose "Update Manager" from the Administration Menu later.

**Important security updates**

- bogofilter**  
a fast Bayesian spam filter (dummy package) (Size: 1 KB)
- bogofilter-bdb**  
a fast Bayesian spam filter (Berkeley DB) (Size: 236 KB)
- bogofilter-common**  
a fast Bayesian spam filter (common files) (Size: 140 KB)
- libfreetype6**  
FreeType 2 font engine, shared library files (Size: 409 KB)
- libwww-perl**  
Perl HTTP/WWW client/server library (Size: 391 KB)

Download size: 49.9 MB  
32 selected.

+ Description of update

You can re-check ...

... and install the updates.

## System changes require your authorization

As we are going to change the system, your authentication is required.



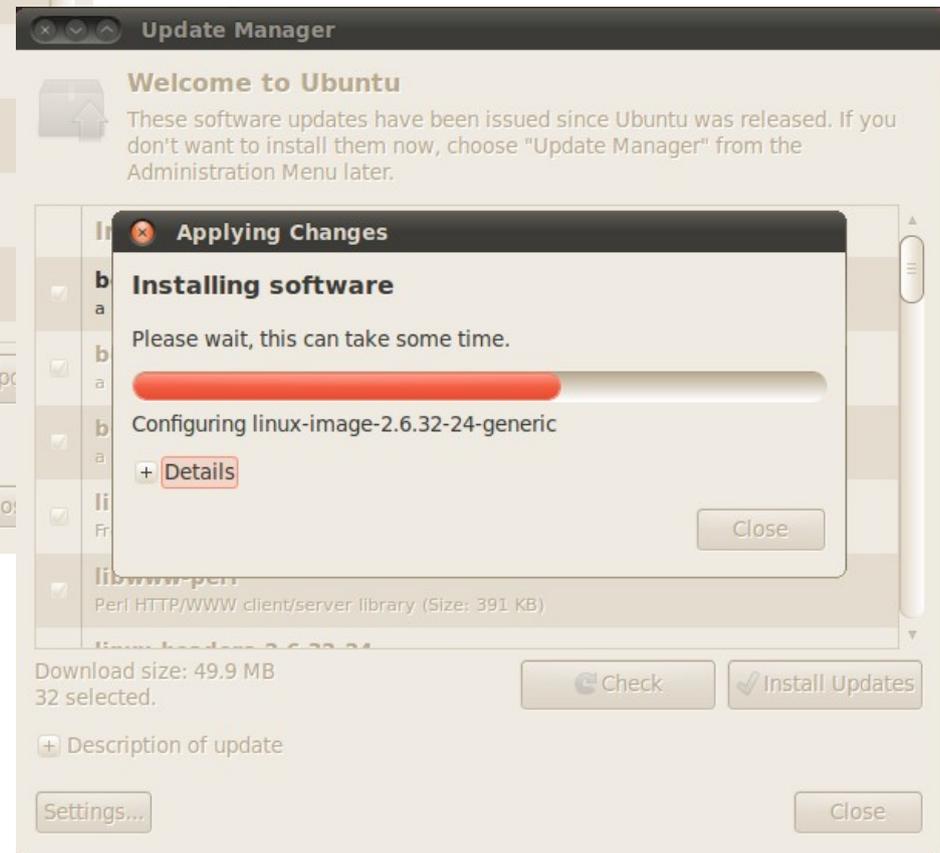
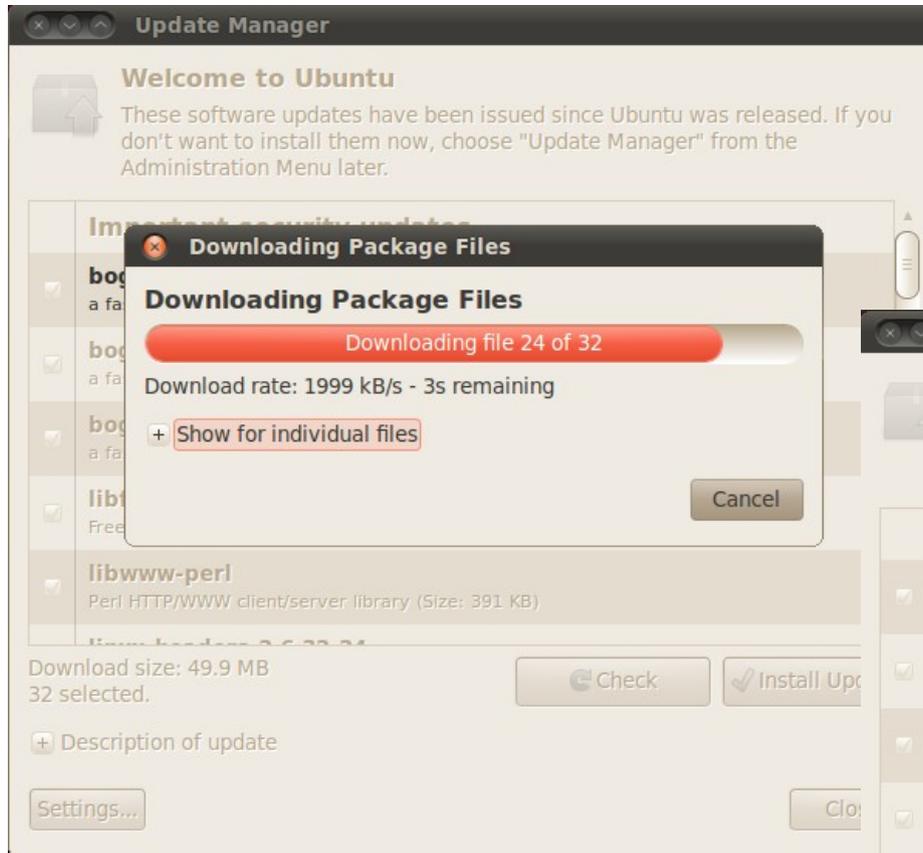
**Enter your password to perform administrative tasks**

The application 'Update Manager' lets you modify essential parts of your system.

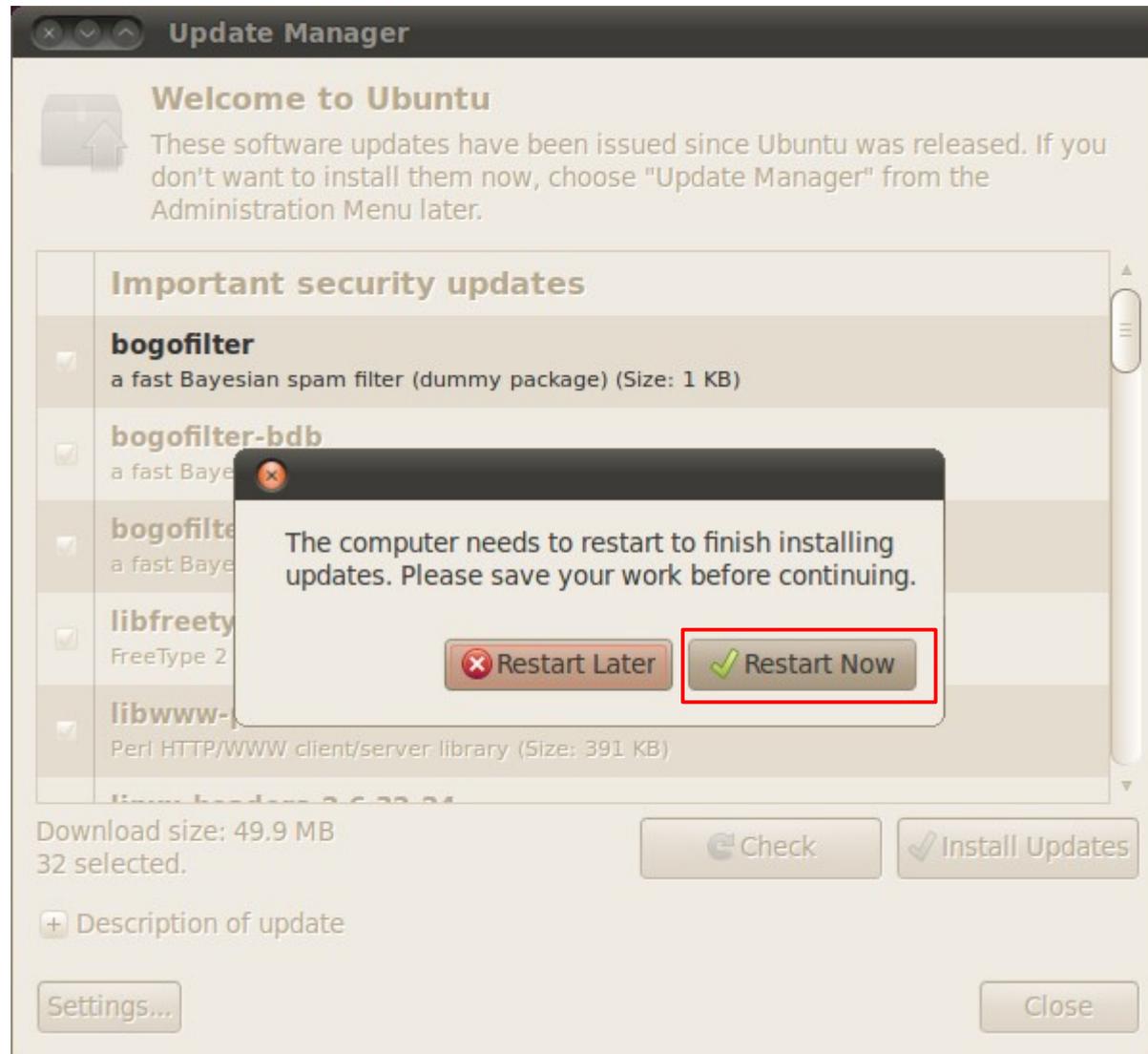
Password:

Cancel OK

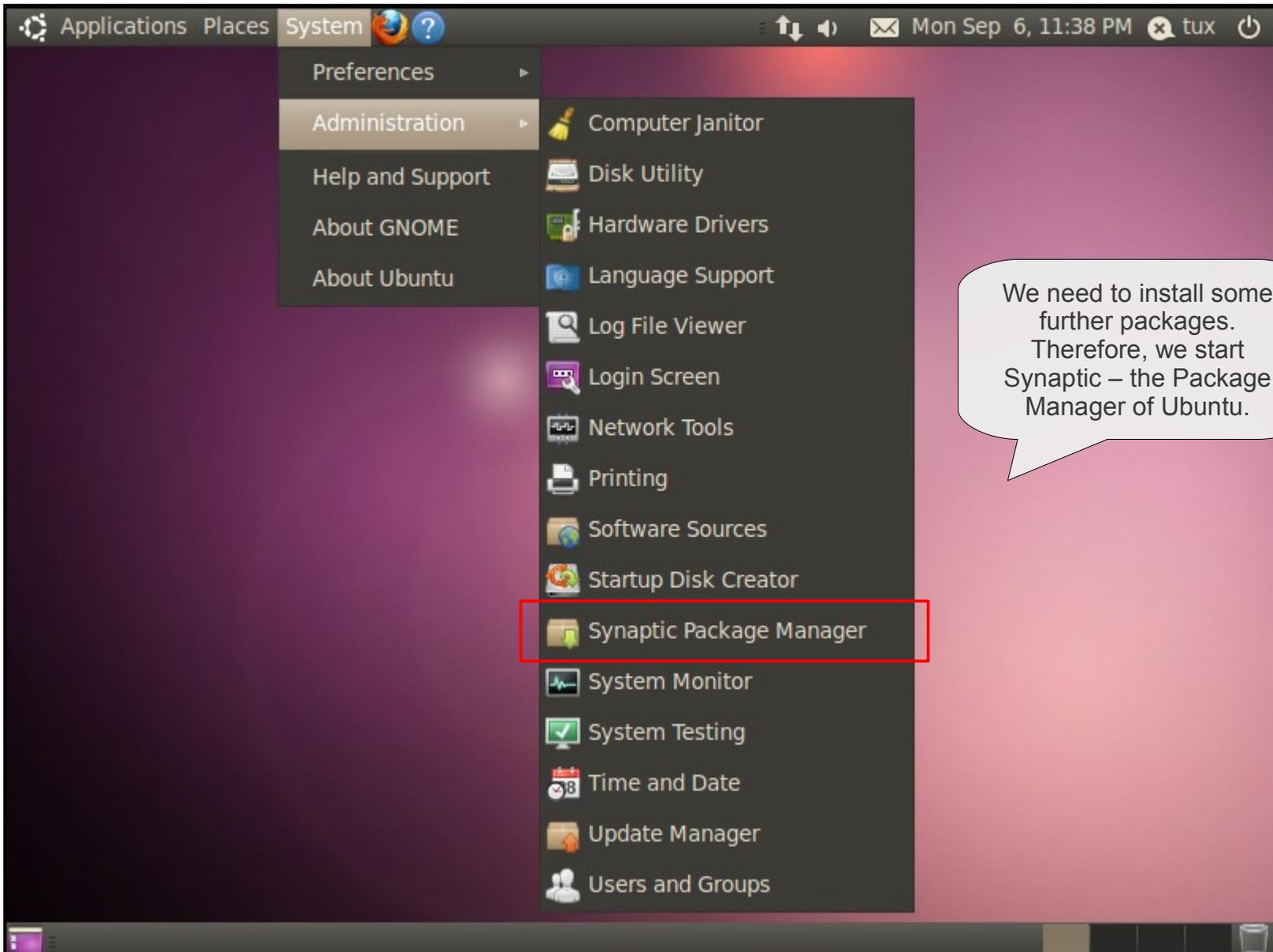
# It's time for another coffee ...



## Some things might never change ...



## Let's install some more packages ...



# Synaptic Package Manager

The screenshot shows the Synaptic Package Manager interface. At the top, there is a menu bar with 'File', 'Edit', 'Package', 'Settings', and 'Help'. Below the menu bar is a toolbar with icons for 'Reload', 'Mark All Upgrades', 'Apply', and 'Properties', along with a 'Quick search' text box and a 'Search' button. The main area is divided into a sidebar on the left and a central pane. The sidebar contains a list of categories under the 'All' filter, including 'Amateur Radio (universe)', 'Base System (universe)', 'Communication', 'Communication (multiverse)', 'Communication (universe)', 'Cross Platform', 'Cross Platform (multiverse)', and 'Cross Platform (universe)'. Below the list are buttons for 'Sections', 'Status', 'Origin', 'Custom Filters', and 'Search Results'. The central pane displays a table of packages with columns for 'S', 'Package', 'Installed Version', 'Latest Version', and 'Description'. The table lists several packages, including '2vcard', '3270-common', '3dchess', '4g8', and '6tunnel'. Below the table, a message states 'No package is selected.' At the bottom of the window, a status bar indicates '30195 packages listed, 1304 installed, 0 broken. 0 to install/upgrade, 0 to remove'.

S	Package	Installed Version	Latest Version	Description
<input type="checkbox"/>	2vcard		0.5-3	perl scrip
<input type="checkbox"/>	3270-common		3.3.7p7-1build2	Common
<input type="checkbox"/>	3dchess		0.8.1-16	3D chess
<input type="checkbox"/>	4g8		1.0-3	Packet Ca
<input type="checkbox"/>	6tunnel		0.11rc2-2	TCP proxy

30195 packages listed, 1304 installed, 0 broken. 0 to install/upgrade, 0 to remove

## Look for “ubuntu-restricted-extras”

The screenshot shows the Synaptic Package Manager interface. The search bar at the top contains the text "ubuntu-restricted-extra". A table of search results is displayed, with the first row highlighted. A context menu is open over the first row, with "Mark for Installation" selected. A status bar at the bottom indicates "4 packages listed, 1304 installed, 0 broken. 0 to install/upgrade, 0 to remove".

**1. Search for “ubuntu-restricted-extras”**

S	Package	Installed Version	Latest Version	Description
<input type="checkbox"/>	ubuntu-restricted-extras		39	Commonly
<input checked="" type="checkbox"/>	Unmark		39	Commonly
<input type="checkbox"/>	Mark for Installation		0.99.14-2ubuntu4	Transitional
<input type="checkbox"/>	Mark for Reinstallation		39	Commonly

**2. Right mouse-click at the listed package “ubuntu-restricted-extras”**

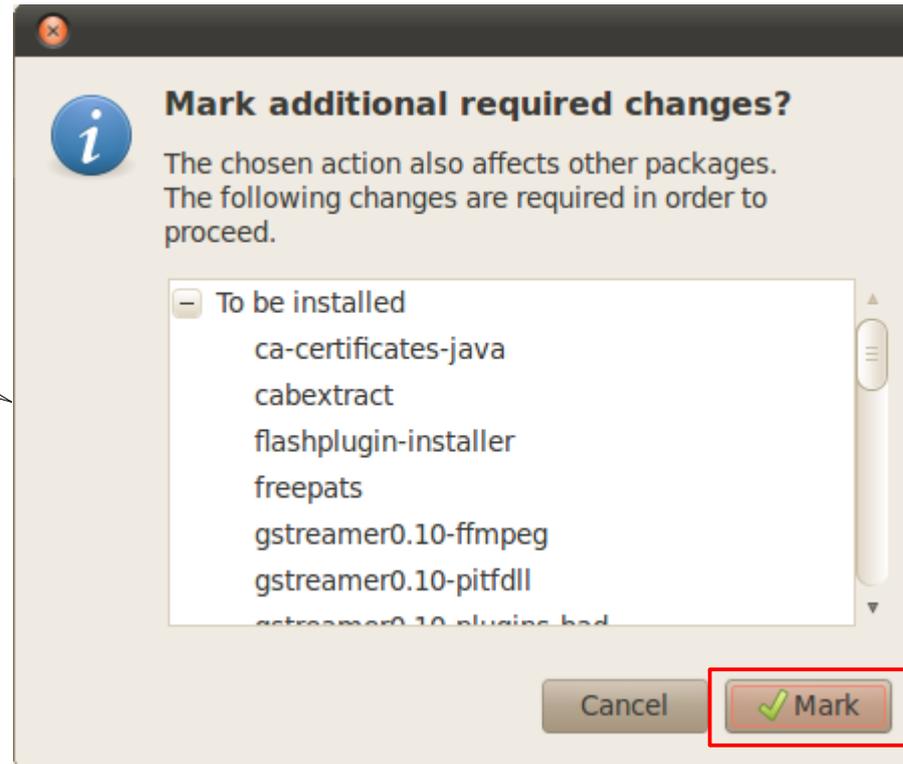
**3. Select “Mark for Installation”**

4 packages listed, 1304 installed, 0 broken. 0 to install/upgrade, 0 to remove

Click the package at the beginning of the line and select “Mark for Installation” ...

## The installation of additional packages might be required

The package “ubuntu-restricted-extras” has some dependencies on additional packages which need to be installed as well.



# Ready to go ...

We are ready to apply the changes and install the packages.

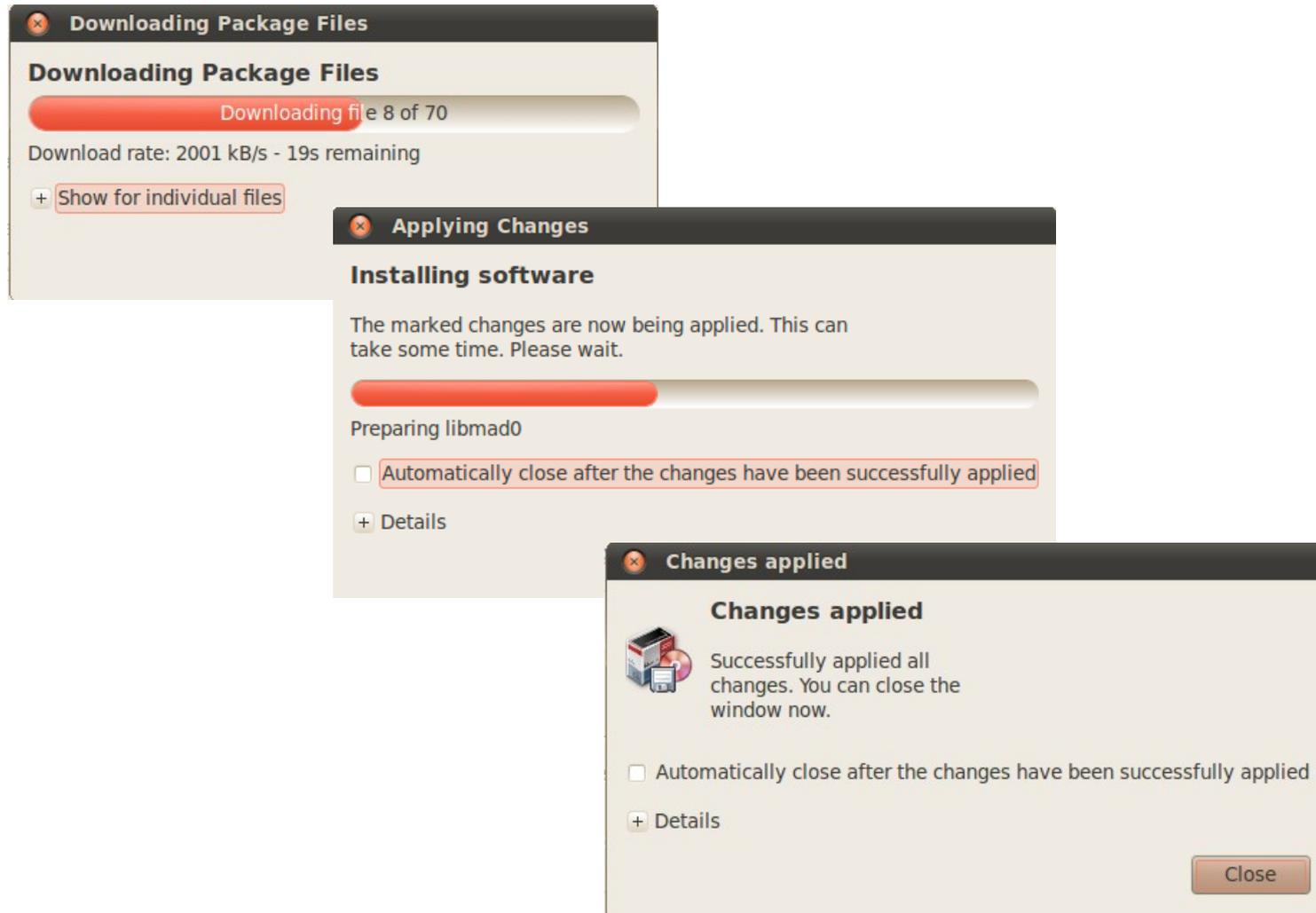
The screenshot shows the Synaptic Package Manager interface. The 'Apply' button in the top toolbar is highlighted with a red box. A 'Summary' dialog box is open in the foreground, also with its 'Apply' button highlighted in red. The dialog box contains the following information:

**Apply the following changes?**  
 This is your last opportunity to look through the list of marked changes before they are applied.

**Summary**  
 70 new packages will be installed  
 184 MB of extra space will be used  
 87.6 MB have to be downloaded

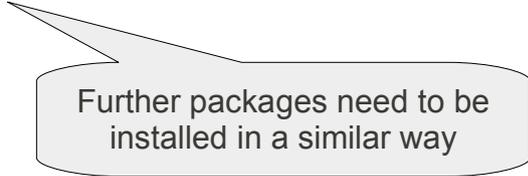
Download package files only

Buttons: Cancel, Apply



## Install additional packages

- Repeat the steps and install the following packages:
  - ttf-xfree86-nonfree (Required for Lotus Notes)
  - simple-ccsm (required for advanced visual effects)

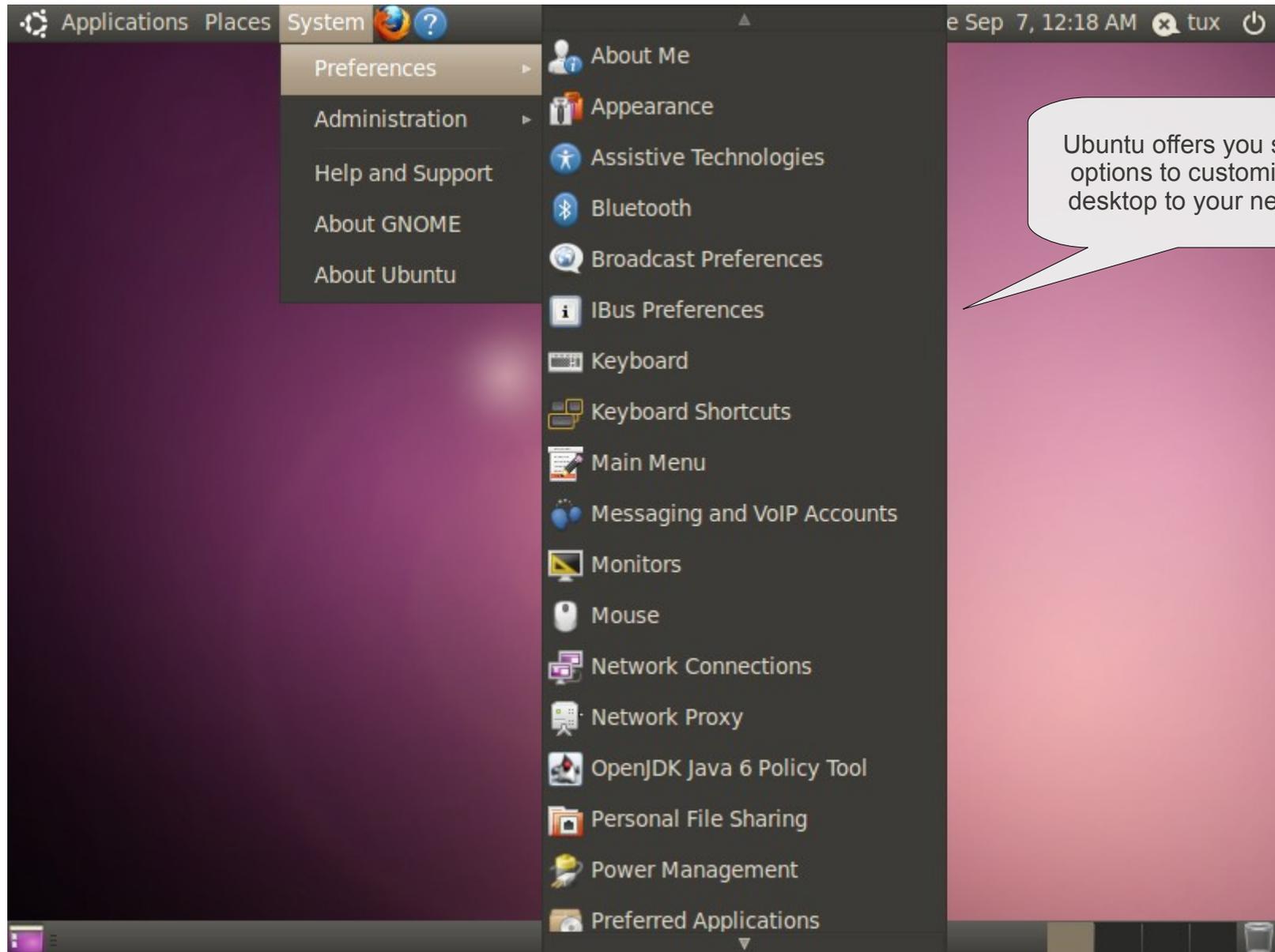


Further packages need to be installed in a similar way

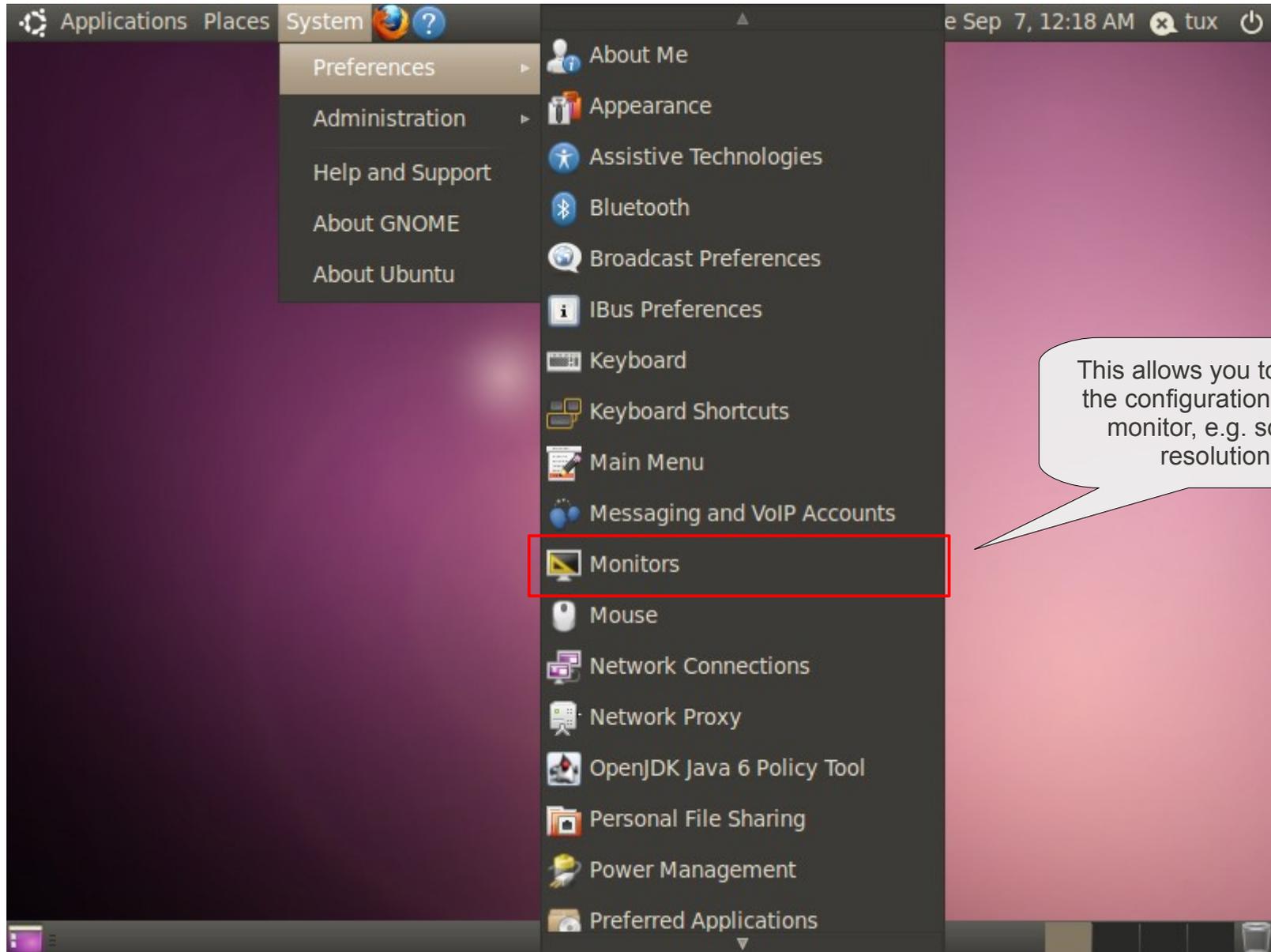
## Steps

- Check the prerequisites
- Install Ubuntu Linux Desktop 10.04
- **Customize your Ubuntu Linux Desktop**
- Lotus Notes 8.5.2
- Lotus Symphony 3
- Lotus Sametime
- Lotus Connections (Activities)
- Appendix

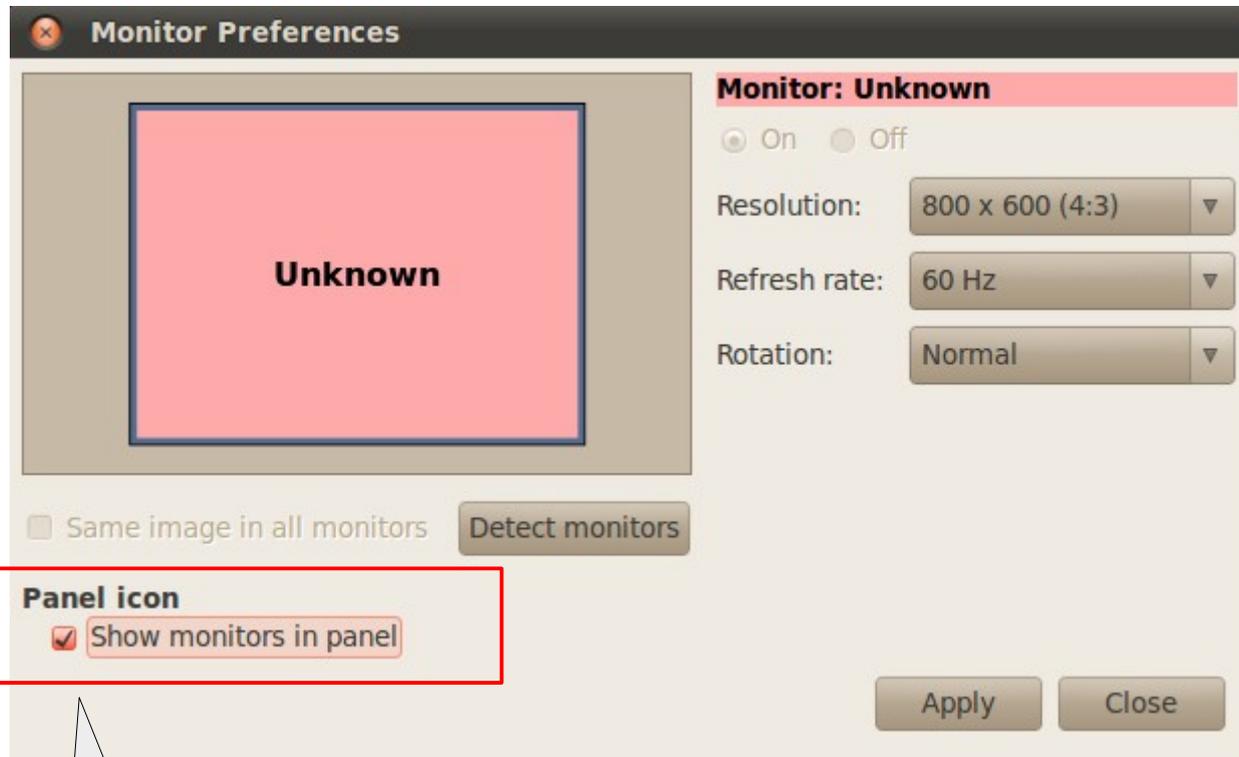
# Desktop Customization



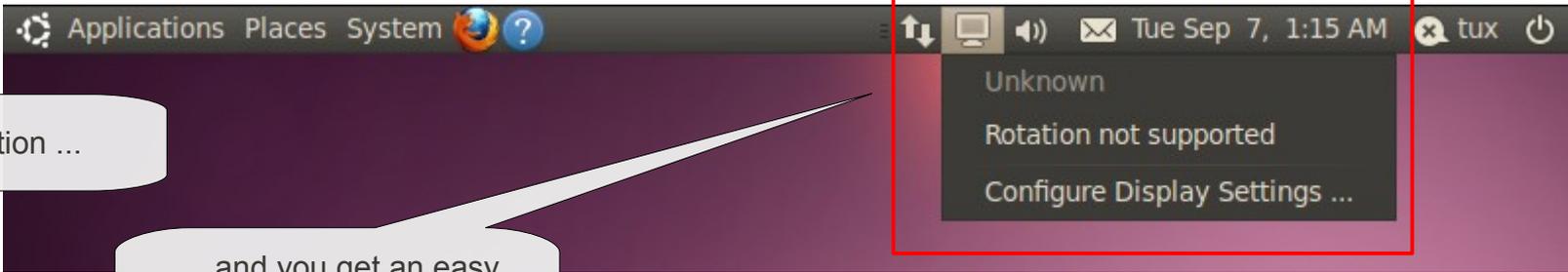
# Screen Resolution



# Screen Resolution

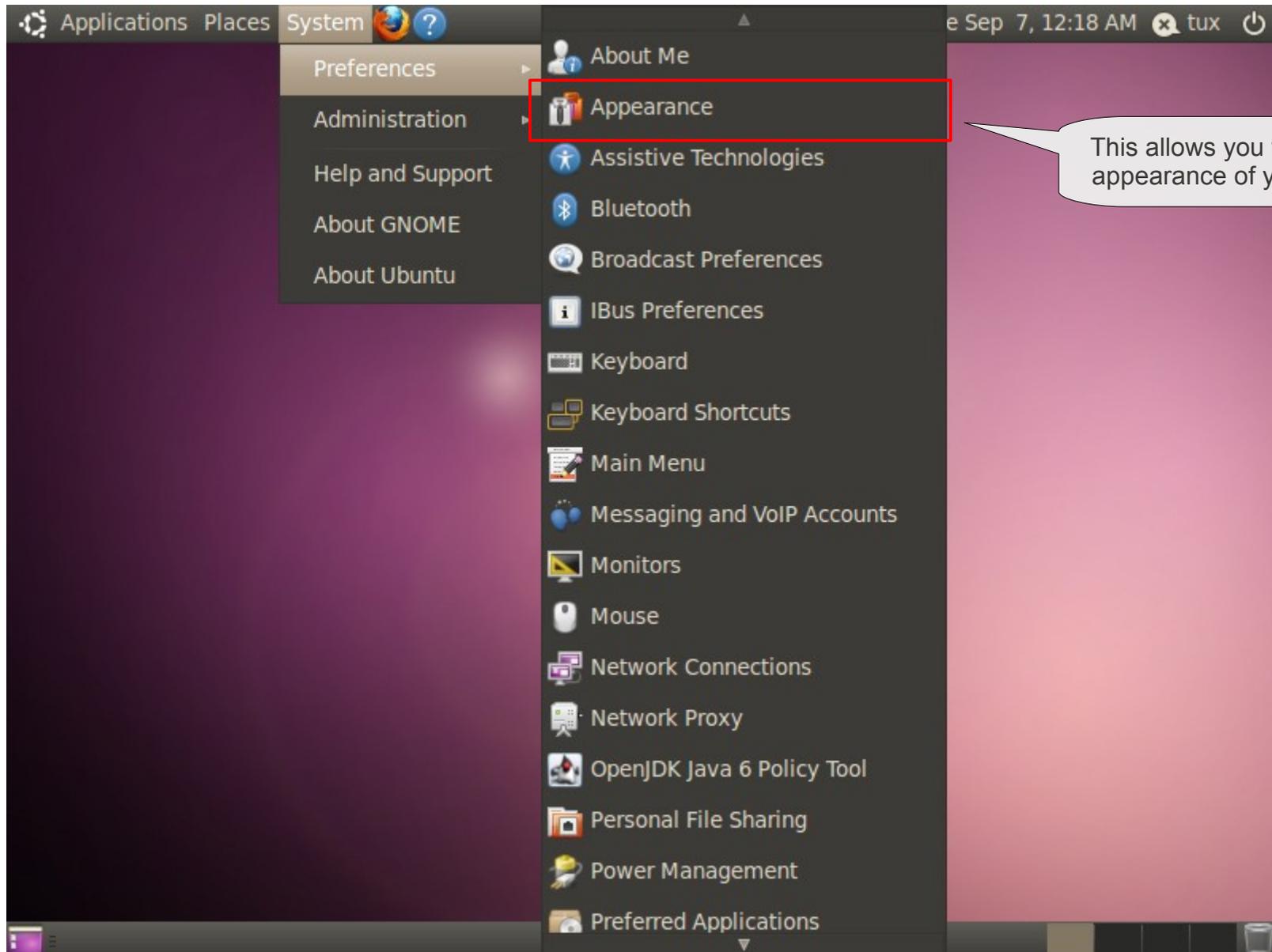


Select this option ...

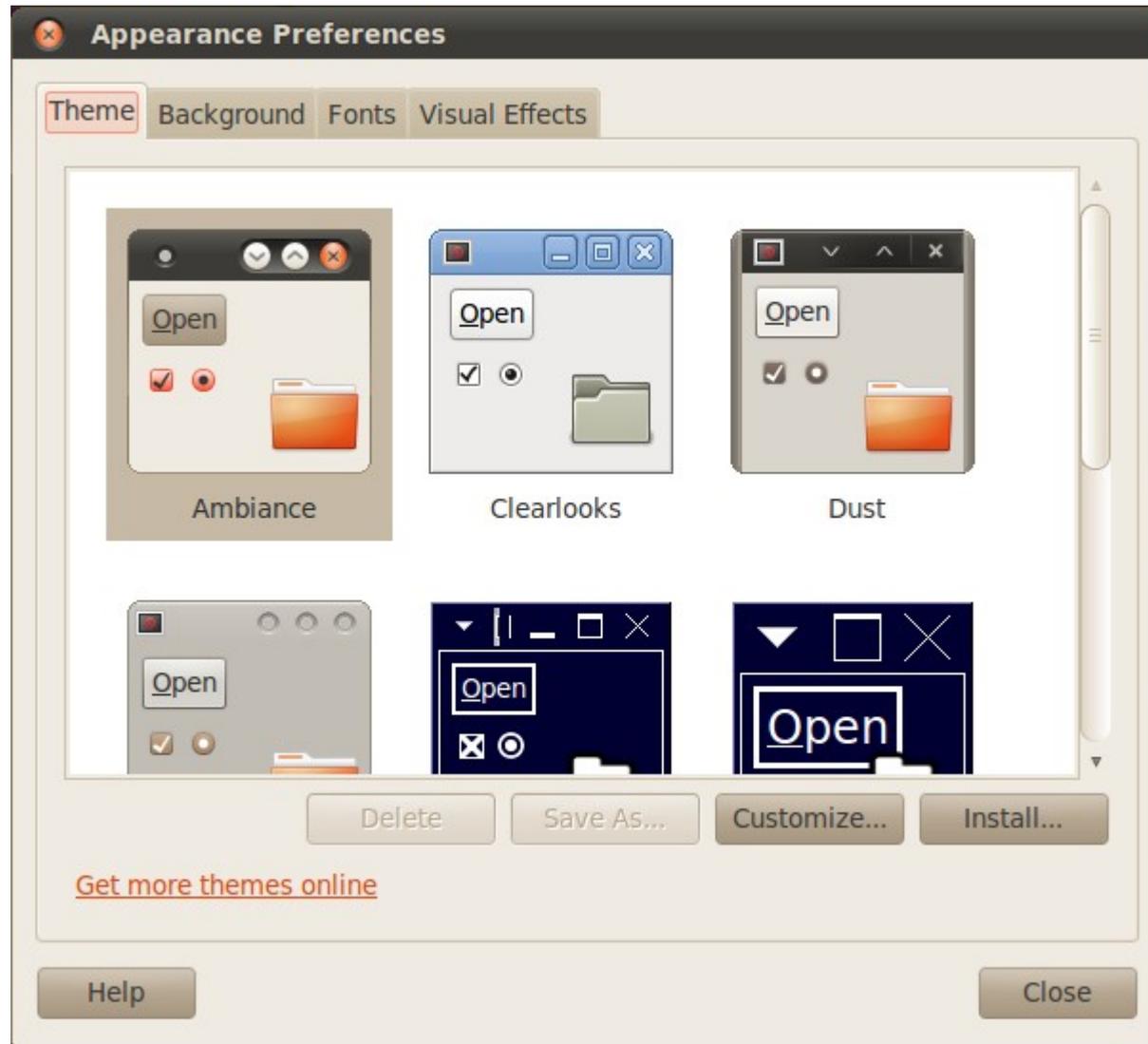


... and you get an easy way to access the monitor configuration tool.

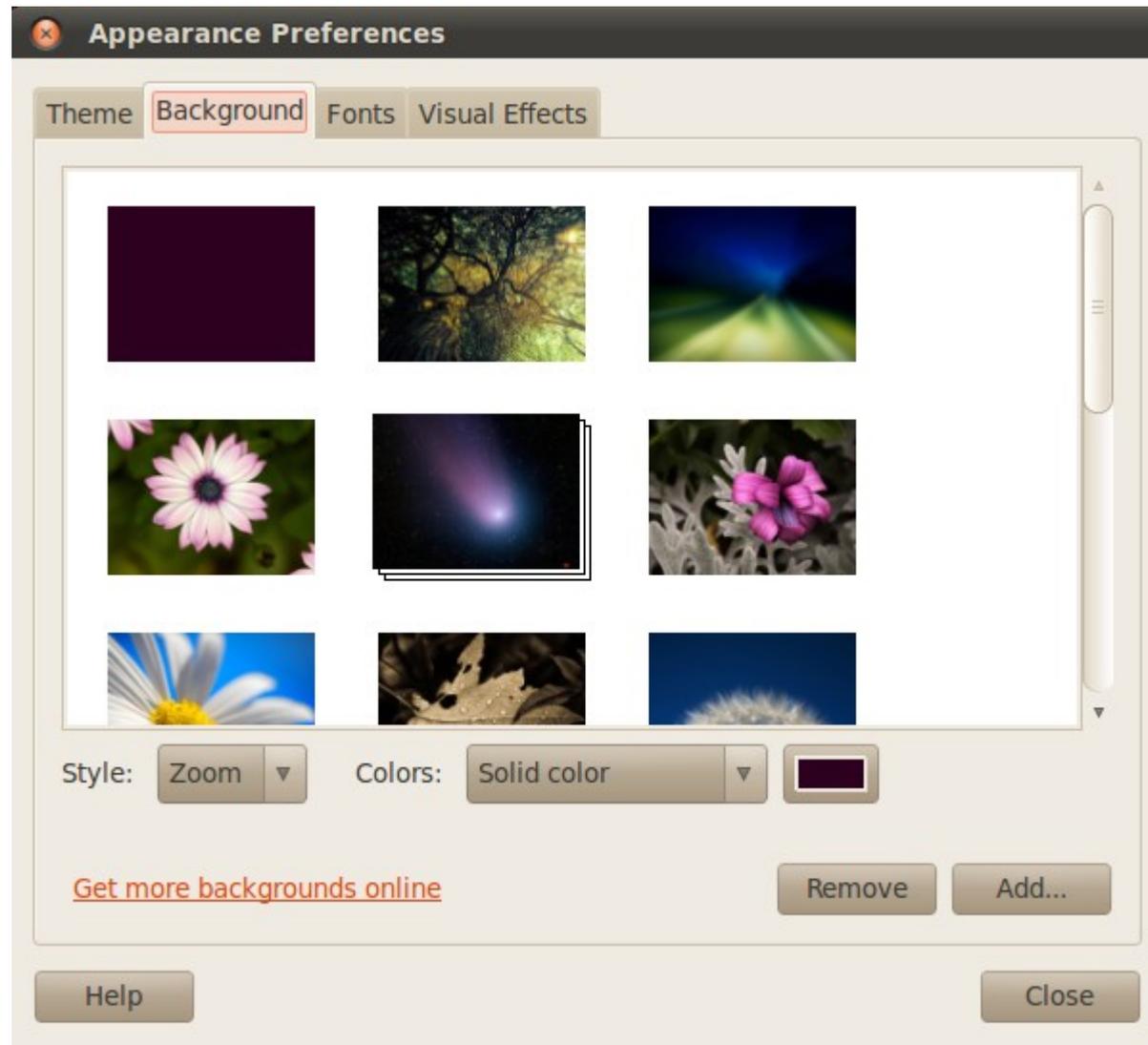
# Desktop Appearance



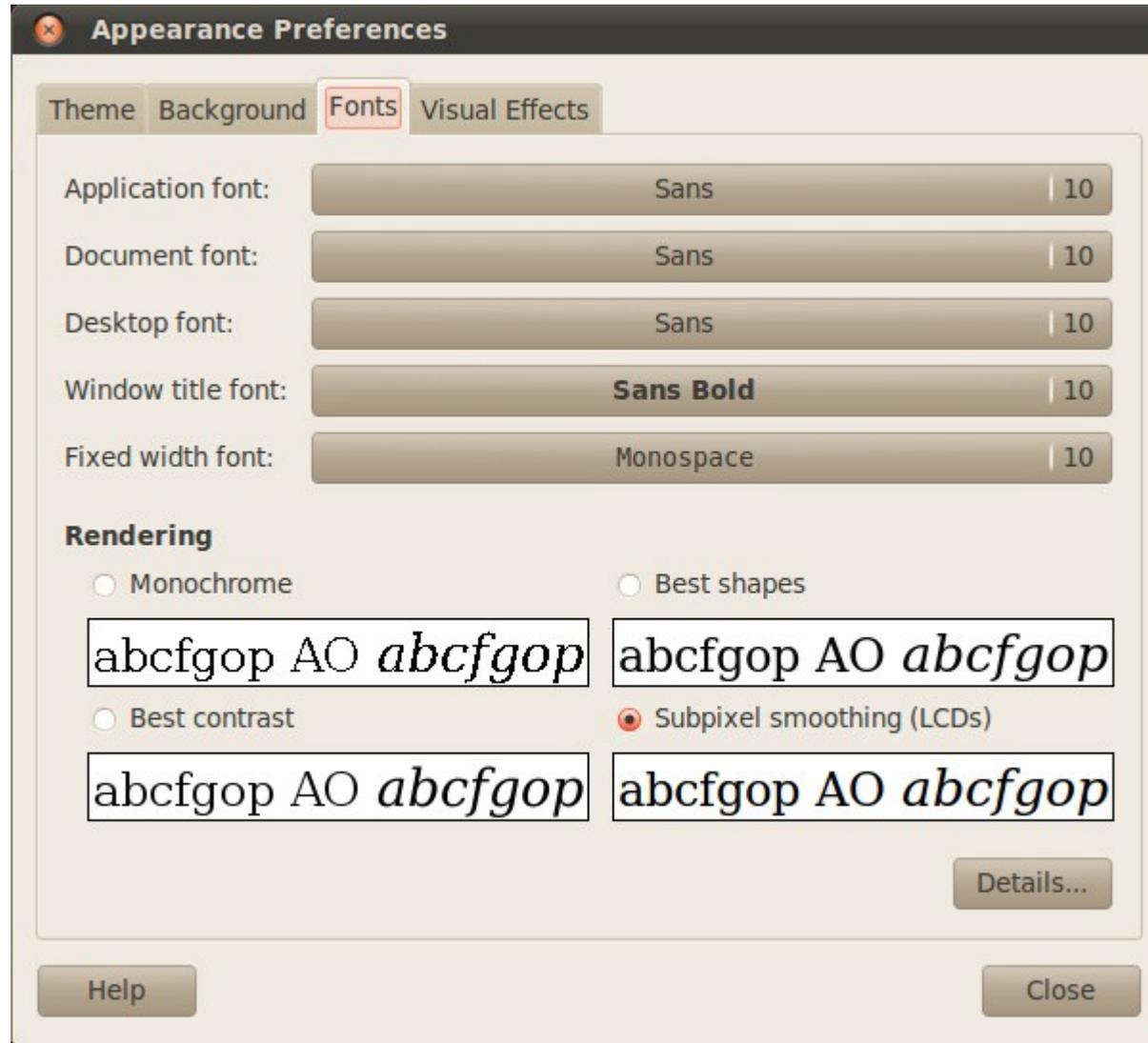
# Desktop Theme



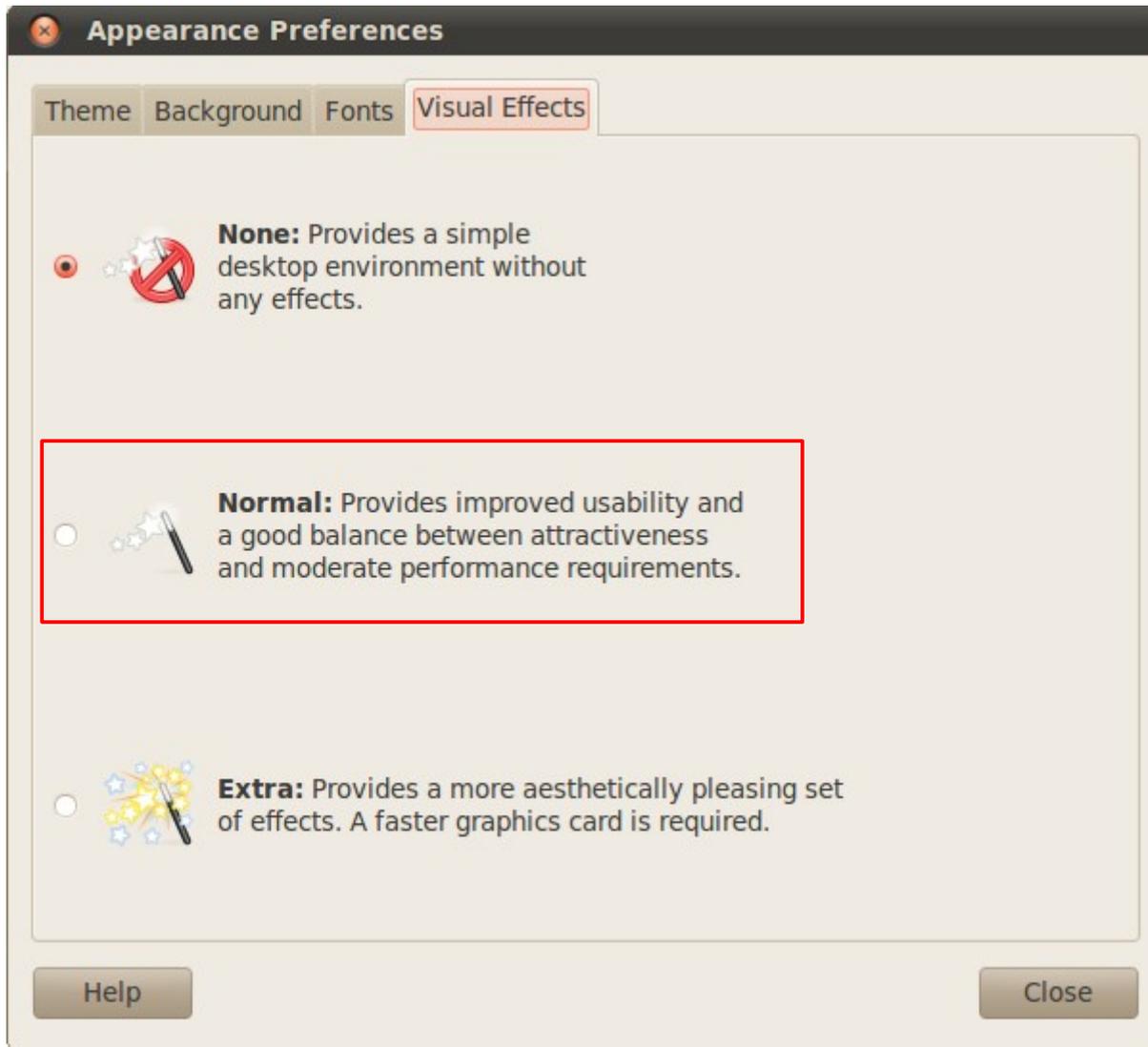
# Background



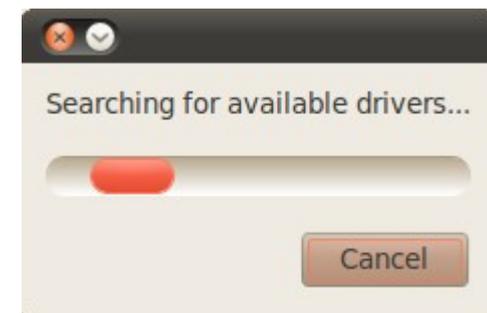
# Fonts



## Visual Desktop Effects



Here you can enable visual effects for your desktop. It requires specific hardware.



For more advanced visual effects, see Appendix "Advanced Visual Effects"

---

## Further help on Ubuntu

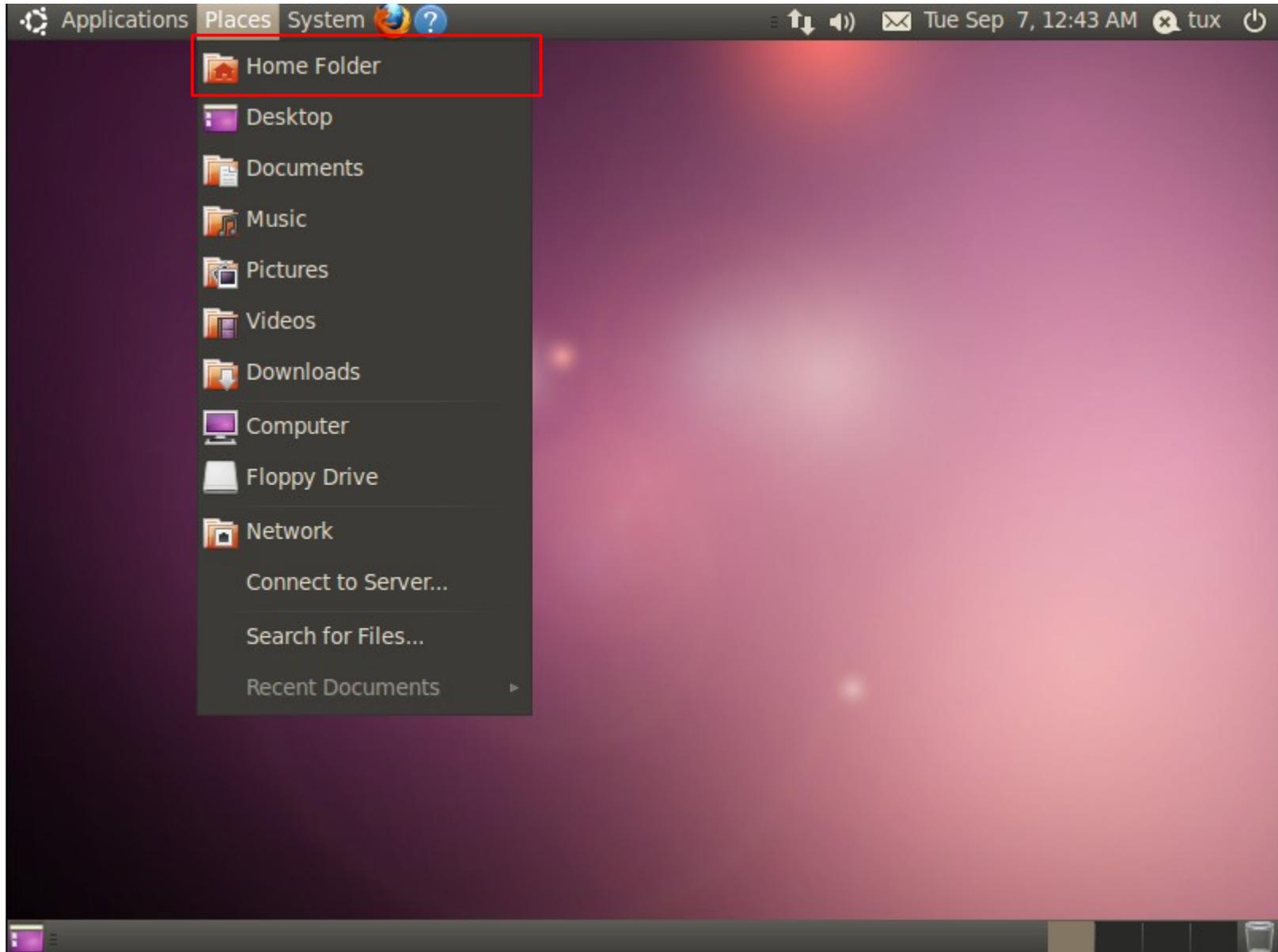
- Ubuntu Help – <https://help.ubuntu.com/10.04>

---

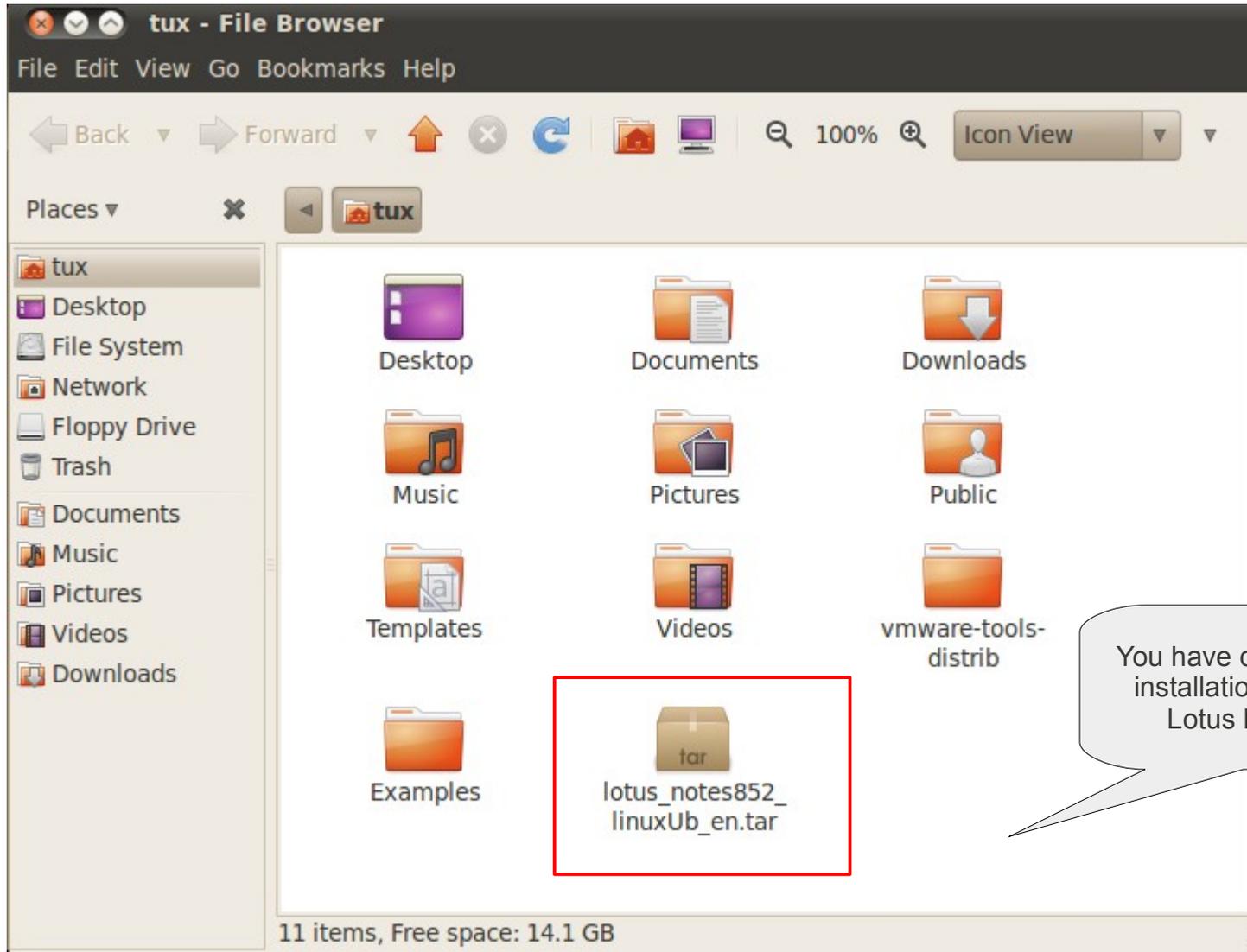
## Steps

- Check the prerequisites
- Install Ubuntu Linux Desktop 10.04
- Customize your Ubuntu Linux Desktop
- **Lotus Notes 8.5.2**
- Lotus Symphony 3
- Lotus Sametime
- Lotus Connections (Activities)
- Appendix

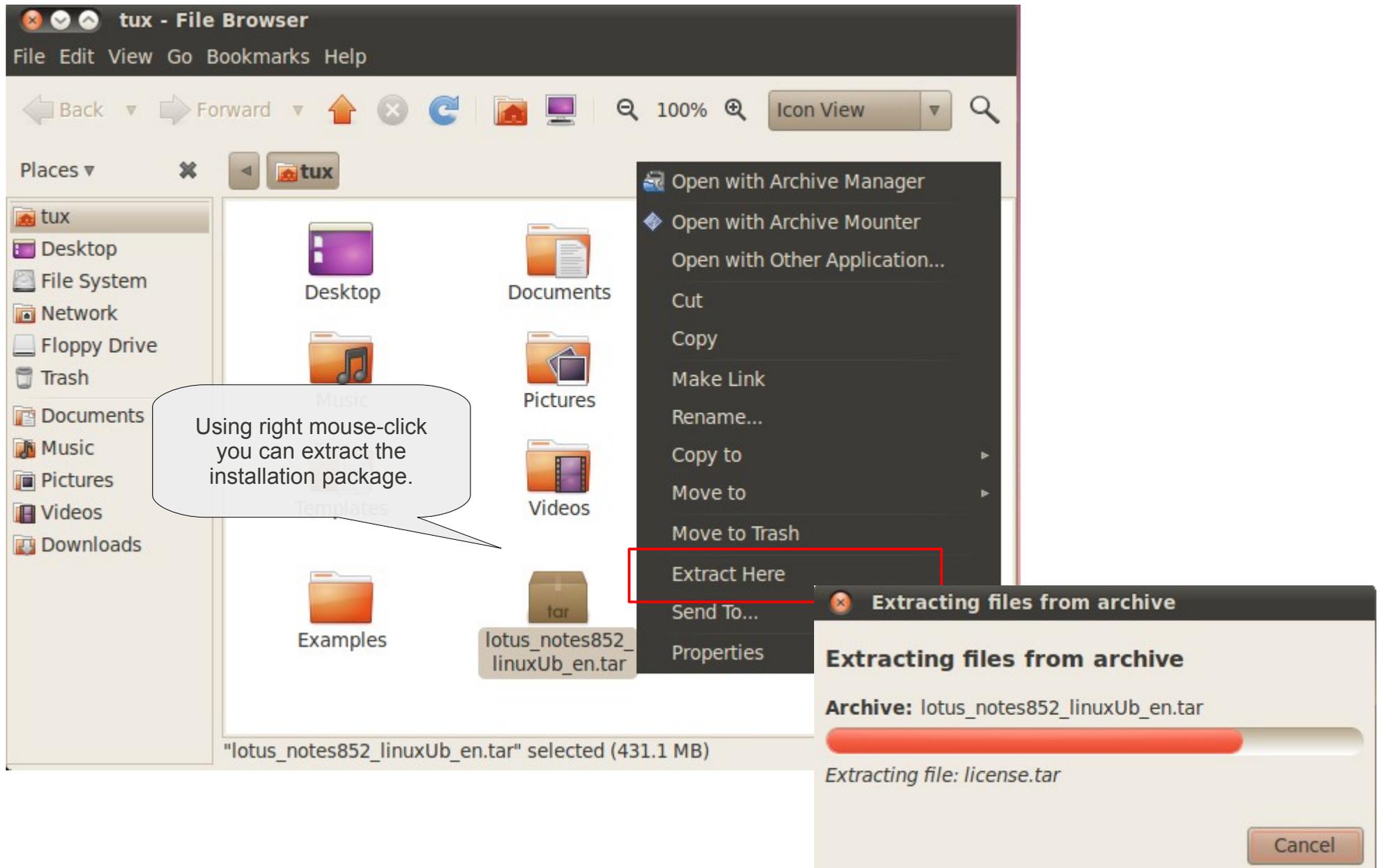
## Lotus Notes – Installation



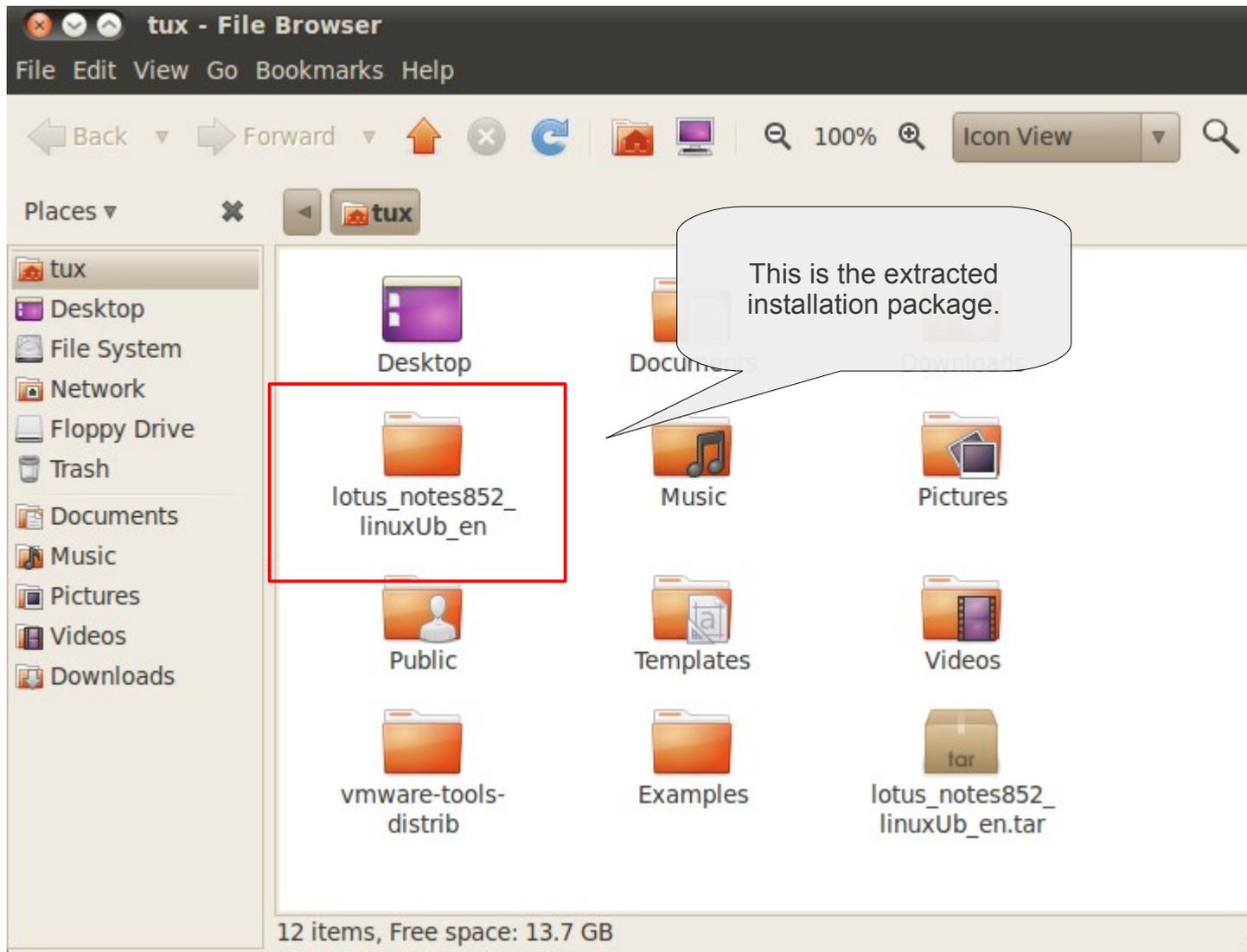
# Lotus Notes – Installation



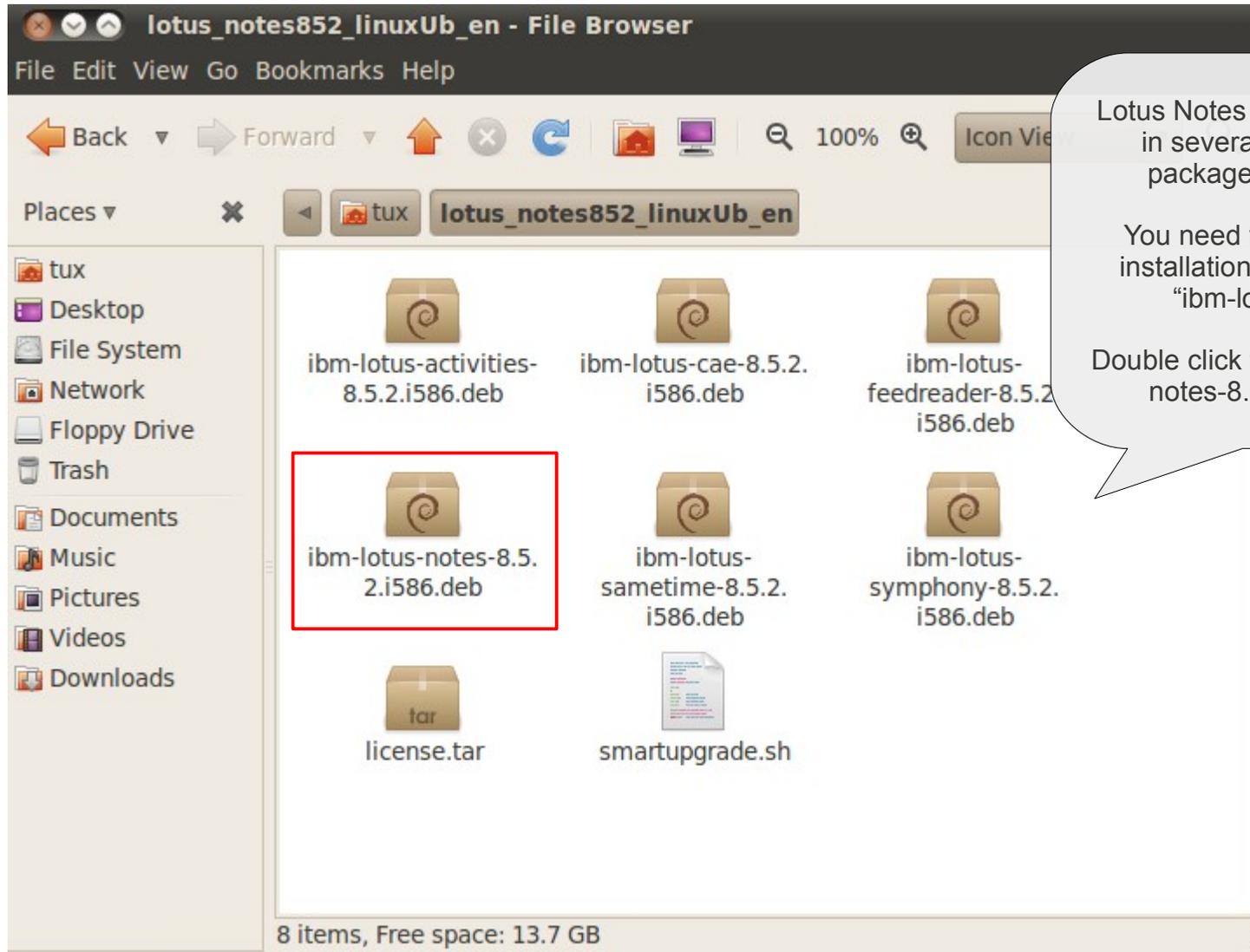
# Lotus Notes – Installation



# Lotus Notes – Installation



# Lotus Notes – Installation



Lotus Notes 8.5.2 is delivered in several components packaged for Ubuntu.

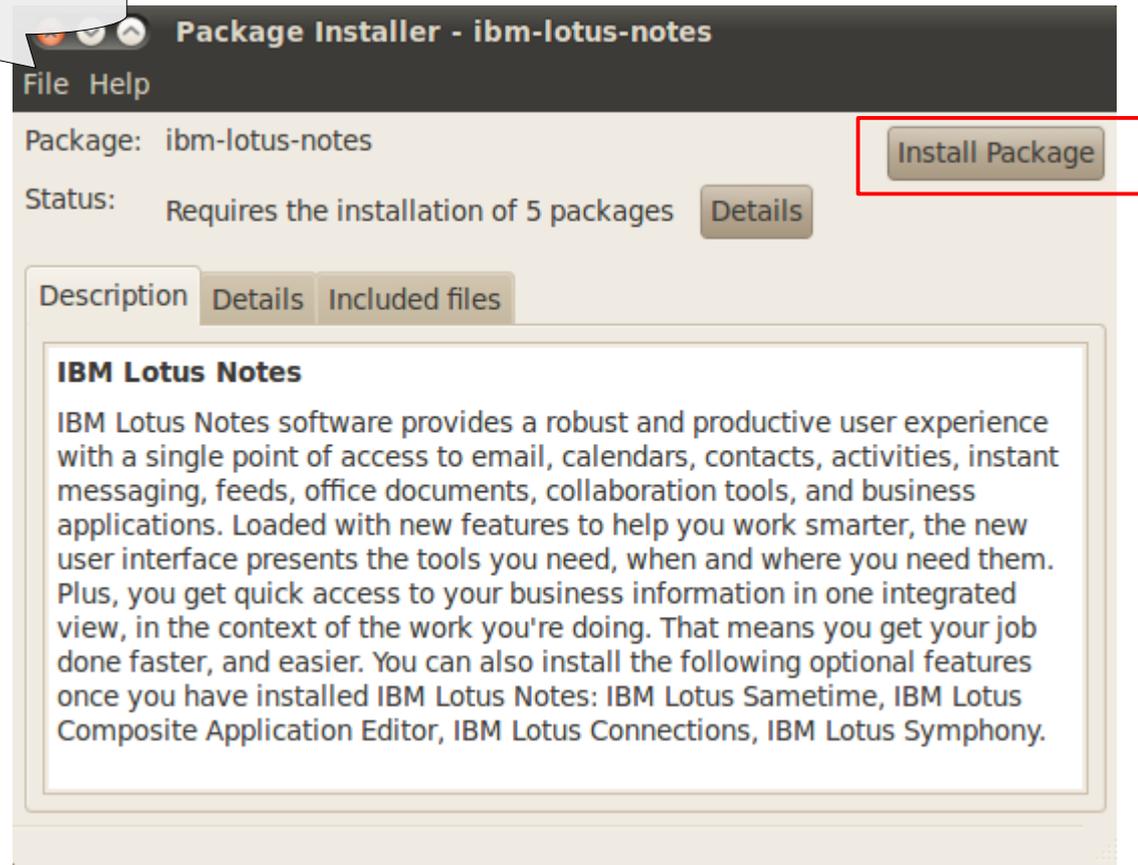
You need to start with the installation of the package "ibm-lotus-notes".

Double click the file "ibm-lotus-notes-8.5.2.i586.deb"

Double click ...

## Lotus Notes – Installation

The Package Installer gets started.  
Click “Install Package”.



# Lotus Notes – Installation



**You need to grant administrative rights to install software**

It is a possible security risk to install packages files manually.  
Install software from trustworthy software distributors only.

Password:

Cancel OK

Again, your password is required for authentication.

**gdebi-gtk**

**Installing ibm-lotus-notes**

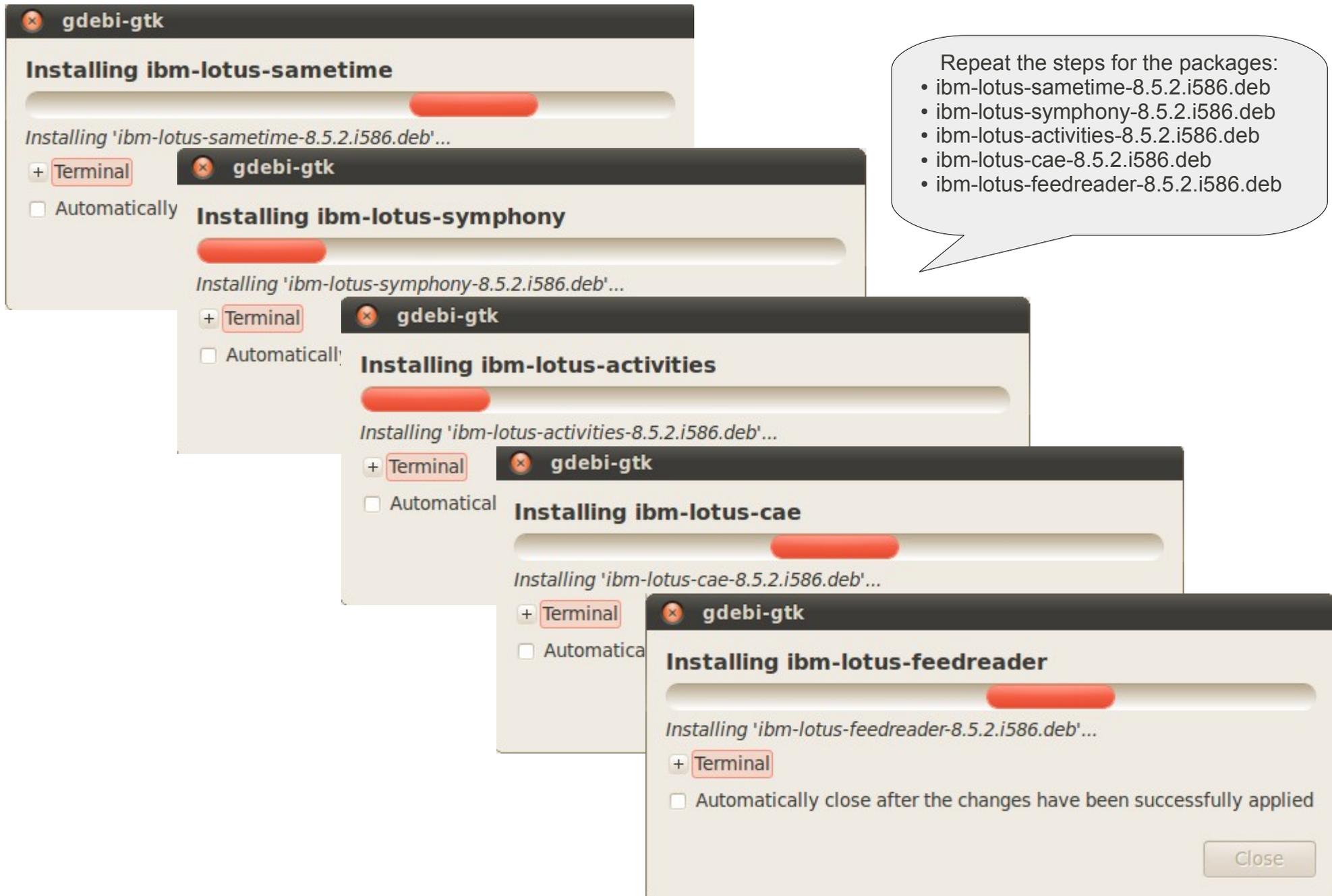
Installing 'ibm-lotus-notes-8.5.2.i586.deb'...

Terminal

Automatically close after the changes have been successfully applied

Close

## Lotus Notes – Installation

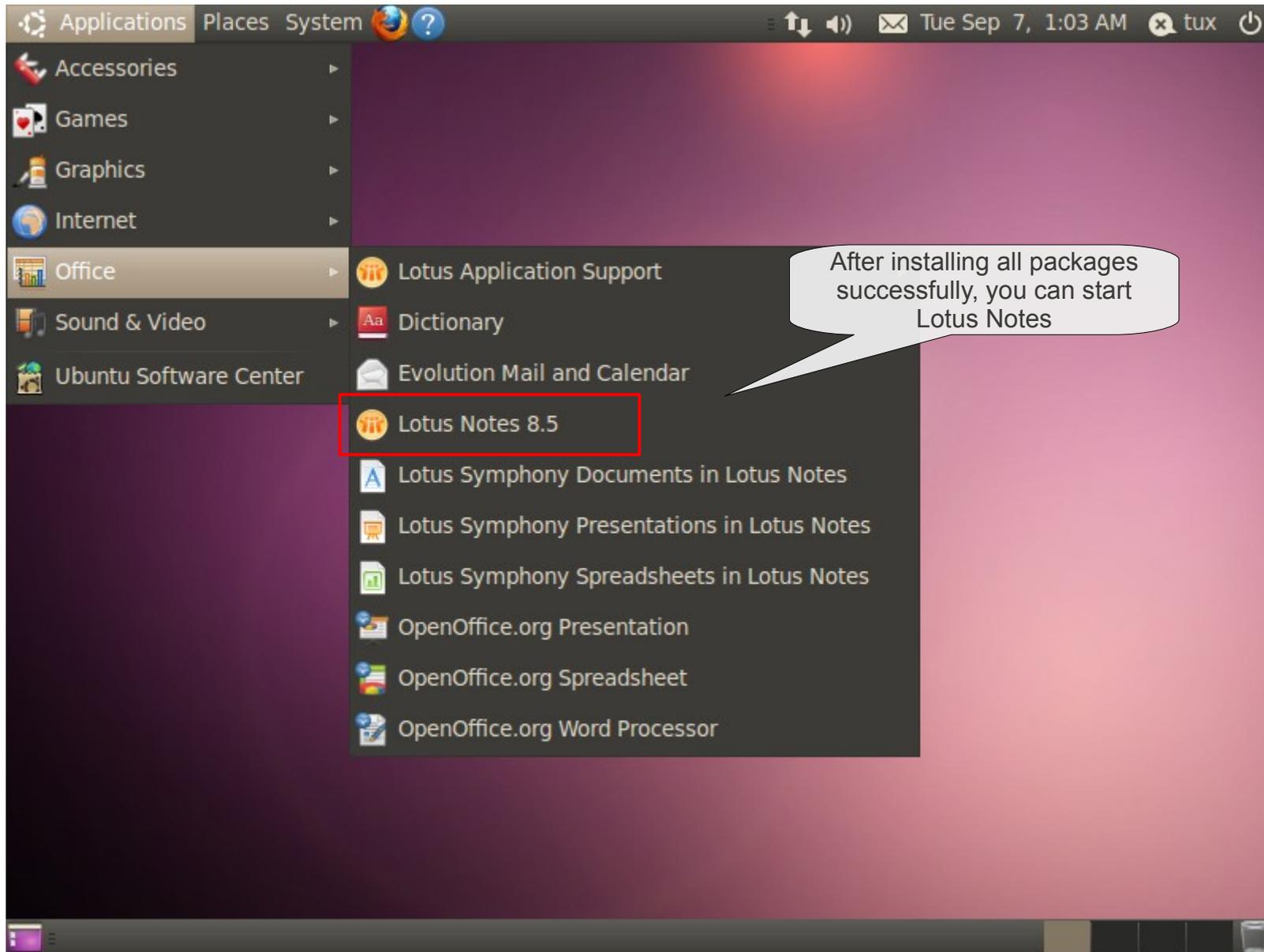


Repeat the steps for the packages:

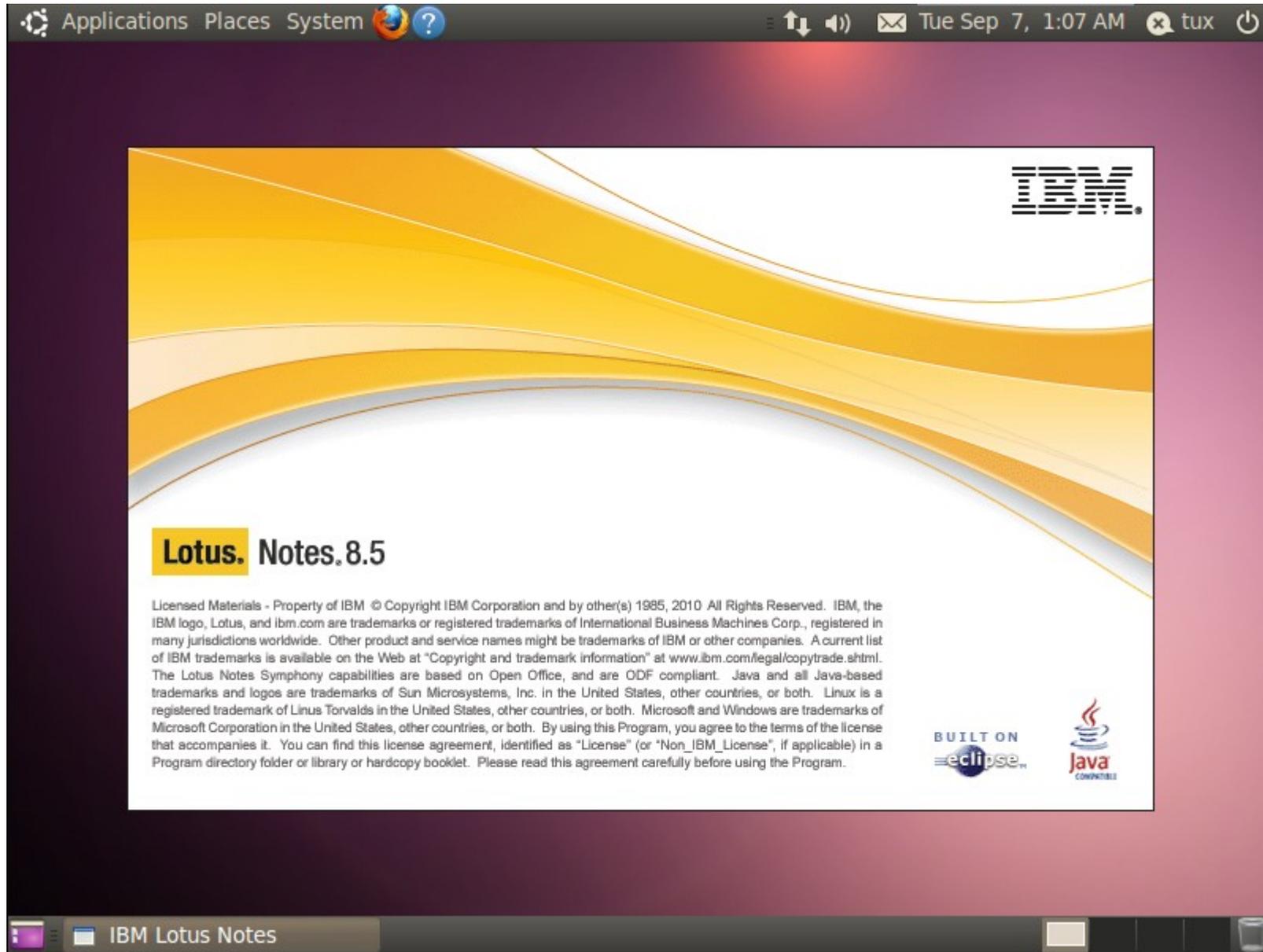
- ibm-lotus-sametime-8.5.2.i586.deb
- ibm-lotus-symphony-8.5.2.i586.deb
- ibm-lotus-activities-8.5.2.i586.deb
- ibm-lotus-cae-8.5.2.i586.deb
- ibm-lotus-feedreader-8.5.2.i586.deb

The image displays five overlapping windows from the gdebi-gtk package manager, each in the process of installing a different Lotus Notes component. The windows are titled 'Installing ibm-lotus-sametime', 'Installing ibm-lotus-symphony', 'Installing ibm-lotus-activities', 'Installing ibm-lotus-cae', and 'Installing ibm-lotus-feedreader'. Each window features a progress bar, a 'Terminal' button, and an 'Automatically' checkbox. The 'Terminal' button is highlighted with a red box in each window. The 'Automatically' checkbox is unchecked in all windows. The 'Close' button is visible in the bottom right corner of the final window.

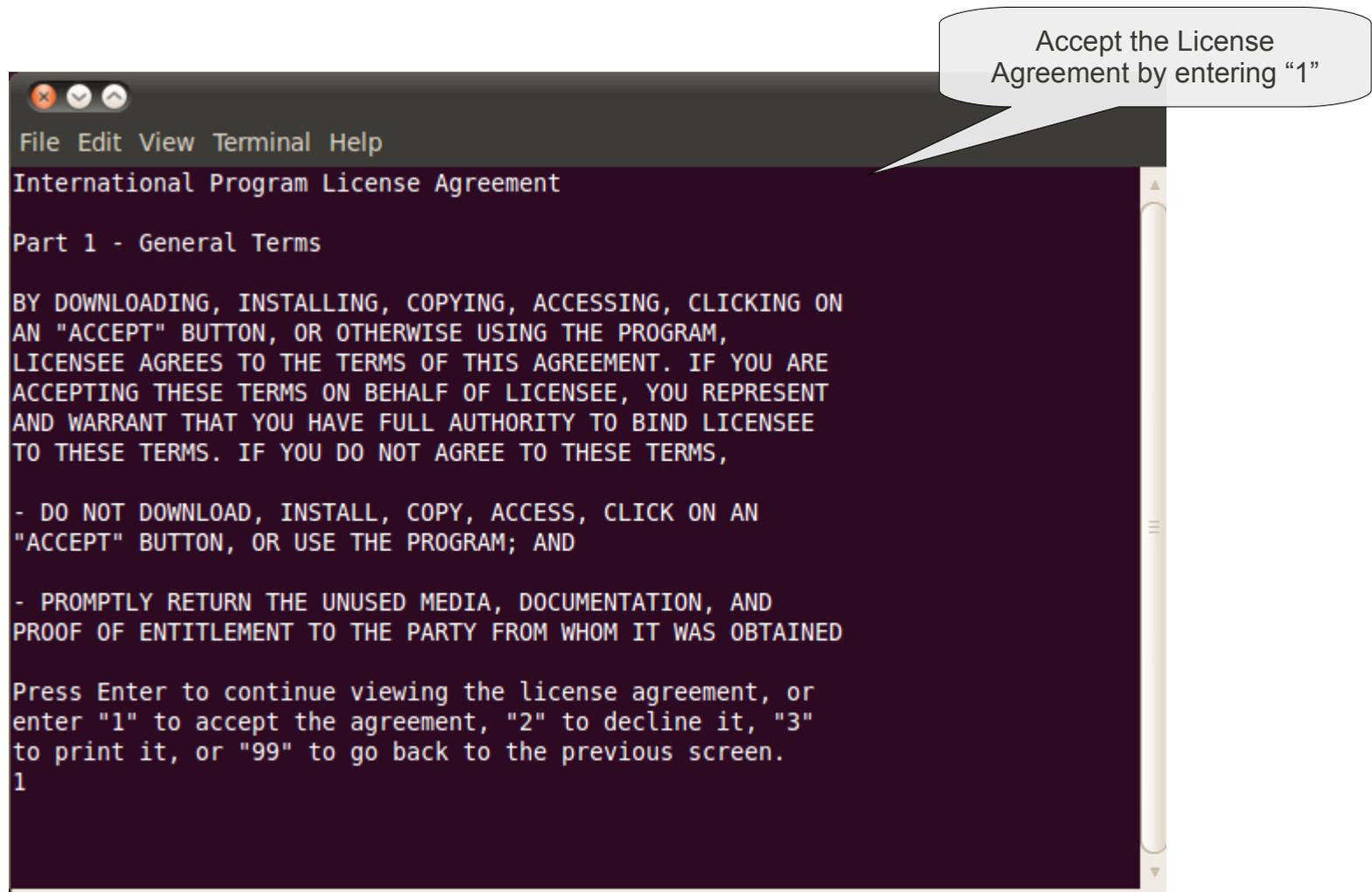
# Lotus Notes – Configuration



# Lotus Notes – Configuration



## Lotus Notes – Configuration



Accept the License Agreement by entering "1"

```
File Edit View Terminal Help
International Program License Agreement

Part 1 - General Terms

BY DOWNLOADING, INSTALLING, COPYING, ACCESSING, CLICKING ON
AN "ACCEPT" BUTTON, OR OTHERWISE USING THE PROGRAM,
LICENSEE AGREES TO THE TERMS OF THIS AGREEMENT. IF YOU ARE
ACCEPTING THESE TERMS ON BEHALF OF LICENSEE, YOU REPRESENT
AND WARRANT THAT YOU HAVE FULL AUTHORITY TO BIND LICENSEE
TO THESE TERMS. IF YOU DO NOT AGREE TO THESE TERMS,

- DO NOT DOWNLOAD, INSTALL, COPY, ACCESS, CLICK ON AN
"ACCEPT" BUTTON, OR USE THE PROGRAM; AND

- PROMPTLY RETURN THE UNUSED MEDIA, DOCUMENTATION, AND
PROOF OF ENTITLEMENT TO THE PARTY FROM WHOM IT WAS OBTAINED

Press Enter to continue viewing the license agreement, or
enter "1" to accept the agreement, "2" to decline it, "3"
to print it, or "99" to go back to the previous screen.
1
```

# Lotus Notes – Configuration

IBM Lotus Notes 8.5.2 Client Configuration

Welcome

This configuration program will help you set up IBM Lotus Notes 8.5.2.

IBM Lotus Notes 8.5.2 Client Configuration

User Information

Depending on how you will use Notes, you may only need to enter some information.

IBM Lotus Notes 8.5.2 Client Configuration

Notes ID File

IBM Lotus Notes 8.5.2 Client Configuration

Internet

Additional Services

Please select the services you would like to configure:

- Internet mail servers (POP or IMAP, SMTP)
- Newsgroup server (NNTP)
- Directory server (LDAP)

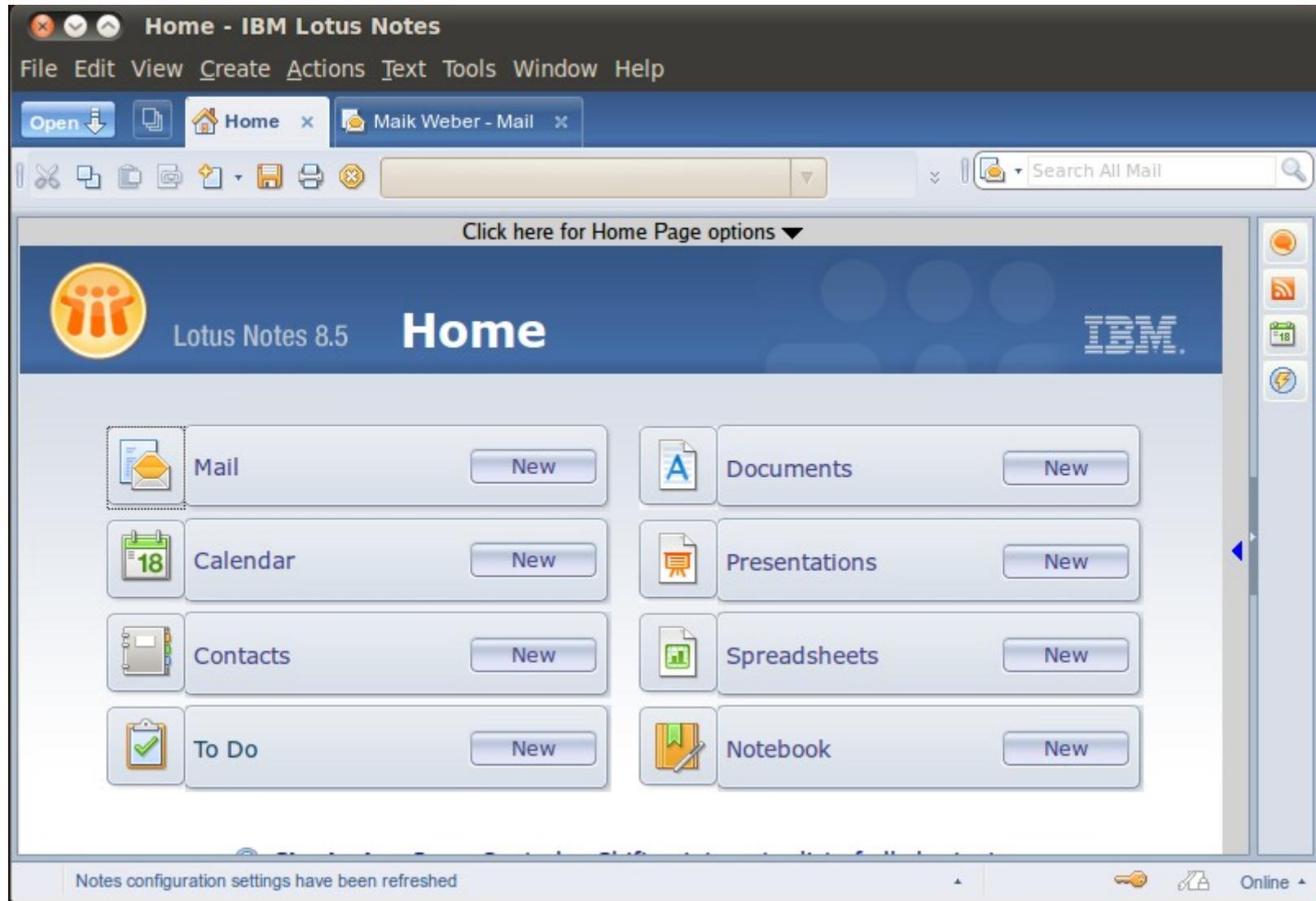
Connection type:  LAN  Modem

- Internet Proxy servers
- Replication settings for sending and receiving mail

Previous Next Finish

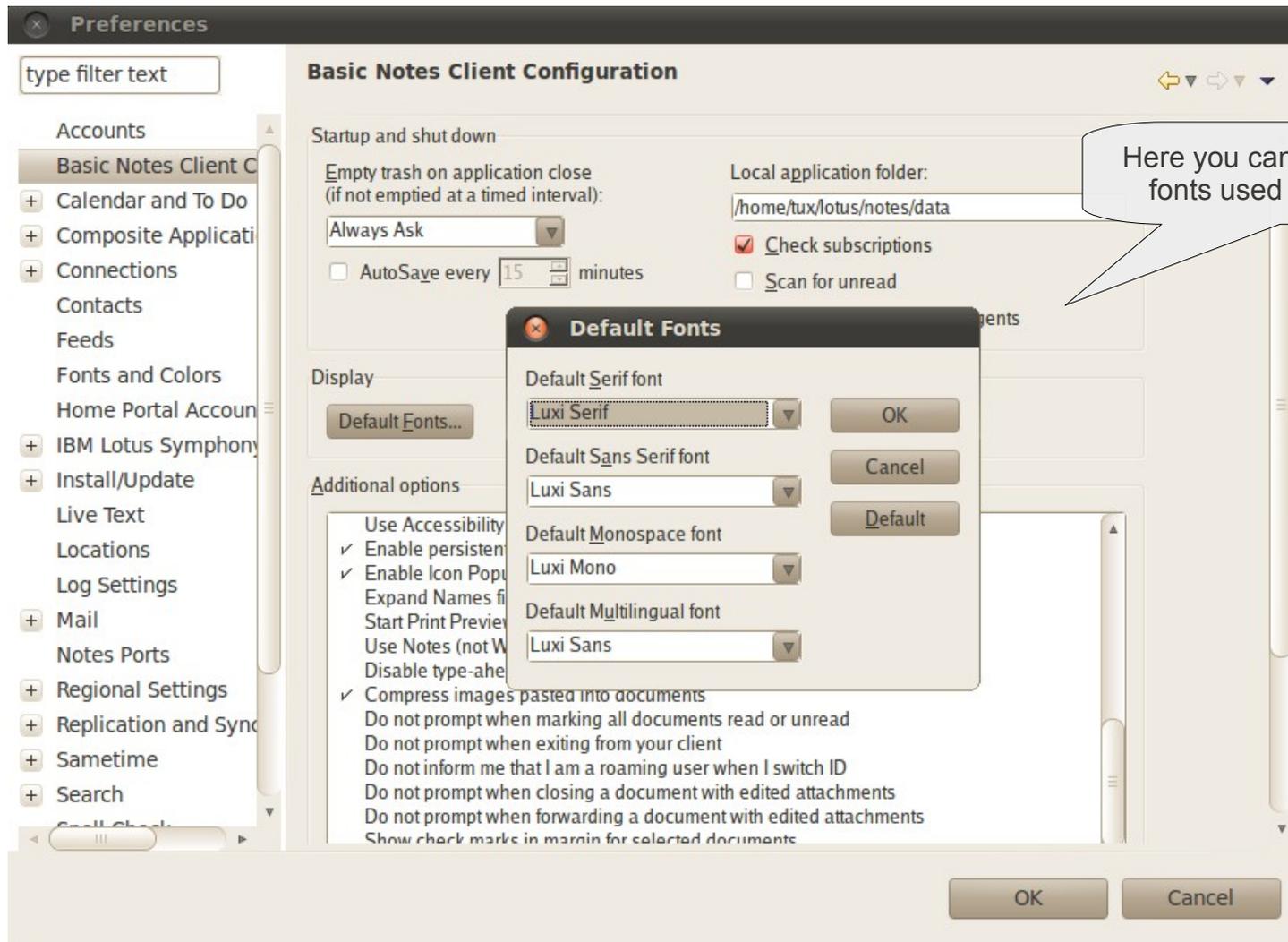
Provide your personal Domino account settings ...

# Lotus Notes – Configuration



# Lotus Notes – Configuration

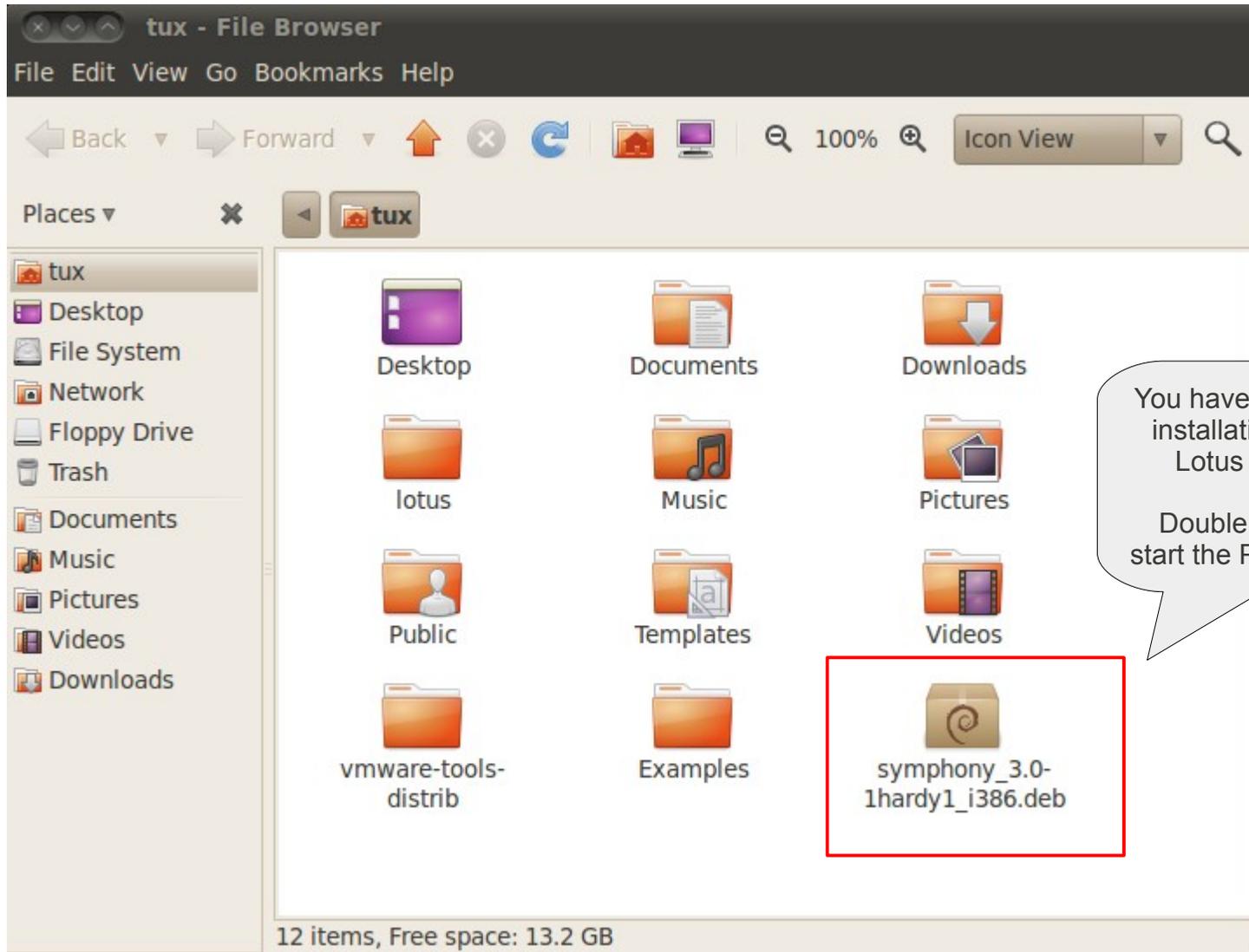
- File > Preferences > Basic Notes Client Configuration > Default Fonts



## Steps

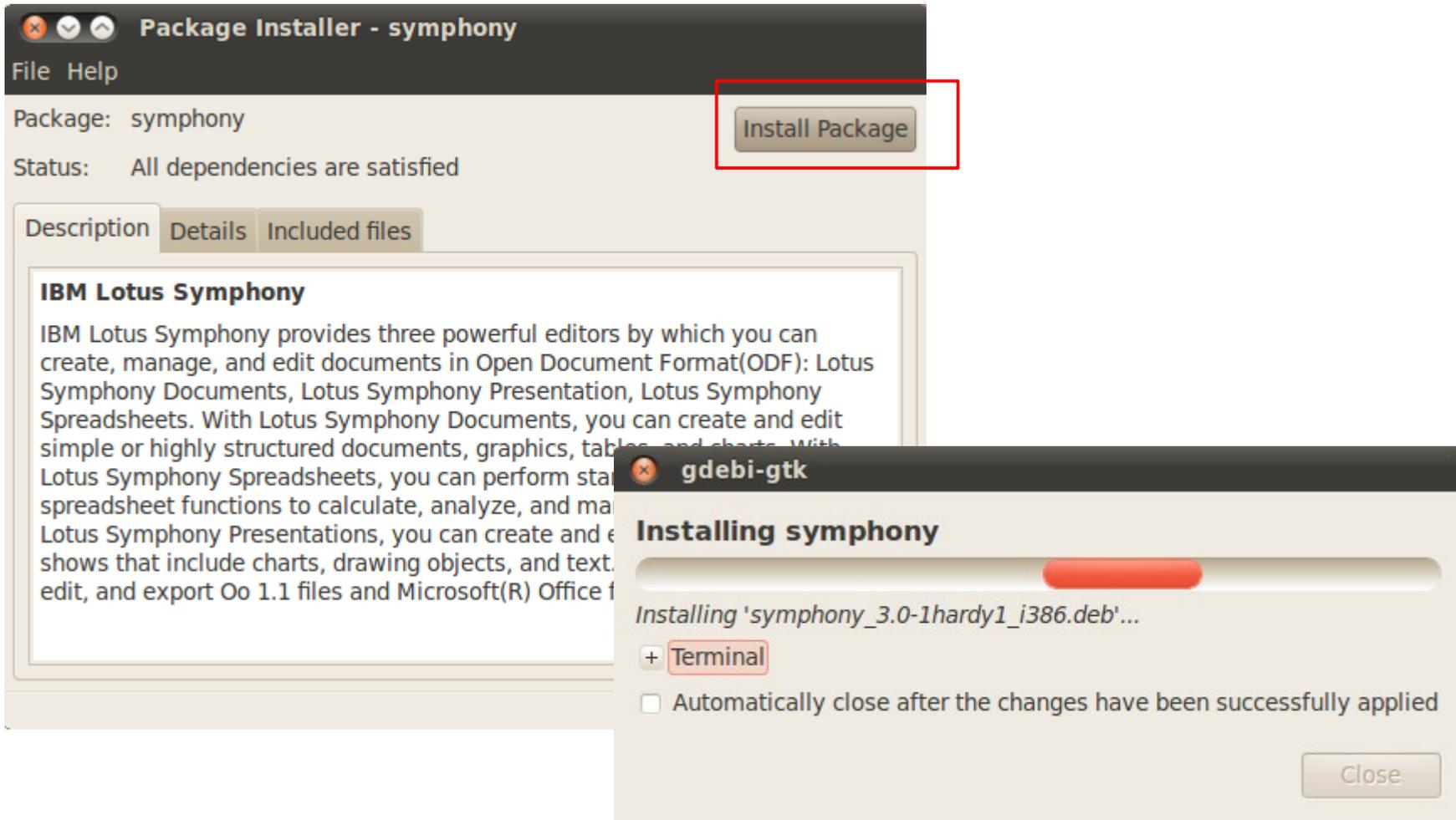
- Check the prerequisites
- Install Ubuntu Linux Desktop 10.04
- Customize your Ubuntu Linux Desktop
- Lotus Notes 8.5.2
- **Lotus Symphony 3**
- Lotus Sametime
- Lotus Connections (Activities)
- Appendix

# Lotus Symphony

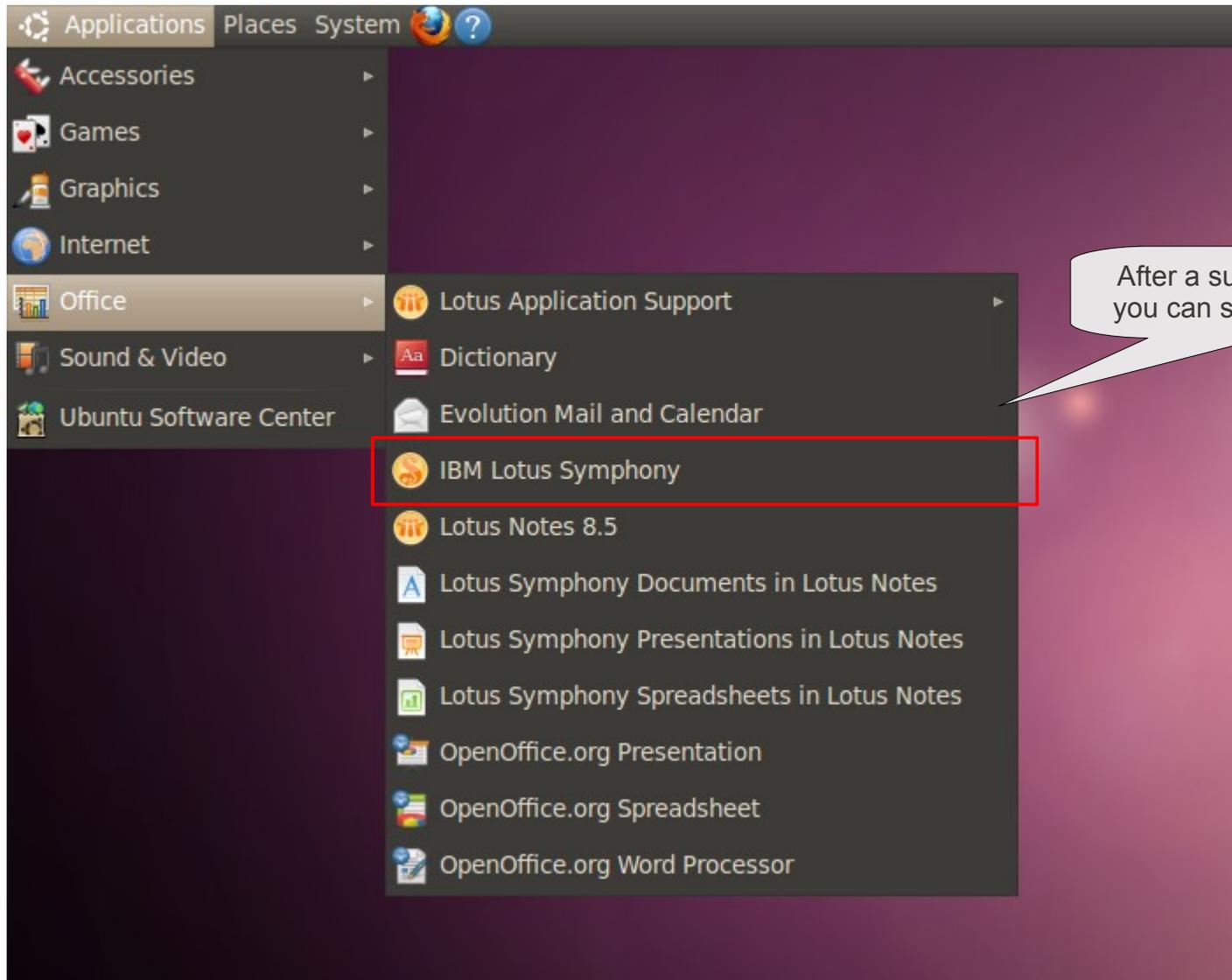


Double click ...

# Lotus Symphony



# Lotus Symphony



# Lotus Symphony

Home - IBM Lotus Symphony

File View Tools Window Help

New Home x

Lotus. Symphony. IBM.

## IBM Lotus Symphony

Be Free. Work Smart.

Create a new Document Create a new Presentation

Visit the **IBM® Lotus® Symphony™** website for more info!

- Download new Clip Art.**  
To see samples of the clip art, go to Create - Clip Art from any of the editors.
- Extend Work sm Symphony**
- Check out the IBM Lotus Symphony wiki.**  
Find demo, tutorials, video and more of Lotus Symphony.
- Join th Request question**

**Lotus. Symphony™ 3**

Licensed Materials - Property of IBM L-HKAG-8758BY. © Copyright IBM Corporation and its licensors 2003, 2010. All Rights Reserved. IBM, the IBM logo, Lotus and Symphony are trademarks of IBM Corporation in the United States, other countries, or both. Built on Eclipse is a trademark of Eclipse Foundation, Inc. Other company, product or service names may be trademarks or service marks of others. This Program is licensed under the terms of the license agreement accompanying the Program. This license agreement may be either located in a Program directory folder or library identified as "License" or "Non\_IBM\_License", if applicable, or provided as a printed license agreement. Please read the agreement carefully before using the Program. By using the Program you agree to these terms.

LotusLive™  
Cloud-based email, web conferencing, IM, file sharing, social networking and project tracking. [Learn More](#)

BUILT ON

---

## Steps

- Check the prerequisites
- Install Ubuntu Linux Desktop 10.04
- Customize your Ubuntu Linux Desktop
- Lotus Notes 8.5.2
- Lotus Symphony 3
- **Lotus Sametime**
- Lotus Connections (Activities)
- Appendix

# Lotus Sametime

Start Lotus Notes ...

Lotus Sametime is included in Lotus Notes, so you have to start Lotus Notes at first if not already running.



# Lotus Sametime

✕
Log In to Sametime

**Lotus Sametime 8.0.2**

Host server:

User name:

Password:

Remember password

Automatically log in

Work online  Work offline

Log in status:

Status message:

Log In
Connectivity...
Cancel

Provide your personal Sametime account settings ...

OR

Use your account at Lotus Greenhouse with the Sametime server "sametime.lotus.com"

# Lotus Sametime

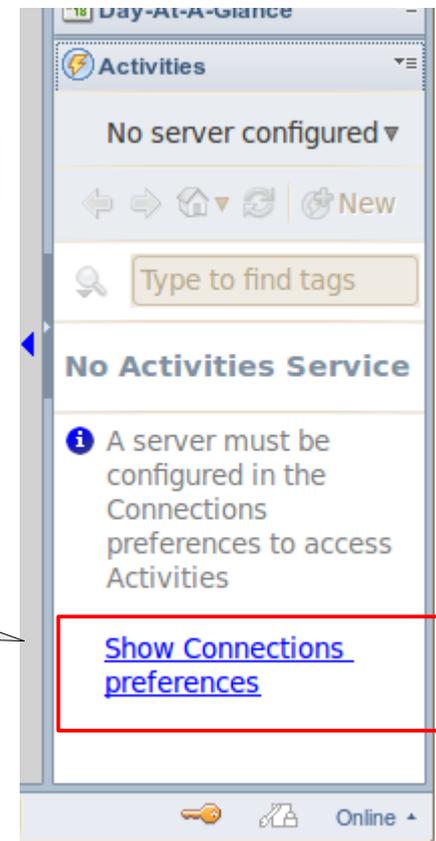


## Steps

- Check the prerequisites
- Install Ubuntu Linux Desktop 10.04
- Customize your Ubuntu Linux Desktop
- Lotus Notes 8.5.2
- Lotus Symphony 3
- Lotus Sametime
- **Lotus Connections (Activities)**
- Appendix

# Lotus Connections (Activities)

## Start Lotus Notes



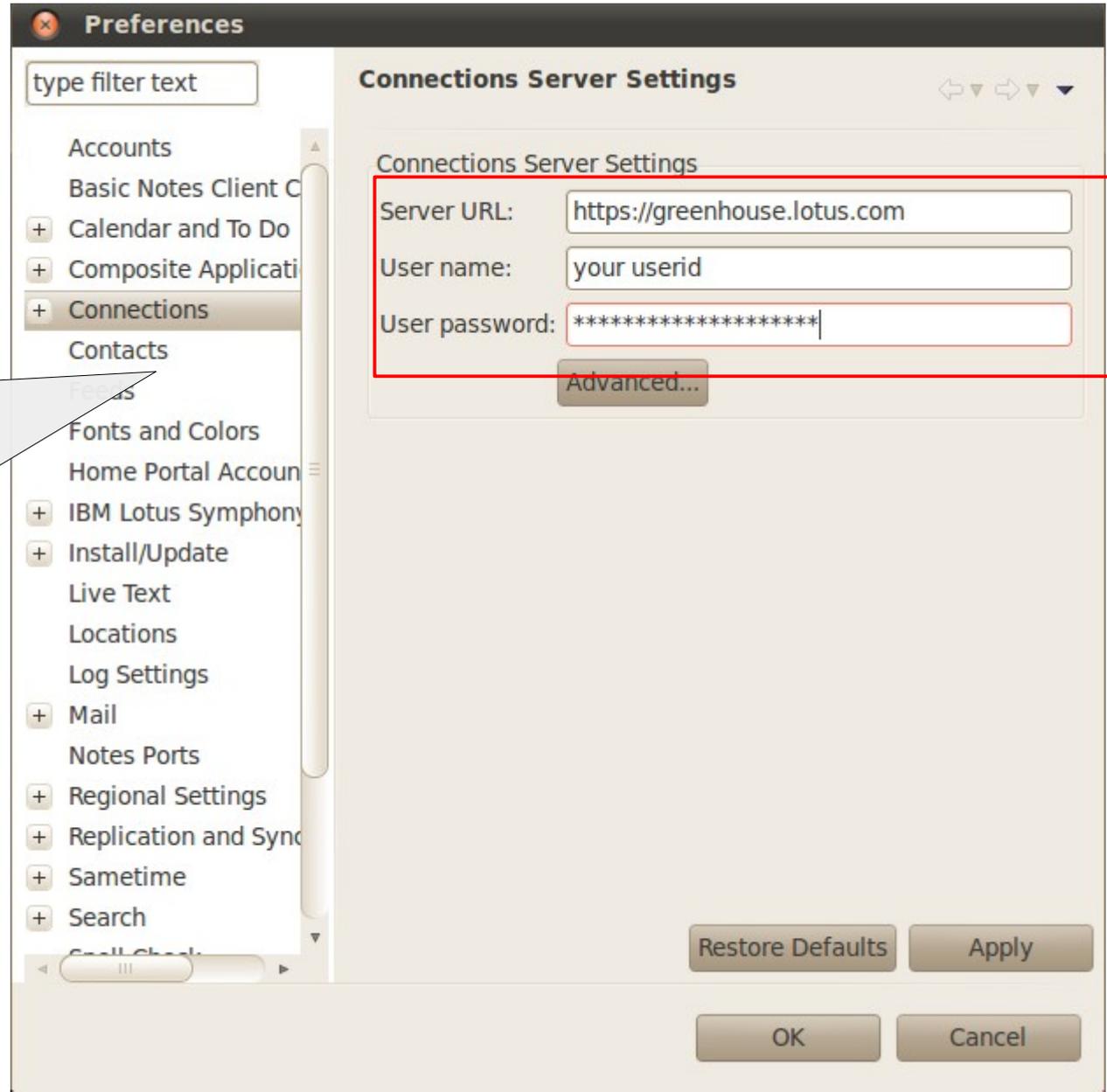
Click the Activities icon in the right panel, then click "Show Connections preferences"

# Lotus Connections (Activities)

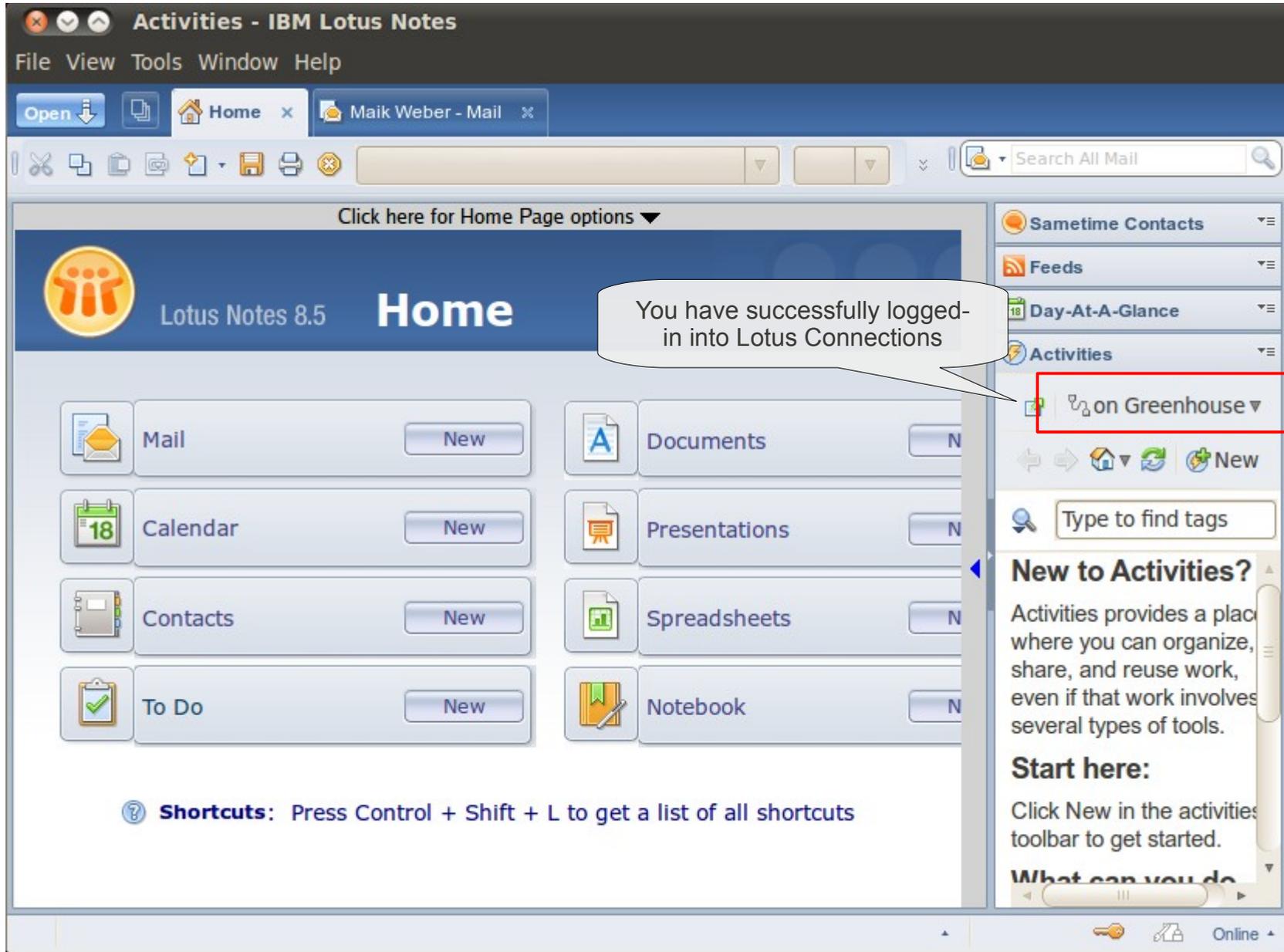
In the Preferences dialogue, provide your personal Lotus Connections account settings ...

OR

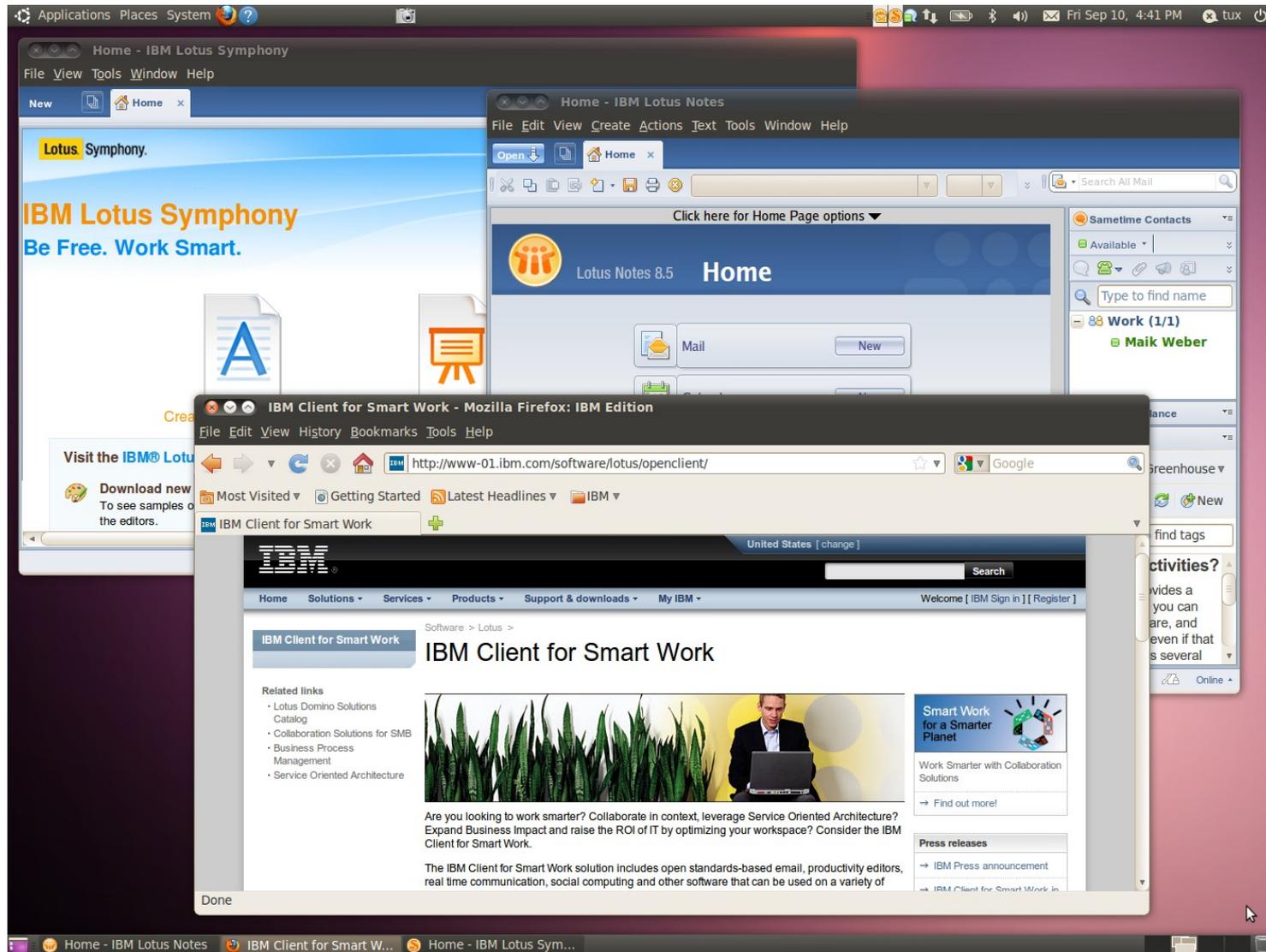
Use your account at Lotus Greenhouse with the Activity server  
 "https://greenhouse.lotus.com"



# Lotus Connections (Activities)



# Congratulations!



## Your OWN copy of IBM Client for Smart Work!

## Further Links

- IBM Client for Smart Work  
<http://www-01.ibm.com/software/lotus/openclient/>
- IBM open collaboration client solution: An overview  
<http://www.ibm.com/developerworks/lotus/library/occs-overview/>
- IBM Client for Smart Work and Ubuntu  
<http://www.ubuntu.com/partners/ibm>
- Canonical offers dedicated support program for Lotus Symphony  
<http://www.ubuntu.com/news/lotus-symphony-dedicated-support>
- IBM Client for Smart Work Announcement  
<http://www-03.ibm.com/press/us/en/pressrelease/29205.wss>
- Documentation and Help for Ubuntu 10.04 LTS  
<https://help.ubuntu.com/10.04/index.html>

---

## Steps

- Check the prerequisites
- Install Ubuntu Linux Desktop 10.04
- Customize your Ubuntu Linux Desktop
- Lotus Notes 8.5.2
- Lotus Symphony 3
- Lotus Sametime
- Lotus Connections (Activities)
- **Appendix**

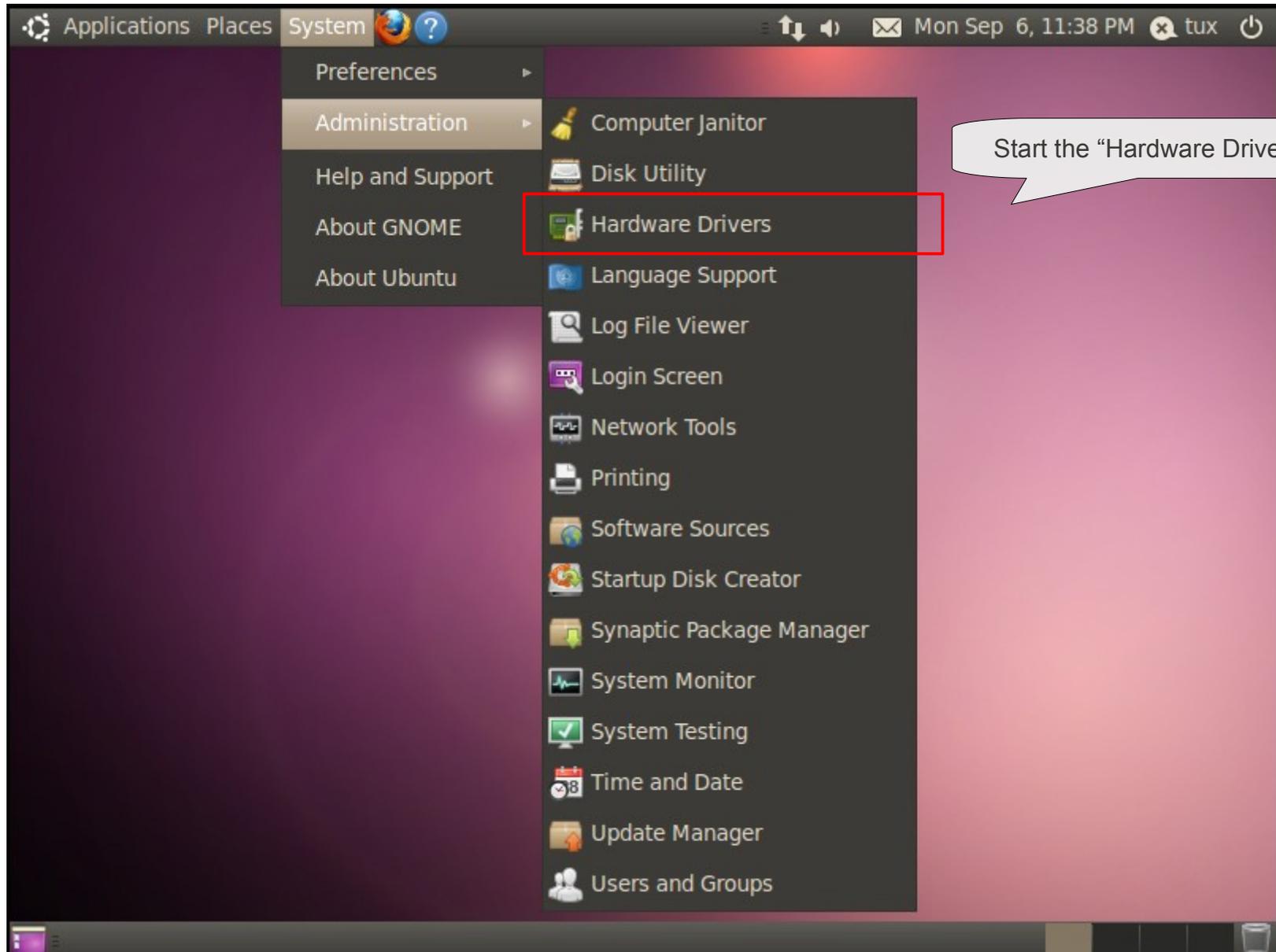
- Proprietary Hardware Drivers
- PAE Kernel
- Advanced Visual Effects

- 
- **Proprietary Hardware Drivers**
  - PAE Kernel
  - Advanced Visual Effects

## Proprietary Hardware Drivers

- For some hardware it might be recommended or required to use the proprietary drivers
  - Recommended: AMD ATI or Nvidia graphic card – better 3D performance compared to Open Source drivers
  - Required: For some wireless cards
- Ubuntu offers the installation of proprietary hardware drivers if any available for your system

# Hardware Drivers

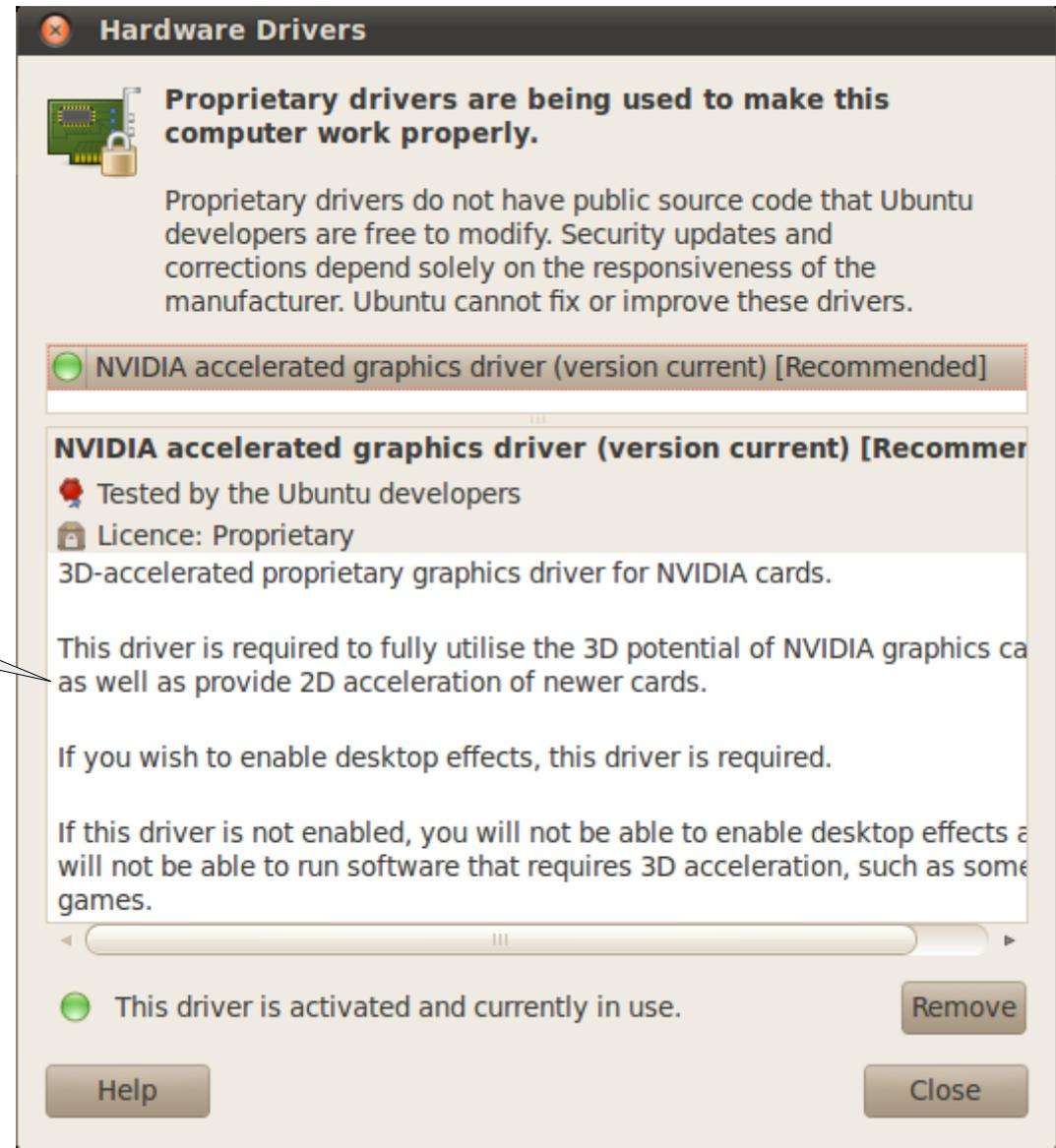


# Hardware Drivers

The tool automatically searches for available drivers ...



... and, if there are any proprietary drivers available for your system, you need to enable/activate them.

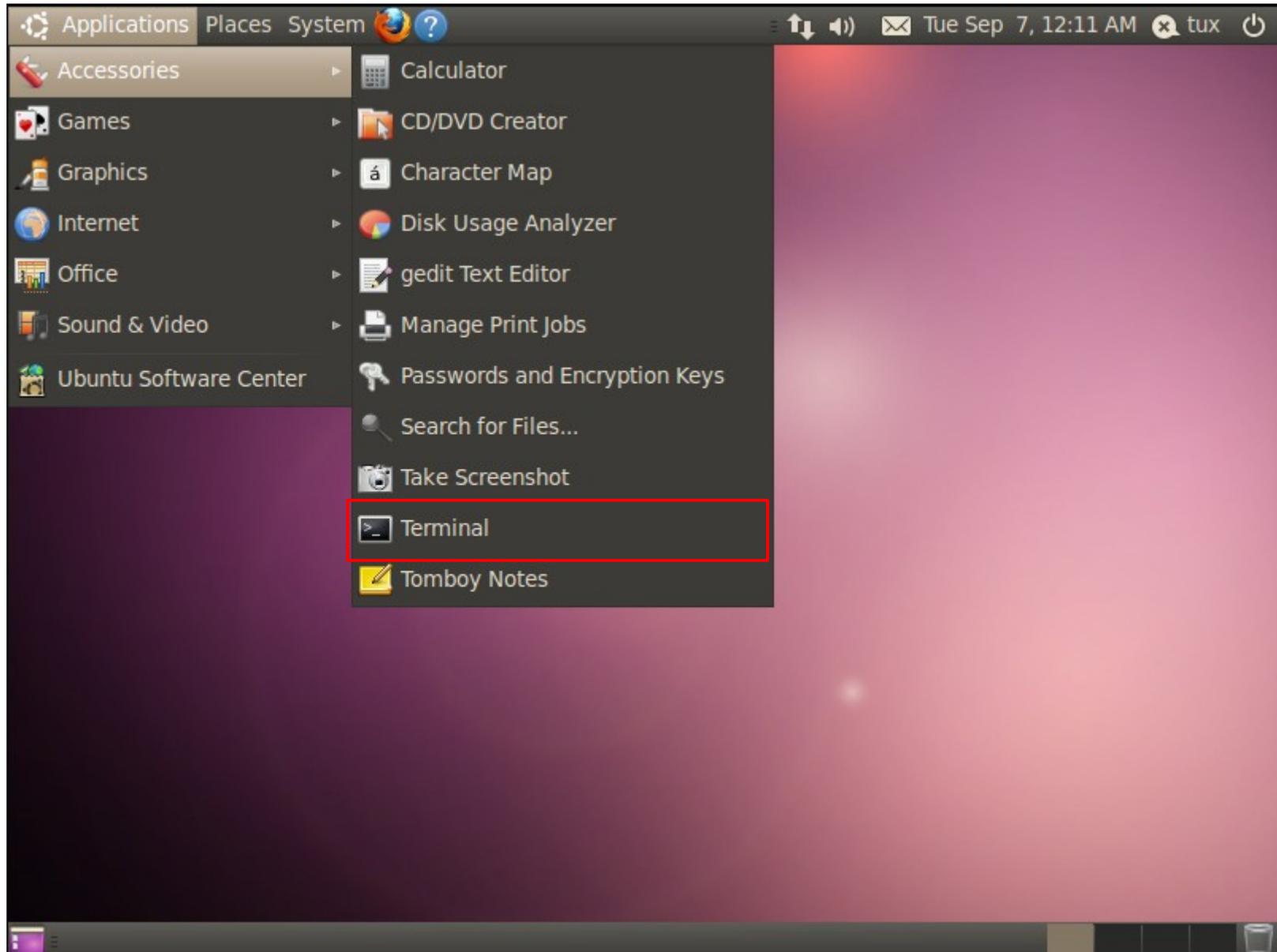


- 
- Proprietary Hardware Drivers
  - **PAE Kernel**
  - Advanced Visual Effects

## PAE Kernel

- If your system has more than 3GB memory installed, you might be interested in using the PAE kernel.
- PAE means Physical Address Extension, for more details have a look at [http://en.wikipedia.org/wiki/Physical\\_Address\\_Extension](http://en.wikipedia.org/wiki/Physical_Address_Extension)
- Check at first, if you are running the “generic” kernel ... or already the PAE enabled kernel.

## Open a terminal



## Check the kernel ...

The terminal window shows the following output:

```
tux@tux-desktop: ~  
File Edit View Terminal Help  
tux@tux-desktop:~$ uname -a  
Linux tux-desktop 2.6.32-24-generic #42-Ubuntu SMP Fri Aug 20 14:24:04 UTC 201  
i686 GNU/Linux  
tux@tux-desktop:~$ free -m  
              total          used         free       shared    buffers       cached  
Mem:          3024           288        2736           0           37          136  
-/+ buffers/cache:  
              115          2909  
Swap:         894             0           894
```

Callout 1 (top): To check the current kernel, type the command `uname -a` and press ENTER

Callout 2 (left): Without PAE, only 3GB memory are usable at the maximum.

Callout 3 (right): If the kernel information ends with “-generic”, you do not have the PAE Kernel installed.

Callout 4 (right): If the kernel information ends with “-generic-pae”, you already have the PAE kernel installed. No further steps are required.

# Install PAE Kernel

1. In Synaptic Package Manager, search for "linux-generic-pae"

S	Package	Installed Version	Latest Version	Description
<input checked="" type="checkbox"/>	linux-generic-pae		2.6.32.24.25	Complete
<input type="checkbox"/>	Unmark		2.6.32.24.25	Backport
<input type="checkbox"/>			2.6.32-24.17	compat-v
<input type="checkbox"/>			2.6.32-23.16	compat-v

2. Right mouse-click on package "linux-generic-pae"

3. Select "Mark for Installation"

4. Additional packages are required for installation.

**Mark additional required changes?**  
 The chosen action also affects other packages. The following changes are required in order to proceed.

- To be installed
  - linux-image-2.6.32-24-generic-pae
  - linux-image-generic-pae

After installation of the new kernel → **Reboot**

## Check again ...

```
tux@tux-desktop: ~  
File Edit View Terminal Help  
tux@tux-desktop:~$ uname -a  
Linux tux-desktop 2.6.32-24-generic-pae #42-Ubuntu SMP Fri Aug 20 15:37:22 UTC  
2010 i686 GNU/Linux  
tux@tux-desktop:~$ free -m  
              total          used          free   shared    buffers     cached  
Mem:          4022           284          3737         0         38         136  
-/+ buffers/cache:          109          3912  
Swap:          894             0           894  
tux@tux-desktop:~$
```

... and more than 3GB memory should be accessible.

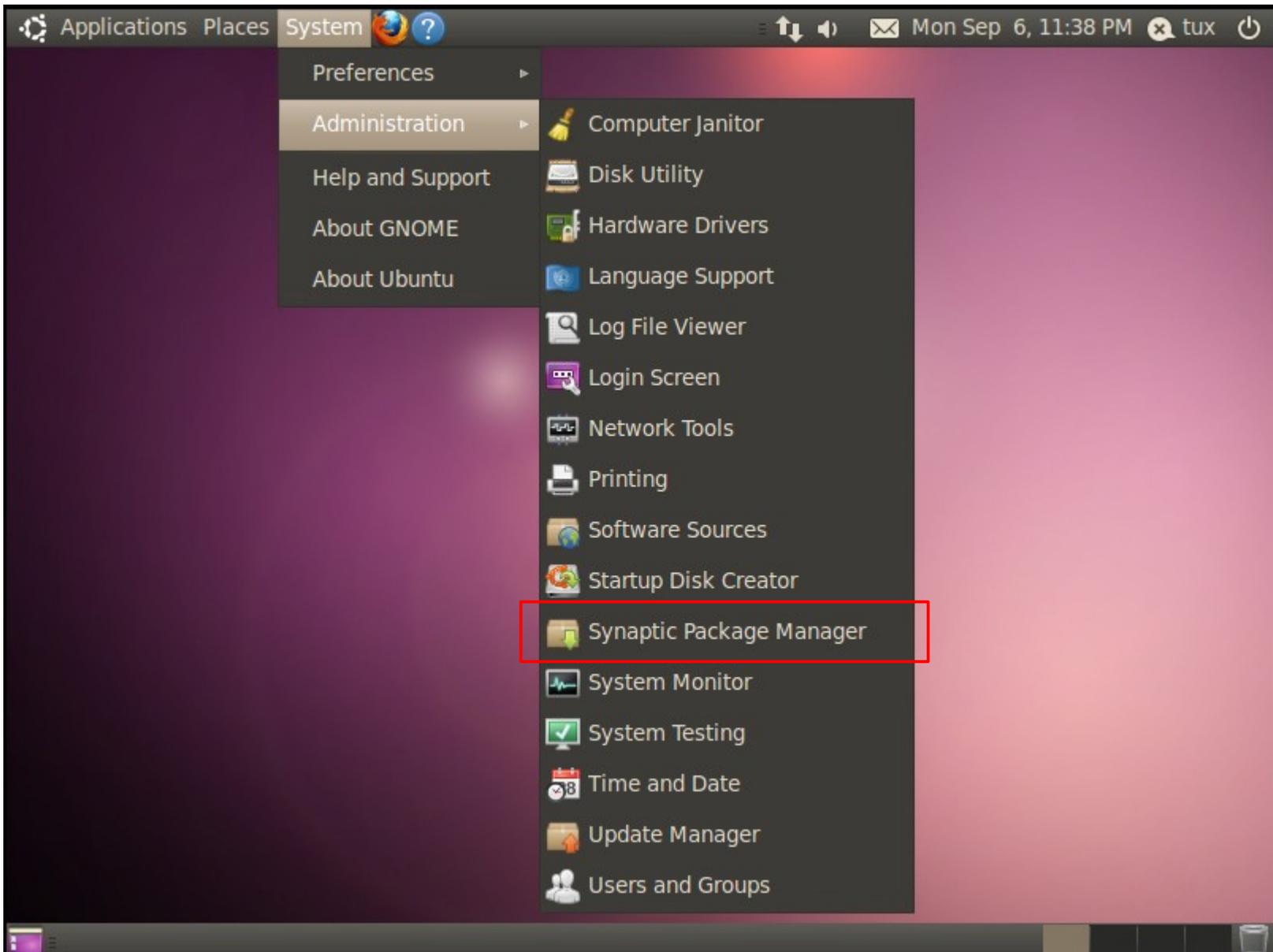
After reboot, you should be using the PAE kernel ...

- 
- Proprietary Hardware Drivers
  - PAE Kernel
  - **Advanced Visual Effects**

## Information

- To use more advanced visual effects, it might be required to use the proprietary hardware driver for your graphic card, if available. More details see appendix “Proprietary Hardware Drivers”
- If your system contains a Nvidia graphic card, the usage of the proprietary hardware driver is recommended instead of the Open Source driver “nouveau”
- Package “simple-ccsm” is required for configuration of more advanced visual effects

# Start Synaptic Package Manager



# Search for package "simple-ccsm"

1. In Synaptic Package Manager, search for "simple-ccsm"

The screenshot shows the Synaptic Package Manager interface. The search bar contains "simple-ccsm". A table lists the search results:

S	Package	Installed Version	Latest Version	Description
<input type="checkbox"/>	simple-ccsm		0.8.2-0ubuntu1	Simple Cor

A context menu is open over the "simple-ccsm" package, with "Mark for Installation" highlighted in red.

2. Right mouse-click on package "simple-ccsm"  
3. Select "Mark for Installation"

The dialog box "Mark additional required changes?" contains the following text:

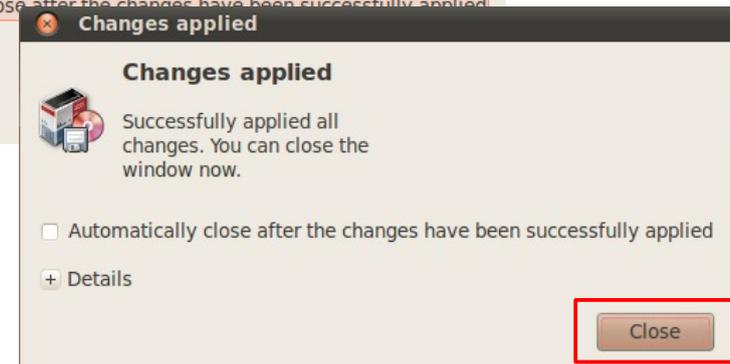
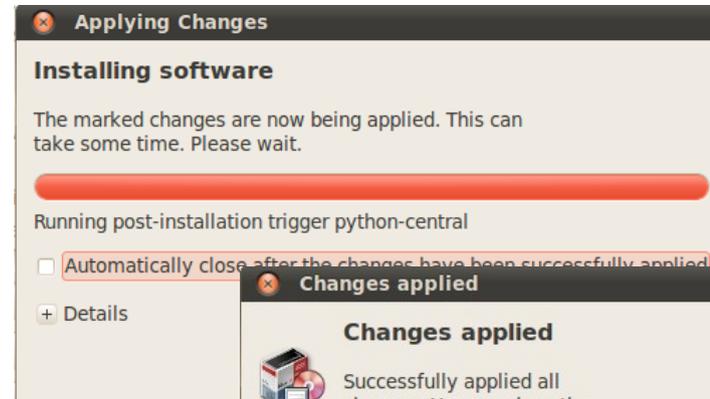
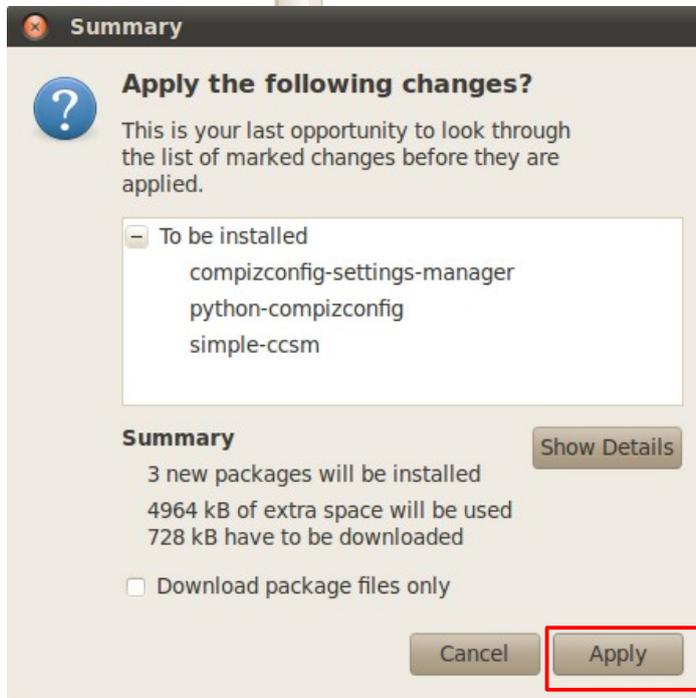
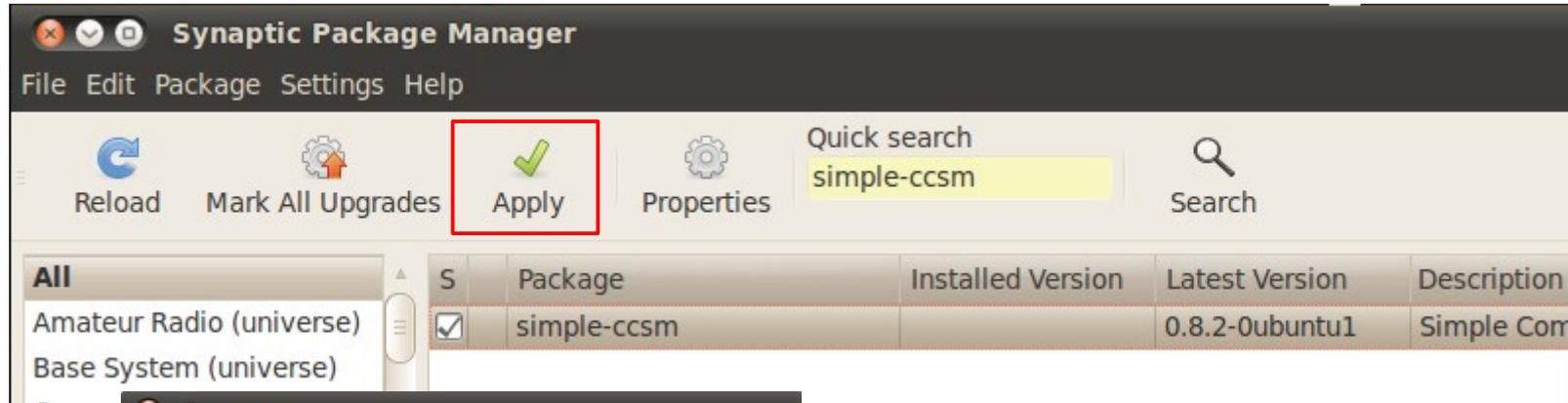
The chosen action also affects other packages. The following changes are required in order to proceed.

- To be installed
  - compizconfig-settings-manager
  - python-compizconfig

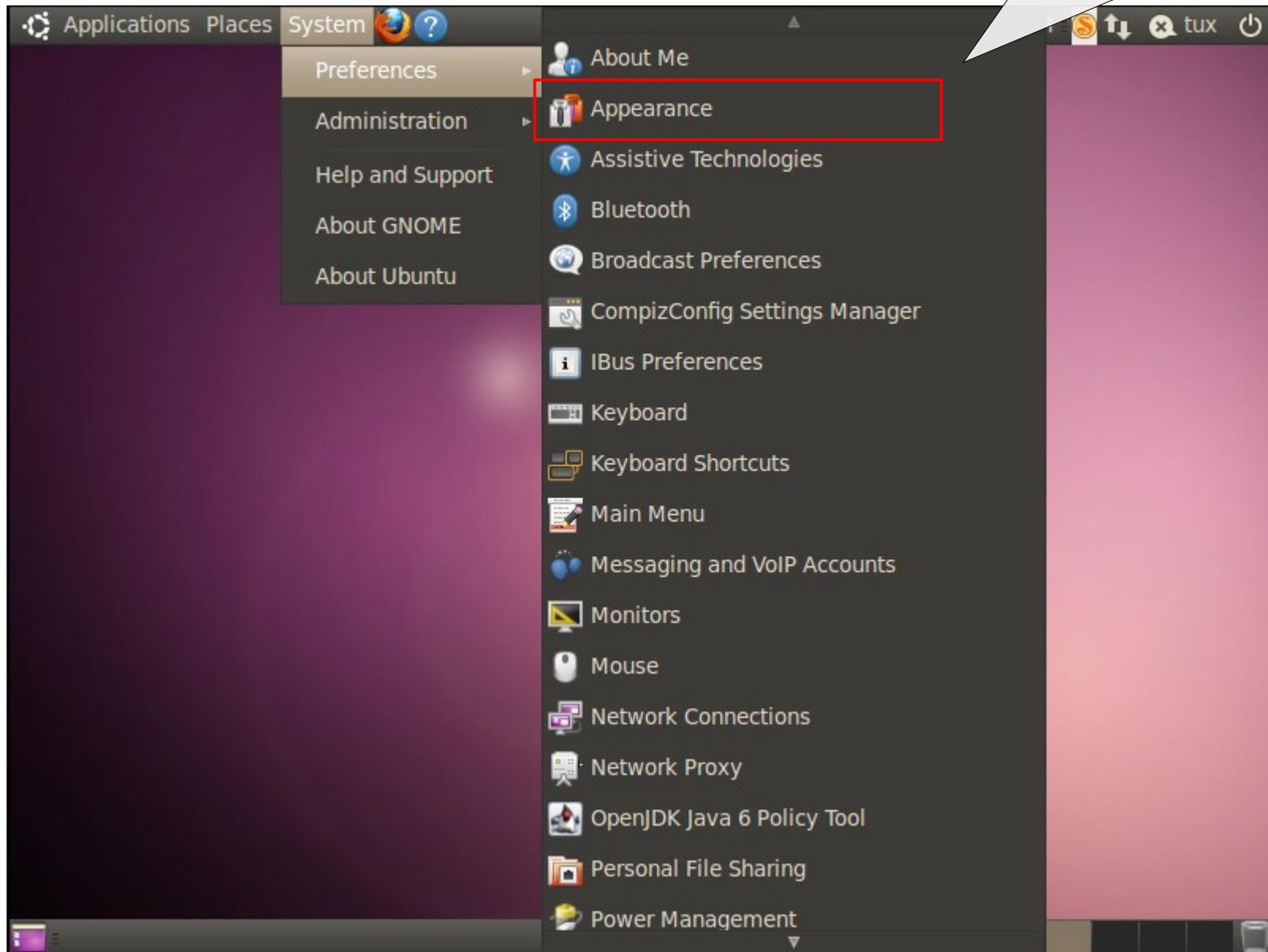
4. Additional packages are required for installation.

Cancel **Mark**

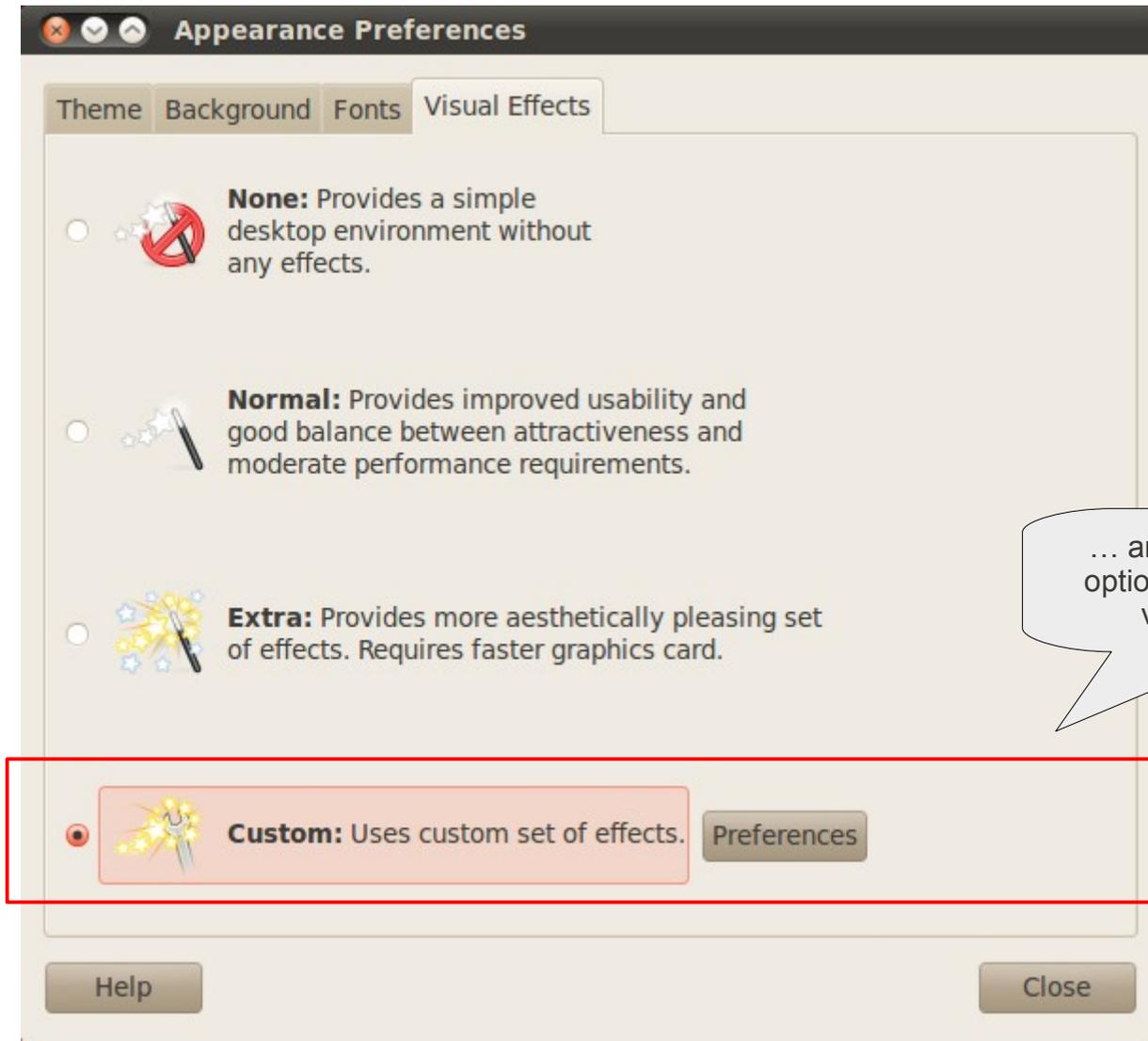
# Install “simple-ccsm”



## Configure “Advanced Visual Effects”



## Configure “Advanced Visual Effects”

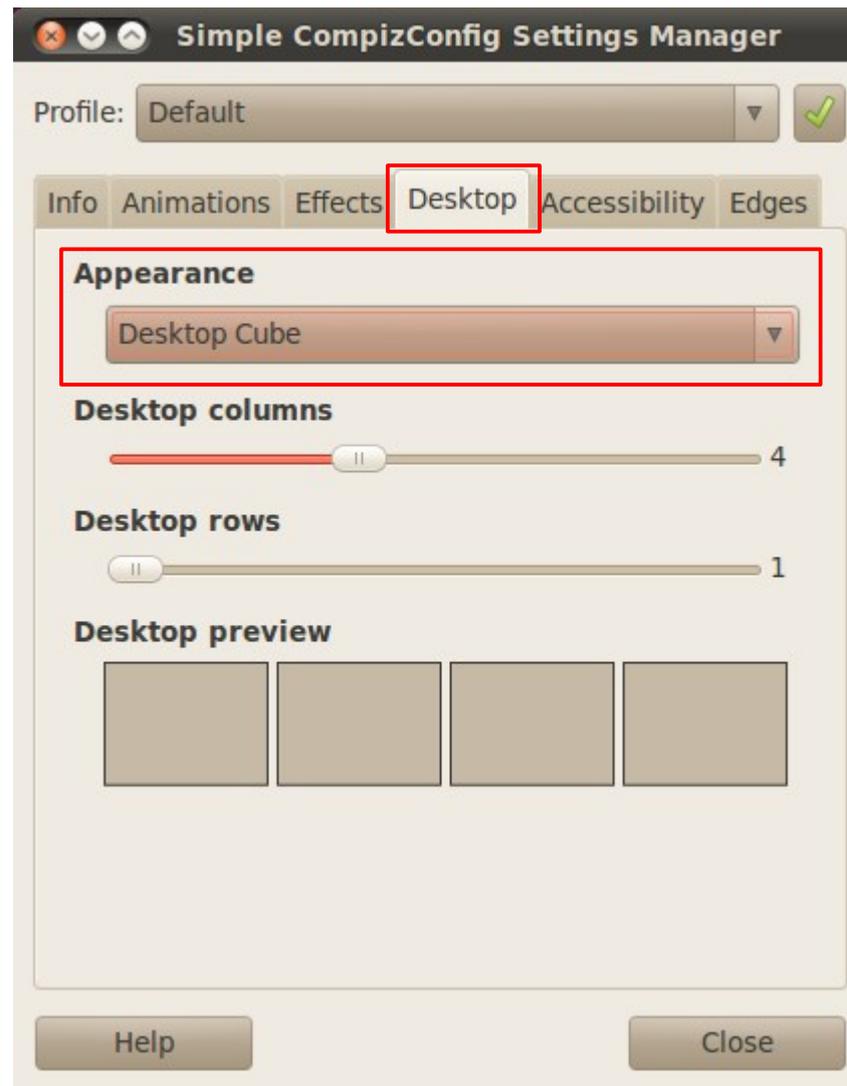


... and you have an additional option available for configuring visual desktop effects.

Click “Preferences”

## Configure “Advanced Visual Effects”

This is an example, how to configure the famous “Desktop Cube”



---

## Trademarks

- IBM, the IBM logo, Lotus and LotusLive are registered trademarks or trademarks of the International Business Machines Corporation in the United States and/or other countries.
- Linux is a registered trademark of Linus Torvalds.
- Red Hat is a registered trademark of Red Hat, Inc. in the United States and other countries.
- SuSE is a registered trademark of Novell, Inc. in the United States and other countries.
- Ubuntu is a registered trademark of Canonical, Inc. in the United States and other countries.
- Windows is a trademark of Microsoft Corporation in the United States, other countries, or both.
- Other company, product and service names may be trademarks or service marks of others.