

Des stratégies pour sécuriser votre système Linux

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**Pourquoi sécuriser son
système?**

Pourquoi sécuriser sont système Linux

- Malgré que vous utilisez un système moins vulnérable, les “crackers” veulent quand même compromettre votre système;
- Vous ne voulez pas que votre système soit utilisé pour des activités illicites (pourriel, porno) ou illégales (vol financière ou d'identité);
- La valeur d'un ordinateur linux compromis a une valeur accrue par rapport à un ordinateur Windows;

Pourquoi sécuriser sont système Linux

- Vous avez des fichiers personnels à protéger;
- Il ne touche pas aux autres de connaître que vous êtes amateur de vin, de nature, ou des poupées “Barbie” -- à moins que, bien sûr, vous choisissiez de partager cette information!
- *Simplement, c'est votre ordinateur, à être utilisé pour vos fins, comme vous voyez bon. À ces fins, des mesures de sécurité doivent être mises en place.*

Linux generals command Windows grunts in botnet battlefield

Veteran virus still recruiting for zombie army

Darren Pauli 15/02/2008 15:40:20

Page: [1](#) [2](#)

Linux servers infected with a mutating virus are commanding huge Windows botnets six years after the [malware](#) was discovered, according to security researchers.

Have your say! 0

The Linux.RST.B virus infects the working directory of the ELF (executable and linkable format) executable files. It can also create a backdoor by opening a socket and listening for a packet containing the attackers origin and the command to be executed..

SophosLabs United Kingdom research director Billy McCourt said Linux boxes are valuable targets as botnet controllers because they are typically remain online as servers.

"Linux computers are very valuable to [hackers](#). A bot army, similar to real armies, needs a general and infantry [and] Linux boxes are often used as servers, which means they have a high up-time - essential for a central control point," McCourt said.

"A Windows computer, on the other hand, is found at home or as a desktop machine in an office, and these computers are regularly switched off [which] makes them less attractive as controllers, but ideal for infantry, or zombies.

"We run various honeypots and as you might also expect, our Linux honeypots are attacked more frequently than our Linux ones, but Linux malware is far more interesting."

“Linux systems, once compromised, are ideal platforms to unleash all sorts of nastiness.

Peter Linich is a network administrator for the University of NSW

McCourt said the virus, discovered in February 2002, is unique among Linux malware because it can replicate across current distributions.

University of New South Wales senior network administrator for the school of computer science and engineering Peter Linich told Computerworld Linux servers are extremely valuable to hackers since they are typically online more than

10 months are year.

"Just yesterday I was watching our incoming network traffic and noticed an ADSL host in Greece scanning through all our machines and running an SSH (Secure Shell) password-guessing attack on all the SSH servers it found," Linich said, adding such attacks occur multiple times a day.

"Such activity is a real threat in our environment where we have hundreds of Linux systems running 24x7. Linux systems, once compromised, are ideal platforms to unleash all sorts of nastiness.

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Un système sous attaque

```
malak@malak:/var/log
File Edit View Terminal Tabs Help
GNU nano 2.0.6 File: secure
Apr 26 13:54:26 malak sshd[23323]: pam_unix(sshd:auth): check pass; user unknown
Apr 26 13:54:26 malak sshd[23323]: pam_unix(sshd:auth): authentication failure; logname= uid=0 euid=0 tty=ssh ruser= rhost=202.105.49.16
Apr 26 13:54:26 malak sshd[23323]: pam_succeed_if(sshd:auth): error retrieving information about user tomcat
Apr 26 13:54:27 malak sshd[23320]: Failed password for invalid user root from 202.105.49.16 port 43998 ssh2
Apr 26 13:54:28 malak sshd[23323]: Failed password for invalid user tomcat from 202.105.49.16 port 42446 ssh2
Apr 26 13:54:28 malak sshd[23322]: Received disconnect from 202.105.49.16: 11: Bye Bye
Apr 26 13:54:28 malak sshd[23321]: Invalid user cady from 202.105.49.16
Apr 26 13:54:28 malak sshd[23325]: input_userauth_request: invalid user cady
Apr 26 13:54:28 malak sshd[23321]: pam_unix(sshd:auth): check pass; user unknown
Apr 26 13:54:28 malak sshd[23321]: pam_unix(sshd:auth): authentication failure; logname= uid=0 euid=0 tty=ssh ruser= rhost=202.105.49.16
Apr 26 13:54:28 malak sshd[23321]: pam_succeed_if(sshd:auth): error retrieving information about user cady
Apr 26 13:54:28 malak sshd[23324]: Received disconnect from 202.105.49.16: 11: Bye Bye
Apr 26 13:54:30 malak sshd[23326]: Invalid user marine from 202.105.49.16
Apr 26 13:54:30 malak sshd[23327]: input_userauth_request: invalid user marine
Apr 26 13:54:30 malak sshd[23326]: pam_unix(sshd:auth): check pass; user unknown
Apr 26 13:54:30 malak sshd[23326]: pam_unix(sshd:auth): authentication failure; logname= uid=0 euid=0 tty=ssh ruser= rhost=202.105.49.16
Apr 26 13:54:30 malak sshd[23326]: pam_succeed_if(sshd:auth): error retrieving information about user marine
Apr 26 13:54:30 malak sshd[23325]: Connection closed by 202.105.49.16
Apr 26 13:54:30 malak sshd[23321]: Failed password for invalid user cady from 202.105.49.16 port 42434 ssh2
Apr 26 13:54:31 malak sshd[23328]: User root from 202.105.49.16 not allowed because not listed in AllowUsers
Apr 26 13:54:31 malak sshd[23329]: input_userauth_request: invalid user root
Apr 26 13:54:31 malak sshd[23328]: pam_unix(sshd:auth): authentication failure; logname= uid=0 euid=0 tty=ssh ruser= rhost=202.105.49.16 user=$
Apr 26 13:54:31 malak sshd[23326]: Failed password for invalid user marine from 202.105.49.16 port 45914 ssh2
Apr 26 13:54:32 malak sshd[23327]: Received disconnect from 202.105.49.16: 11: Bye Bye
Apr 26 13:54:33 malak sshd[23328]: Failed password for invalid user root from 202.105.49.16 port 49276 ssh2
Apr 26 13:54:33 malak sshd[23329]: Received disconnect from 202.105.49.16: 11: Bye Bye
Apr 26 13:54:36 malak sshd[23330]: Invalid user global from 202.105.49.16
Apr 26 13:54:36 malak sshd[23331]: input_userauth_request: invalid user global
Apr 26 13:54:36 malak sshd[23330]: pam_unix(sshd:auth): check pass; user unknown
Apr 26 13:54:36 malak sshd[23330]: pam_unix(sshd:auth): authentication failure; logname= uid=0 euid=0 tty=ssh ruser= rhost=202.105.49.16
Apr 26 13:54:36 malak sshd[23330]: pam_succeed_if(sshd:auth): error retrieving information about user global
Apr 26 13:54:37 malak sshd[23332]: User root from 202.105.49.16 not allowed because not listed in AllowUsers
Apr 26 13:54:37 malak sshd[23333]: input_userauth_request: invalid user root
Apr 26 13:54:37 malak sshd[23332]: pam_unix(sshd:auth): authentication failure; logname= uid=0 euid=0 tty=ssh ruser= rhost=202.105.49.16 user=$
Apr 26 13:54:38 malak sshd[23330]: Failed password for invalid user global from 202.105.49.16 port 49425 ssh2
Apr 26 13:54:38 malak sshd[23334]: Invalid user marine from 202.105.49.16
Apr 26 13:54:38 malak sshd[23335]: input_userauth_request: invalid user marine
Apr 26 13:54:38 malak sshd[23331]: Received disconnect from 202.105.49.16: 11: Bye Bye
Apr 26 13:54:38 malak sshd[23334]: pam_unix(sshd:auth): check pass; user unknown
Apr 26 13:54:38 malak sshd[23334]: pam_unix(sshd:auth): authentication failure; logname= uid=0 euid=0 tty=ssh ruser= rhost=202.105.49.16
Apr 26 13:54:38 malak sshd[23334]: pam_succeed_if(sshd:auth): error retrieving information about user marine
Apr 26 13:54:39 malak sshd[23332]: Failed password for invalid user root from 202.105.49.16 port 53047 ssh2
Apr 26 13:54:39 malak sshd[23333]: Received disconnect from 202.105.49.16: 11: Bye Bye

^G Get Help      ^O WriteOut      ^R Read File     ^Y Prev Page     ^K Cut Text      ^C Cur Pos
^X Exit          ^J Justify       ^W Where Is      ^V Next Page     ^U UnCut Text    ^T To Spell
```

**Tout le monde doit
s'identifier**

Tout le monde doit s'identifier

- Tout les utilisateurs doivent s'identifier avec leur mot de passe quoique la façon qu'ils veulent se connecter: ssh, ftp, vnc, et même et particulièrement au bureau
- *Si vous faites toujours un “log out” après votre session, votre ordinateur restera allumé et à la fois disponible pour les autres utilisateurs autorisés (le cas échéant), et le VNC sera refusé*
- Il est fortement déconseillé que votre ordinateur ouvre un compte défaut automatiquement



f10-preview.fedoraproject.org



Steven

Other...



Restart



Shut Down

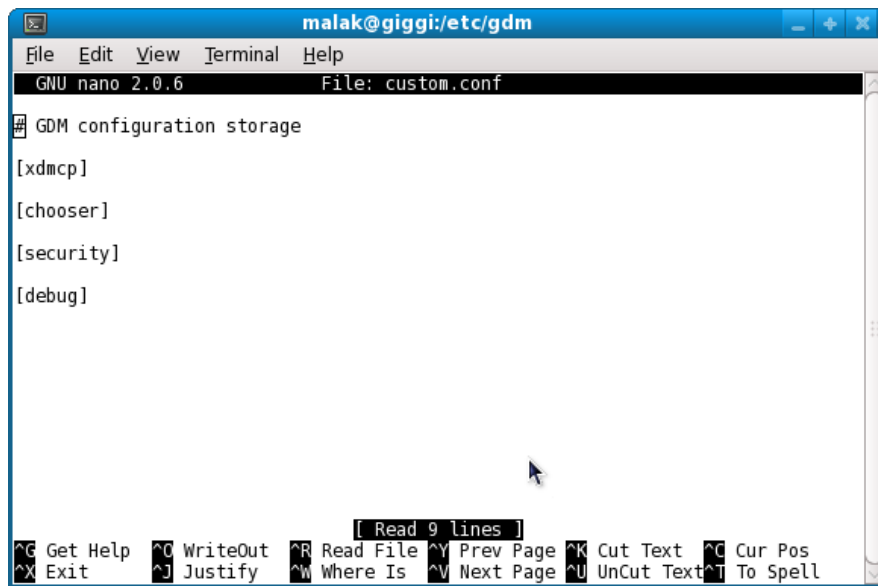


Sun Nov 2, 4:02 PM



Username:

Gestion des mots de passe



```
malak@giggi:/etc/gdm
File Edit View Terminal Help
GNU nano 2.0.6 File: custom.conf

# GDM configuration storage

[xdmcp]

[chooser]

[security]

[debug]

[ Read 9 lines ]
^G Get Help ^O WriteOut ^R Read File ^Y Prev Page ^K Cut Text ^C Cur Pos
^X Exit ^J Justify ^W Where Is ^V Next Page ^U UnCut Text ^T To Spell
```

- Dans
/etc/gdm/custom.conf
enlever toute ligne
“AutomaticLogin” et
“AutomaticLoginEnable”



Applications

Places

System



0:57 PM

Live session user



Examples



Install



Preferences



Administration



Help and Support



About GNOME



About Ubuntu



Assistive Technologies



Bluetooth



Default Printer



Display



Encryption and Keyrings



Keyboard



Keyboard Shortcuts



Main Menu



Mouse



Network Connections



Network Proxy



PalmOS Devices



Power Management



Preferred Applications



Remote Desktop



SCIM Input Method Setup



Screensaver



Sound



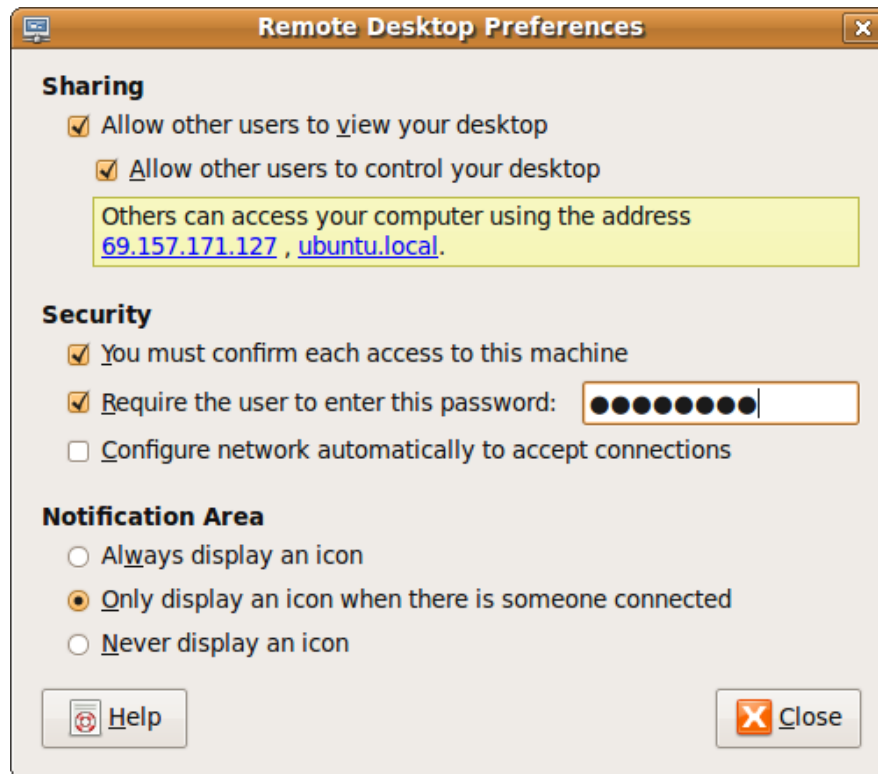
Startup Applications



Windows



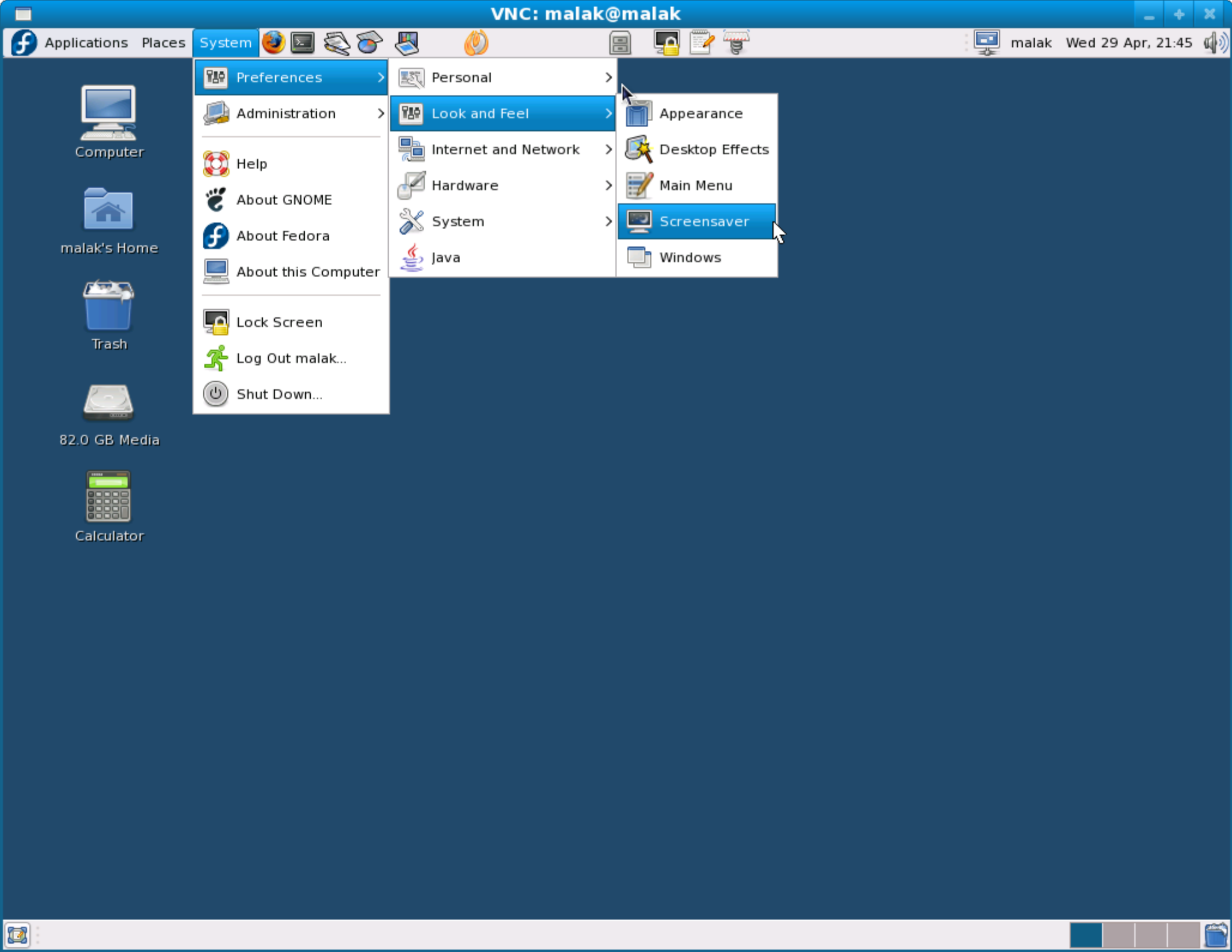
Controllez l'accès à distance à votre bureau



- Vous pouvez décider si votre bureau sera contrôlable à distance à partir de Système | Préférences | Internet et réseaux | “Remote Desktop”
- Ubuntu – l'option “Remote Desktop” se trouve directement dans Système | Préférences

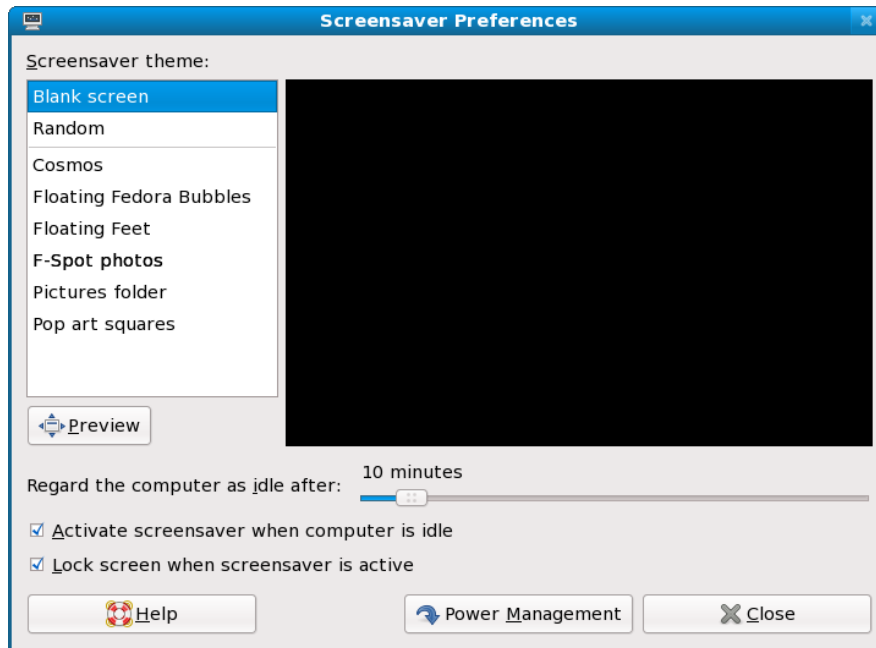
Tout le monde doit s'identifier

- L'économiseur d'écran devrait exiger un mot de passe afin de libérer l'accès à l'ordinateur
 - système | réglages (preferences en anglais) | “look and feel” | économiseur d'écran
- *Ceci vous donne une certaine protection si vous partez de votre ordinateur pendant quelques minutes (voir la fin de la présentation ...)*



Verrouillage automatique

- Pour verrouiller l'ordi automatiquement par voie de l'économiseur de l'écran dans Gnome c'est dans système | réglages | “look and feel” | économiseur d'écran



malak

malak on malak

Password:

.....|

Leave Message

Switch User

Cancel

Unlock

Gérer les mots de passe

Gérer les mots de passe p.1

- Exiger des mots de passe:
 - d'au moins 8 caractères
 - 1tbm-d+p au lieu de mdp
 - qui ont des caractères majuscules, minuscules et spéciales, et des chiffres, telles
 - °!'"#\$%?&*()_+=<>/^,
 - 1234567890
 - 1Tbm-D+p au lieu de unmotpas

Gérer les mots de passe p.2

- qui sont faciles à souvenir mais difficiles à deviner, p.ex. les initiales des mots d'une phrase mémorable
 - 1Tbm-D+p --> “un (1) Très bon mot-De-passe”
- Dans le fichier /etc/login.defs vous pouvez l'expiration des mots de passe

Gérer les mots de passe (p. 4)

(au moins Red Hat / CentOS / Fedora)

- Dans le fichier
/etc/pam.d/system-auth, modifier la ligne:

password requisite
/lib/security/
\$ISA/pam_cracklib.so
retry=3

Insérer “minlen=8”
(longueur
minimale),
ucredit=-1
(caractères
majuscules).

```
malak@giggi:/lib/security
GNU nano 2.0.6 File: /etc/pam.d/system-auth Modified

#PAM-1.0
# This file is auto-generated.
# User changes will be destroyed the next time authconfig is run.
auth      required      pam_env.so
auth      sufficient    pam_fprintd.so
auth      sufficient    pam_unix.so nullok try_first_pass
auth      requisite     pam_succeed_if.so uid >= 500 quiet
auth      required      pam_deny.so

account   required      pam_unix.so
account   sufficient    pam_localuser.so
account   sufficient    pam_succeed_if.so uid < 500 quiet
account   required      pam_permit.so

password  requisite     pam_cracklib.so try_first_pass retry=3 minlen=8 ucredit=-1 lcredit=-1 dcredit=-1 ocredit=-1
password  sufficient    pam_unix.so sha512_shadow nullok try_first_pass use_authok
password  requisite     pam_deny.so

session   optional      pam_keyinit.so revoke
session   required      pam_limits.so
session   [success=1 default=ignore] pam_succeed_if.so service in crond quiet use_uid
session   required      pam_unix.so

^G Get Help      ^O WriteOut      ^R Read File     ^Y Prev Page     ^K Cut Text      ^C Cur Pos
^X Exit          ^J Justify       ^W Where Is      ^V Next Page     ^U UnCut Text    ^T To Spell
```

Gérer les mots de passe p.3

- Exiger l'expiration des mots de passe après un certain temps
 - System | Administration | Users and Groups | <fournir le m-d-p de root> | <cliquer sur un nom d'utilisateur> | onglet info m-d-p



Computer



malak's Home



Trash



82.0 GB Media



Calculator



Preferences



Administration



Help



About GNOME



About Fedora



About this Computer



Lock Screen



Log Out malak...



Shut Down...



Add/Remove Software



Authentication



Bootloader



Date & Time



Display



Firewall



Language



Network



Network Device Control



Printing



Root Password



SELinux Management



Services



Software Sources



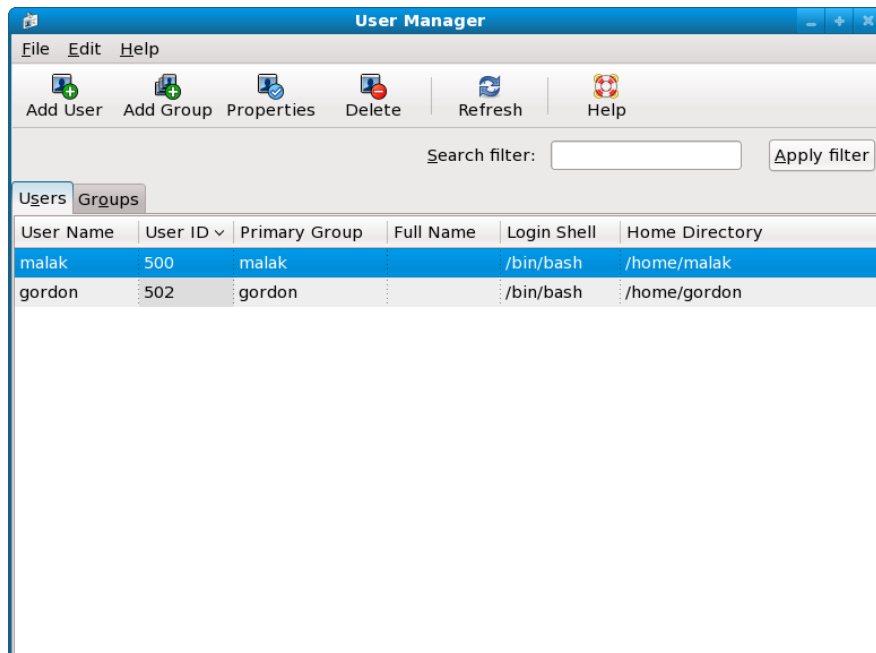
Update System



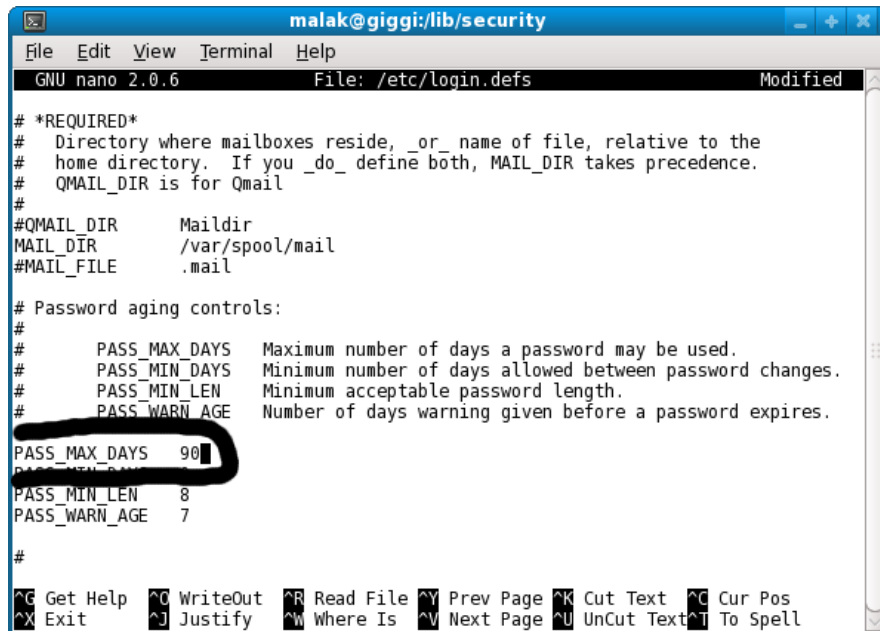
Users and Groups



Expiration des mots de passe



Expiration des mots de passe (au moins Red Hat / CentOS / Fedora)



```
malak@giggi:/lib/security
File Edit View Terminal Help
GNU nano 2.0.6 File: /etc/login.defs Modified

# *REQUIRED*
# Directory where mailboxes reside, _or_ name of file, relative to the
# home directory. If you _do_ define both, MAIL_DIR takes precedence.
# QMAIL_DIR is for Qmail
#
#QMAIL_DIR Maildir
MAIL_DIR /var/spool/mail
#MAIL_FILE .mail

# Password aging controls:
#
# PASS_MAX_DAYS Maximum number of days a password may be used.
# PASS_MIN_DAYS Minimum number of days allowed between password changes.
# PASS_MIN_LEN Minimum acceptable password length.
# PASS_WARN_AGE Number of days warning given before a password expires.
PASS_MAX_DAYS 90
PASS_MIN_DAYS 5
PASS_MIN_LEN 8
PASS_WARN_AGE 7

#
^G Get Help ^O WriteOut ^R Read File ^Y Prev Page ^K Cut Text ^C Cur Pos
^X Exit ^J Justify ^W Where Is ^V Next Page ^U UnCut Text ^T To Spell
```

- Dans le fichier /etc/login.defs, modifier la ligne “PASS_MAX_DAYS” à un chiffre comme 90 jours (3 mois)

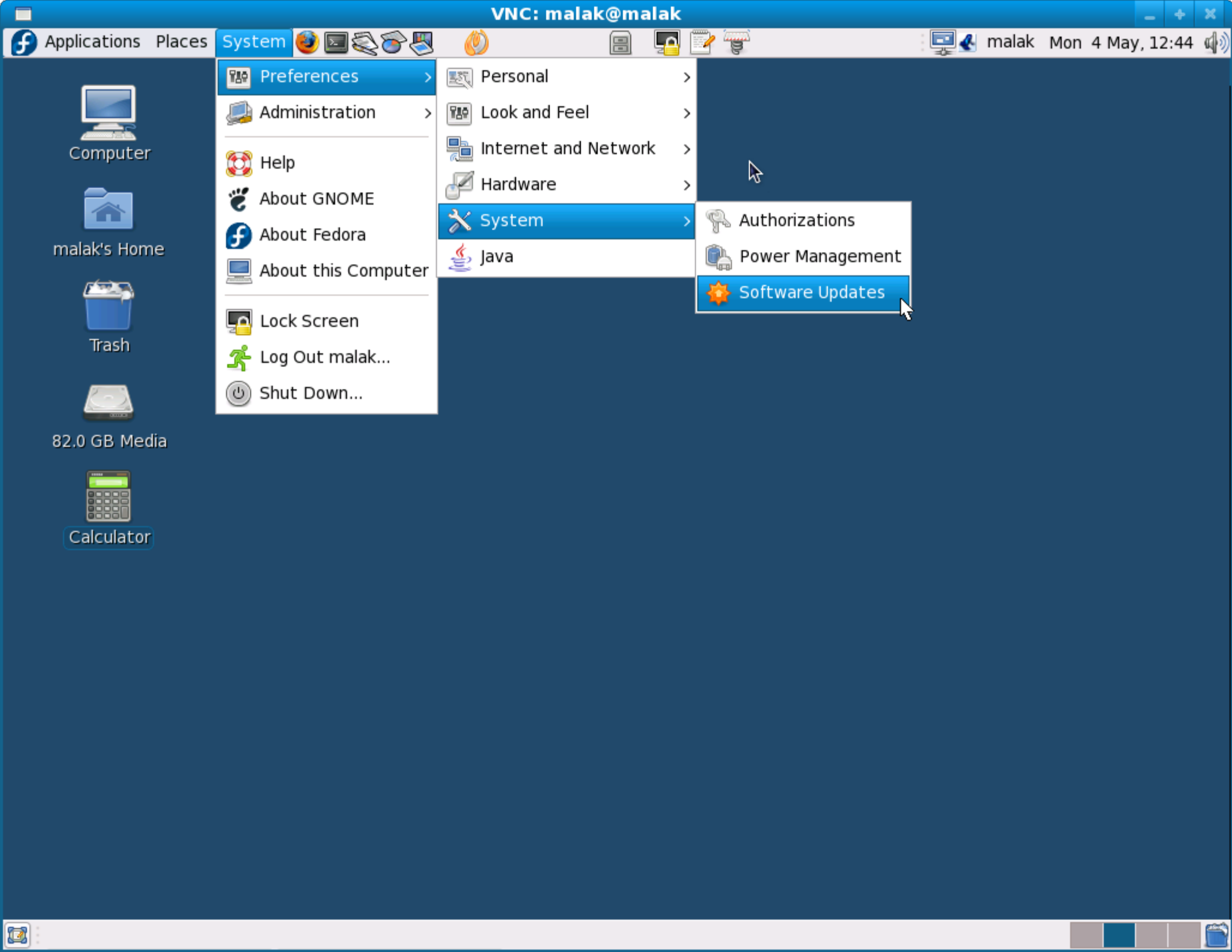
Faire vos mises-à-jour

Faire vos mises-à-jour p.1

- Les mises-à-jour normalement incluent:
 - Les correctifs de sécurité
 - Les mises-à-jour des logiciels avec des nouvelles fonctions, capacités, améliorations, etc.
 - L'enlèvement ou le remplacement des logiciels désuets et/ou considérés inférieures à des nouveaux logiciels
 - Les installations de nouveaux logiciels susceptibles à être utiles

Faire vos mises-à-jour p.2

- Les mises à jour sont préparées par des équipes de soit des bénévoles, soit des pros, soit les deux, qui se dédient à maintenir votre distribution à jour, et sûr, et s'assurent que ces mises-à-jour sont fonctionnelles, ne “briseront” pas votre système, complètes et appropriées.
- Les mises-à-jours normalement devraient se faire automatiquement, à moins que vous préfèrez suivre de près les mises-à-jour



Applications

Places

System



malak

Mon 4 May, 12:44



Computer



malak's Home



Trash



82.0 GB Media



Calculator



Preferences



Administration



Help



About GNOME



About Fedora



About this Computer



Lock Screen



Log Out malak...



Shut Down...



Personal



Look and Feel



Internet and Network



Hardware



System



Java



Authorizations

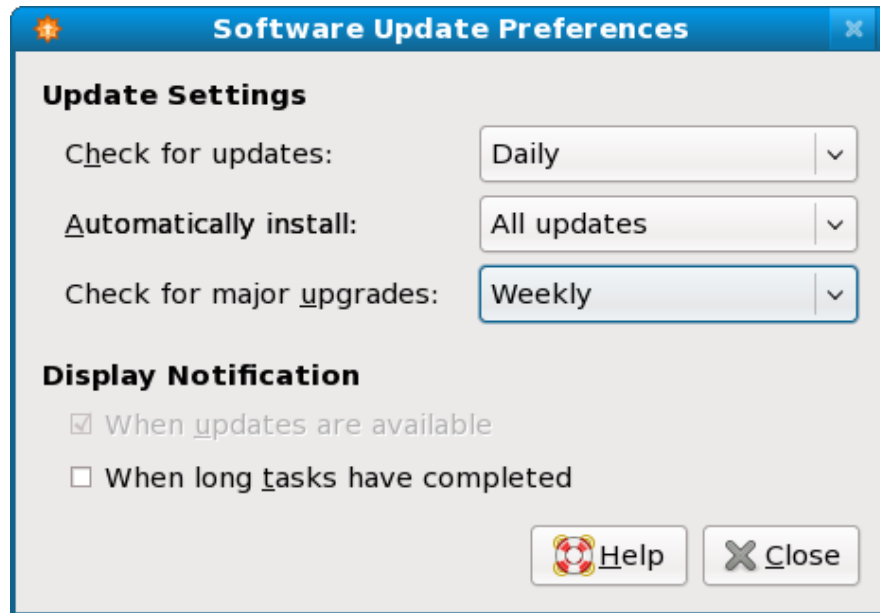


Power Management



Software Updates

Faire vos mises-à-jour p.3



- À moins que vous aimez contrôler les mises-à-jour manuellement, normalement c'est une bonne idée de les faire automatiquement

File Edit View Terminal Tabs Help

[malak@malak ~]\$ su

Password:

[root@malak malak]# yum update

Loaded plugins: refresh-packagekit

http://livna.cat.pdx.edu/repo/9/i386/repodata/repomd.xml: [Errno 14] HTTP Error 404: Not Found

Trying other mirror.

livna

| 2.4 kB 00:00

fedora

| 2.4 kB 00:00

rpmfusion-free-updates

| 2.1 kB 00:00

rpmfusion-nonfree-updates

| 2.1 kB 00:00

rpmfusion-free

| 951 B 00:00

adobe-linux-i386

| 951 B 00:00

updates-newkey

| 2.3 kB 00:02

updates-newkey/primary_db

| 4.2 MB 04:03

rpmfusion-nonfree

| 951 B 00:00

updates

| 2.6 kB 00:00

Setting up Update Process

Resolving Dependencies

--> Running transaction check

--> Package firefox.i386 0:3.0.10-1.fc9 set to be updated

--> Package gnome-python2-extras.i386 0:2.19.1-27.fc9 set to be updated

--> Package gnome-python2-gtkhtml2.i386 0:2.19.1-27.fc9 set to be updated

--> Package gnome-python2-libegg.i386 0:2.19.1-27.fc9 set to be updated

--> Package libcurl.i386 0:7.19.4-4.fc9 set to be updated

--> Package libmodplug.i386 1:0.8.7-1.fc9 set to be updated

--> Package totem.i386 0:2.23.2-16.fc9 set to be updated

--> Package totem-gstreamer.i386 0:2.23.2-16.fc9 set to be updated

--> Package totem-mozplugin.i386 0:2.23.2-16.fc9 set to be updated

--> Package totem-nautilus.i386 0:2.23.2-16.fc9 set to be updated

--> Package totem-xine.i386 0:2.23.2-16.fc9 set to be updated

--> Package vlgothic-fonts.noarch 0:20090422-1.fc9 set to be updated

--> Package vlgothic-fonts-common.noarch 0:20090422-1.fc9 set to be updated

--> Package vlgothic-p-fonts.noarch 0:20090422-1.fc9 set to be updated

--> Package xulrunner.i386 0:1.9.0.10-1.fc9 set to be updated

--> Package yelp.i386 0:2.22.1-12.fc9 set to be updated

--> Finished Dependency Resolution

Dependencies Resolved

```
=====
Package                Arch      Version      Repository      Size
=====
```

Updating:

firefox	i386	3.0.10-1.fc9	updates-newkey	12 M
gnome-python2-extras	i386	2.19.1-27.fc9	updates-newkey	51 k
gnome-python2-gtkhtml2	i386	2.19.1-27.fc9	updates-newkey	19 k
gnome-python2-libegg	i386	2.19.1-27.fc9	updates-newkey	57 k
libcurl	i386	7.19.4-4.fc9	updates-newkey	166 k
libmodplug	i386	1:0.8.7-1.fc9	updates-newkey	171 k
totem	i386	2.23.2-16.fc9	updates-newkey	2.4 M
totem-gstreamer	i386	2.23.2-16.fc9	updates-newkey	69 k

File Edit View Terminal Tabs Help

```

---> Package totem-gstreamer.i386 0:2.23.2-16.fc9 set to be updated
---> Package totem-mozplugin.i386 0:2.23.2-16.fc9 set to be updated
---> Package totem-nautilus.i386 0:2.23.2-16.fc9 set to be updated
---> Package totem-xine.i386 0:2.23.2-16.fc9 set to be updated
---> Package vlgothic-fonts.noarch 0:20090422-1.fc9 set to be updated
---> Package vlgothic-fonts-common.noarch 0:20090422-1.fc9 set to be updated
---> Package vlgothic-p-fonts.noarch 0:20090422-1.fc9 set to be updated
---> Package xulrunner.i386 0:1.9.0.10-1.fc9 set to be updated
---> Package yelp.i386 0:2.22.1-12.fc9 set to be updated
--> Finished Dependency Resolution

```

Dependencies Resolved

Package	Arch	Version	Repository	Size
Updating:				
firefox	i386	3.0.10-1.fc9	updates-newkey	12 M
gnome-python2-extras	i386	2.19.1-27.fc9	updates-newkey	51 k
gnome-python2-gtkhtml2	i386	2.19.1-27.fc9	updates-newkey	19 k
gnome-python2-libegg	i386	2.19.1-27.fc9	updates-newkey	57 k
libcurl	i386	7.19.4-4.fc9	updates-newkey	166 k
libmodplug	i386	1:0.8.7-1.fc9	updates-newkey	171 k
totem	i386	2.23.2-16.fc9	updates-newkey	2.4 M
totem-gstreamer	i386	2.23.2-16.fc9	updates-newkey	69 k
totem-mozplugin	i386	2.23.2-16.fc9	updates-newkey	273 k
totem-nautilus	i386	2.23.2-16.fc9	updates-newkey	36 k
totem-xine	i386	2.23.2-16.fc9	updates-newkey	52 k
vlgothic-fonts	noarch	20090422-1.fc9	updates-newkey	2.3 M
vlgothic-fonts-common	noarch	20090422-1.fc9	updates-newkey	15 k
vlgothic-p-fonts	noarch	20090422-1.fc9	updates-newkey	2.4 M
xulrunner	i386	1.9.0.10-1.fc9	updates-newkey	9.0 M
yelp	i386	2.22.1-12.fc9	updates-newkey	874 k

Transaction Summary

```

=====
Install      0 Package(s)
Update      16 Package(s)
Remove       0 Package(s)

```

Total download size: 30 M

Is this ok [y/N]: y

Downloading Packages:

```

(1/16): vlgothic-fonts-common-20090422-1.fc9.noarch.rpm                | 15 kB  00:03
(2/16): gnome-python2-gtkhtml2-2.19.1-27.fc9.i386.rpm                 | 19 kB  00:01
(3/16): totem-nautilus-2.23.2-16.fc9.i386.rpm                         | 36 kB  00:02
(4/16): gnome-python2-extras-2.19.1-27.fc9.i386.rpm                  | 51 kB  00:03
(5/16): totem-xine-2.23.2-16.fc9.i386.rpm                             | 52 kB  00:04
(6/16): gnome-python2-libegg-2.19.1-27.fc9.i386.rpm                   | 57 kB  00:04
(7/16): totem-gstreamer-2.23.2-16.fc9.i386.rpm                       | 69 kB  00:06
(8/16): libcurl-7.19.4-4.fc9.i386.rpm                                (1%) 57% [=====] 11 kB/s | 96 kB  00:06 ETA

```

```
gordon@austin:~$ sudo apt-get upgrade
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages have been kept back:
  nvidia-common
The following packages will be upgraded:
  acpid apport apport-gtk apt apt-utils cups cups-bsd cups-client cups-common
  dash dkms doc-base dpkg fakeroot fglrx-amdcccle fglrx-kernel-source
  fglrx-modaliases firefox firefox-3.0 firefox-3.0-branding
  firefox-3.0-gnome-support firefox-gnome-support flashplugin-nonfree foo2zjs
  foomatic-filters ghostscript ghostscript-x gnome-system-tools
  gnome-user-guide gstreamer0.10-alsa gstreamer0.10-gnomevfs
  gstreamer0.10-plugins-base gstreamer0.10-plugins-base-apps
  gstreamer0.10-plugins-good gstreamer0.10-pulseaudio gstreamer0.10-x gvfs
  gvfs-backends gvfs-bin gvfs-fuse libavcodec51 libavformat52 libavutil49
  libcups2 libcupsimage2 libcurl3 libcurl3-gnutls libfreetype6 libglib2.0-0
  libglib2.0-data libgs8 libgstreamer-plugins-base0.10-0 libgvfscommon0
  libicu38 libjasper1 libkrb53 liblcms1 libnm-glib0 libnm-util0 libnss3-1d
  libpam-modules libpam-runtime libpam0g libpango1.0-0 libpango1.0-common
  libpng12-0 libpoppler-glib3 libpoppler3 libpostproc51 libpurple-bin
  libpurple0 libsndfile1 libssl0.9.8 libvolume-id0 libwmf0.2-7
  linux-headers-2.6.27-11 linux-headers-2.6.27-11-generic
  linux-image-2.6.27-11-generic linux-libc-dev network-manager
  network-manager-gnome openssl pidgin pidgin-data poppler-utils python-apport
  python-problem-report sudo tasksel tasksel-data tzdata udev xfonts-scalable
  xorg-driver-fglrx xserver-common xserver-xorg-core xserver-xorg-video-intel
  xulrunner-1.9 xulrunner-1.9-gnome-support
99 upgraded, 0 newly installed, 0 to remove and 1 not upgraded.
Need to get 114MB of archives.
After this operation, 73.7kB of additional disk space will be used.
Do you want to continue [Y/n]? y
Get:1 http://ca.archive.ubuntu.com intrepid-updates/main dash 0.5.4-9ubuntu1.1 [
Get:2 http://ca.archive.ubuntu.com intrepid-updates/main dpkg 1.14.20ubuntu6.2 [
Get:3 http://ca.archive.ubuntu.com intrepid-updates/main ghostscript 8.63.dfsg.1
Get:4 http://ca.archive.ubuntu.com intrepid-updates/main libkrb53 1.6.dfsg.4~bet
Get:5 http://ca.archive.ubuntu.com intrepid-updates/main libcups2 1.3.9-2ubuntu9
Get:6 http://ca.archive.ubuntu.com intrepid-updates/main libpng12-0 1.2.27-1ubun
Get:7 http://ca.archive.ubuntu.com intrepid-updates/main libcupsimage2 1.3.9-2ub
```

File Edit View Terminal Tabs Help

```
Get:97 http://ca.archive.ubuntu.com intrepid-updates/restricted fglrx-amdcccle 2:8.543-0ubuntu4.1 [6749kB]
Get:98 http://ca.archive.ubuntu.com intrepid-updates/main fglrx-modaliases 2:8.543-0ubuntu4.1 [10.9kB]
Get:99 http://ca.archive.ubuntu.com intrepid-updates/main gnome-system-tools 2.22.1-0ubuntu1.1 [2792kB]
Fetched 114MB in 2min47s (685kB/s)
Extracting templates from packages: 100%
Preconfiguring packages ...
(Reading database ... 132418 files and directories currently installed.)
Preparing to replace dash 0.5.4-9ubuntu1 (using ../dash_0.5.4-9ubuntu1.1_i386.deb) ...
Unpacking replacement dash ...
Processing triggers for man-db ...
Setting up dash (0.5.4-9ubuntu1.1) ...

(Reading database ... 132418 files and directories currently installed.)
Preparing to replace dpkg 1.14.20ubuntu6.1 (using ../dpkg_1.14.20ubuntu6.2_i386.deb) ...
Unpacking replacement dpkg ...
Processing triggers for man-db ...
Setting up dpkg (1.14.20ubuntu6.2) ...

(Reading database ... 132418 files and directories currently installed.)
Preparing to replace ghostscript 8.63.dfsg.1-0ubuntu6.2 (using ../ghostscript_8.63.dfsg.1-0ubuntu6.4_i386.deb) ...
Cleaning up font configuration of gs...
Cleaning up category psprint..
Cleaning up category cmap..
Cleaning up category cid..
Cleaning up category truetype..
Cleaning up category gsfontderivative..
Cleaning up category type3..
Cleaning up category type1..
Unpacking replacement ghostscript ...
Preparing to replace libkrb53 1.6.dfsg.4~beta1-3 (using ../libkrb53_1.6.dfsg.4~beta1-3ubuntu0.1_i386.deb) ...
Unpacking replacement libkrb53 ...
Preparing to replace libcups2 1.3.9-2ubuntu6.1 (using ../libcups2_1.3.9-2ubuntu9.1_i386.deb) ...
Unpacking replacement libcups2 ...
Preparing to replace libpng12-0 1.2.27-1 (using ../libpng12-0_1.2.27-1ubuntu0.1_i386.deb) ...
Unpacking replacement libpng12-0 ...
Preparing to replace libcupsimage2 1.3.9-2ubuntu6.1 (using ../libcupsimage2_1.3.9-2ubuntu9.1_i386.deb) ...
Unpacking replacement libcupsimage2 ...
Preparing to replace libgs8 8.63.dfsg.1-0ubuntu6.2 (using ../libgs8_8.63.dfsg.1-0ubuntu6.4_i386.deb) ...
Unpacking replacement libgs8 ...
```

Faire vos mises-à-jour p.2

- Graphique
 - *Fedora/CentOS/Ubuntu/Debian*: Système | Administration | Mises-à-jour
 - *Ubuntu/Debian*: Système | Administration | Mises-à-jour | Synaptic | (add the appropriate choice here)



Computer



malak's Home



Trash



82.0 GB Media



Calculator



Preferences



Administration



Help



About GNOME



About Fedora



About this Computer



Lock Screen



Log Out malak...



Shut Down...



Add/Remove Software



Authentication



Bootloader



Date & Time



Display



Firewall



Language



Network



Network Device Control



Printing



Root Password



SELinux Management



Services



Software Sources



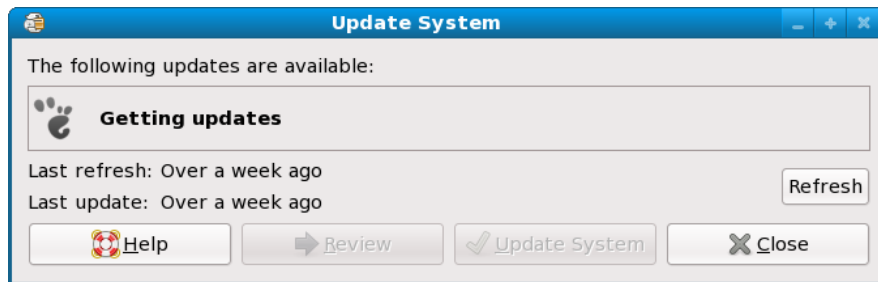
Update System



Users and Groups

Faire vos mises-à-jour _{p.3}

– *Fedora / CentOS /
Ubuntu /
Debian:*
Système |
Administration |
Mises-à-jour



Faire vos mises-à-jour p.4

- *Ubuntu/Debian*: Système | Administration | Mises-à-jour | Synaptic | (Gestionnaire de paquets) et cliquer sur “Appliquer”



Applications

Places

System



Mon May 4, 10:52 PM

Live session user


Examples
Install
507.2 MB Media Preferences > Administration > Help and Support About GNOME About Ubuntu Authorizations Computer Janitor Hardware Drivers Install Language Support Log File Viewer Login Window Network Tools Partition Editor Printing Services Software Sources Synaptic Package Manager System Monitor System Testing Time and Date Update Manager USB Startup Disk Creator Users and Groups

Synaptic Package Manager

FileEditPackageSettingsHelp

Reload

Mark All Upgrades

Apply

Properties

Quick search

Search

All

Communication

Communication (restricted)

Cross Platform

Development

Documentation

Editors

Email

Embedded Devices

GNOME Desktop Environment

Games and Amusement

Graphics

Internationalization and localization

Interpreted Computer Languages

KDE Desktop Environment

Libraries

Libraries - Development

S	Package	Installed Version	Latest Version	Description
☐	 abiword		2.6.6-0ubuntu1	efficient, featureful word processor with collaboration
☐	 abiword-common		2.6.6-0ubuntu1	efficient, featureful word processor with collaboration
☐	 abiword-help		2.6.6-0ubuntu1	online help for AbiWord
☐	 abiword-plugin-grammar		2.6.6-0ubuntu1	grammar checking plugin for AbiWord
☐	 abiword-plugin-mathview		2.6.6-0ubuntu1	equation editor plugin for AbiWord
☐	 abiword-plugins		2.6.6-0ubuntu1	transitional plugins package for AbiWord
☐	 abrowser		3.0.8+nobinonly-0ubuntu1	meta package for the unbranded abrowser
☐	 abrowser-3.0-branding		3.0.8+nobinonly-0ubuntu1	package that ships the abrowser branding

efficient, featureful word processor with collaboration

Get Screenshot

AbiWord is a full-featured, efficient word processing application. It is suitable for a wide variety of word processing tasks, and is extensible with a variety of plugins.

This package includes many of the available import/export plugins allowing AbiWord to interact with ODT, WordPerfect, and other formats. It also includes tools plugins, offering live collaboration with AbiWord users on Linux and Windows (using TCP or Jabber/XMPP), web translation and dictionary support, and more.

Additional plugins that require significant amounts of extra software to function are in the various abiword-plugin-* packages.

Sections

Status

Origin

Custom Filters

Search Results

Successfully marked available upgrades

**Installer les logiciels à
partir des dépôts de
paquetages**

Installer les logiciels à partir des dépôts de paquets

- Dans le Windows, on télécharge un logiciel de n'importe où et on peut l'installer directement; c'est un jeu complet avec tout les composants nécessaires.
- Dans le Windows, apart la partie strictement “Windows”, c'est vous le responsable de suivre tous les logiciels installés, la disponibilité des mises-à-jour et des correctifs, et de les installer -- en présumant que ceux-ci sont même disponibles!
(Admettons que certains logiciels ont un option de mise-à-jour automatique, mais seulement pour eux-mêmes.)

Installer les logiciels à partir des “repositories”

- *Dans le linux, les logiciels sont plutôt normalement installés à partir d'un gestionnaire de paquets qui:*
 - détermine les logiciels de support nécessaires, s'ils existent sur le système déjà ou non, et les cherche au nécessaire;
 - il gère les versions, mises-à-jours et correctifs;
 - il coordonne l'installation des logiciels; etc.

Installer les logiciels à partir des dépôts de paquets

- L'important à saisir c'est qu'avec *TOUT* les logiciels installés à partir de votre gestionnaire de paquets des dépôts de paquets -- que ça soit “la partie linux”, les logiciels de base tels les fontes, le “desktop”, un logiciel comme OpenOffice.org, ou Firefox -- *s'il y a un correctif à apporter*, normalement les grands distributions (Ubuntu, OpenSuse, Fedora, Debian, Mandriva, CentOS, PCLinuxOS, etc.) et les grands distributions desquels y sont dérivés, *vont sortir ces correctifs, taillés pour leur distribution, dans des brefs délais.*

Installer les logiciels à partir des dépôts de paquets

- *Et alors, quand vous avez l'option d'installer un logiciel à partir de n'importe où OU à partir d'un dépôt de paquets, il est toujours à privilégier de l'installer à partir du dépôt de paquetage.*

Installer les logiciels à partir des dépôts de paquets

- *Il se peut alors que certains logiciels que vous voulez utiliser ne font pas partie de votre distribution ou un dépôt de paquets taillé pour votre distribution: Le choix alors est de trouver une distribution qui l'a dans ses dépôts OU de tolérer ceci, MAIS dans le but de garder au minimum le nombre de logiciels non-supportés.*

Repositories/Ubuntu - Community Ubuntu Documentation - Mozilla Firefox

File Edit View History Bookmarks Tools Help

https://help.ubuntu.com/community/Repositories/Ubuntu

Google

Most Visited Release Notes Fedora Project Red Hat Free Content



ubuntu

documentation

Search

Community Documentation

Ubuntu Documentation > Community Documentation > RepositoriesUbuntu

Login to Edit

RepositoriesUbuntu

What are Repositories?

There are literally thousands of Ubuntu programs available to meet the needs of Ubuntu users. Many of these programs are stored in software archives commonly referred to as *repositories*. Repositories make it very easy to install new software onto Ubuntu using an Internet connection, while also providing a high level of security, as each program available in the repositories is thoroughly tested and built specifically for each version of Ubuntu.

The Ubuntu software repositories are organized into four separate areas or "components", according to the the level of support offered by Ubuntu and whether or not the program in question complies with Ubuntu's [Free Software Philosophy](#).

The repository components are:

- **Main** - Officially supported software.
- **Restricted** - Supported software that is not available under a completely free license.
- **Universe** - Community maintained software, i.e. not officially supported software.
- **Multiverse** - Software that is not free.

For more information regarding the Ubuntu Repository components, [click here](#).

The Ubuntu *Install* CDs contain software from the "Main" and "Restricted" components of the repositories. Once your system is made aware of the Internet-based locations for these repositories, many more software programs are available for installation. By using the software package management tools already installed on your system, you can search for, install and update any piece of software directly over the Internet, without the need for the CD.

Adding Repositories in Ubuntu

Contents

1. [What are Repositories?](#)

2. [Adding Repositories in Ubuntu](#)

3. [Ubuntu Software Tab](#)

1. [Adding Ubuntu Software Repositories](#)

2. [Download Server](#)

3. [CD-ROM/DVD](#)

4. [Third-Party Software Tab](#)

1. [Adding Canonical Partner Repositories](#)

2. [CD-ROM/DVD](#)

3. [Adding Other Repositories](#)

4. [Editing Repositories](#)

5. [Removing & Disabling Repositories](#)

5. [Updates Tab](#)

1. [Ubuntu Updates](#)

1. [Automatic Updates](#)

2. [Release Updates](#)

6. [Authentication Tab](#)

7. [Statistics](#)

8. [Integration with Add/Remove](#)

9. [Exploring the Repositories](#)

10. [Other Links](#)

Done

help.ubuntu.com

Adding Repositories in Ubuntu

This section describes how to manage software repositories in **Ubuntu 7.04 (Feisty Fawn)** ([EOL](#)), **Ubuntu 7.10 (Gutsy Gibbon)** ([EOL](#)), **Ubuntu 8.04 (Hardy Heron)**, **Ubuntu 8.10 (Intrepid Ibex)**, and **Ubuntu 9.04 (Jaunty Jackalope)**. For earlier versions of Ubuntu please refer to [Repositories/Ubuntu/Dapper](#). For **Kubuntu** please see [Kubuntu repository management](#).

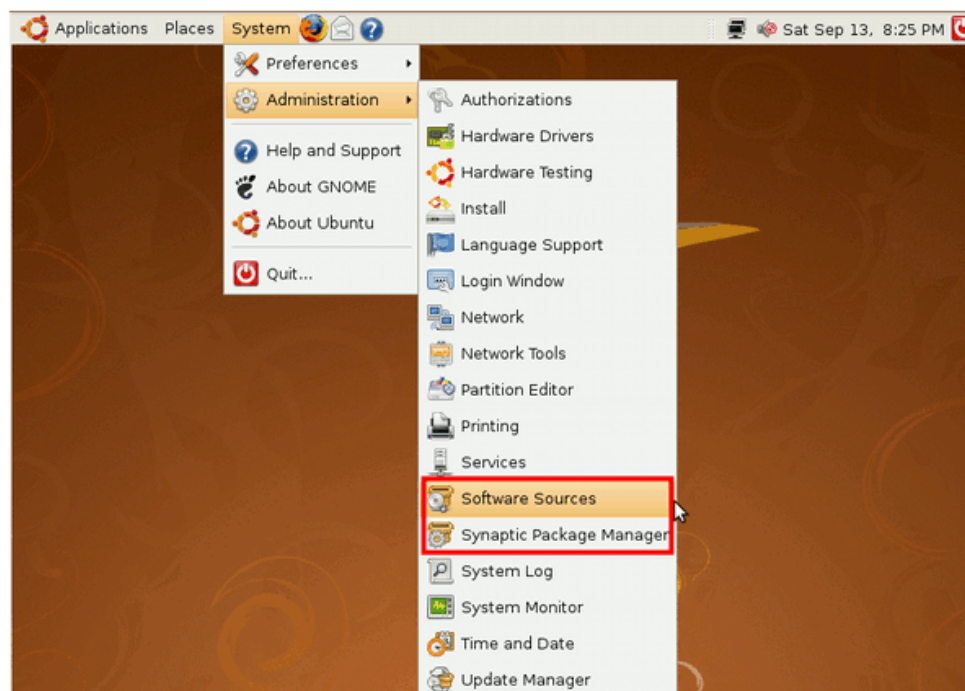
The operations described on this page modify the software repositories configuration file located at

```
/etc/apt/sources.list
```

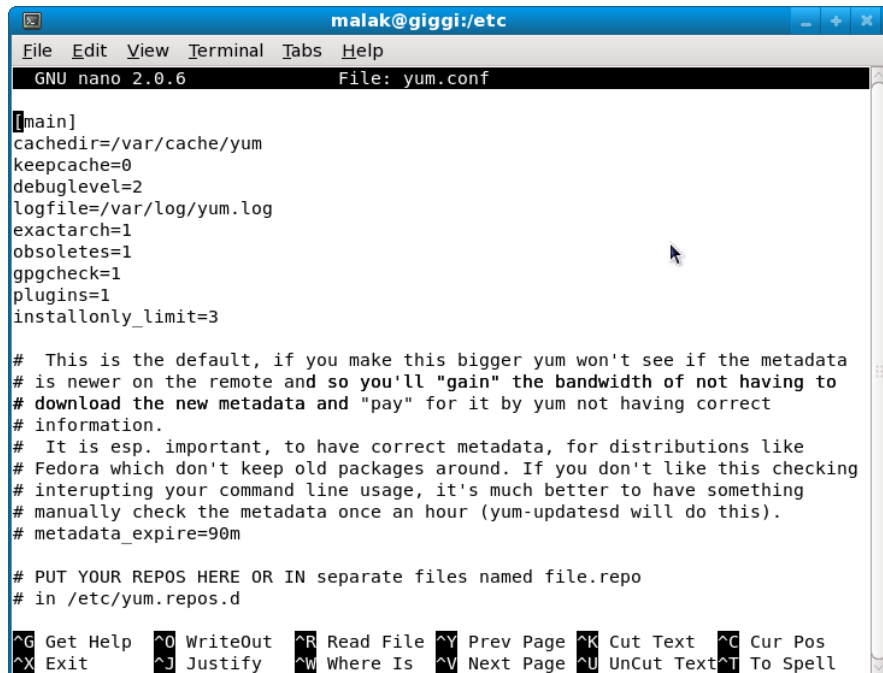
 Software sources can also be managed by making direct modifications to this file using the command line. If you prefer to use the command line instead of a graphical user interface, see [Managing Repositories from the Command Line](#) instead.

GUI-based repository management is normally accomplished via the "Software Sources" panel. This panel can be accessed via two menus:

- Software Sources: System > Administration > Software Sources.
- *Synaptic*: System > Administration > *Synaptic* >> Settings >> Repositories.
- You will have to enter your password to gain access to the page.



Les fichiers infos pour les “repositories” Red Hat / Fedora / CentOS



The screenshot shows a terminal window titled 'malak@giggi:/etc' with the GNU nano 2.0.6 editor open to the file 'yum.conf'. The file content is as follows:

```
[main]
cachedir=/var/cache/yum
keepcache=0
debuglevel=2
logfile=/var/log/yum.log
exactarch=1
obsoletes=1
gpgcheck=1
plugins=1
installonly_limit=3

# This is the default, if you make this bigger yum won't see if the metadata
# is newer on the remote and so you'll "gain" the bandwidth of not having to
# download the new metadata and "pay" for it by yum not having correct
# information.
# It is esp. important, to have correct metadata, for distributions like
# Fedora which don't keep old packages around. If you don't like this checking
# interrupting your command line usage, it's much better to have something
# manually check the metadata once an hour (yum-updatesd will do this).
# metadata_expire=90m

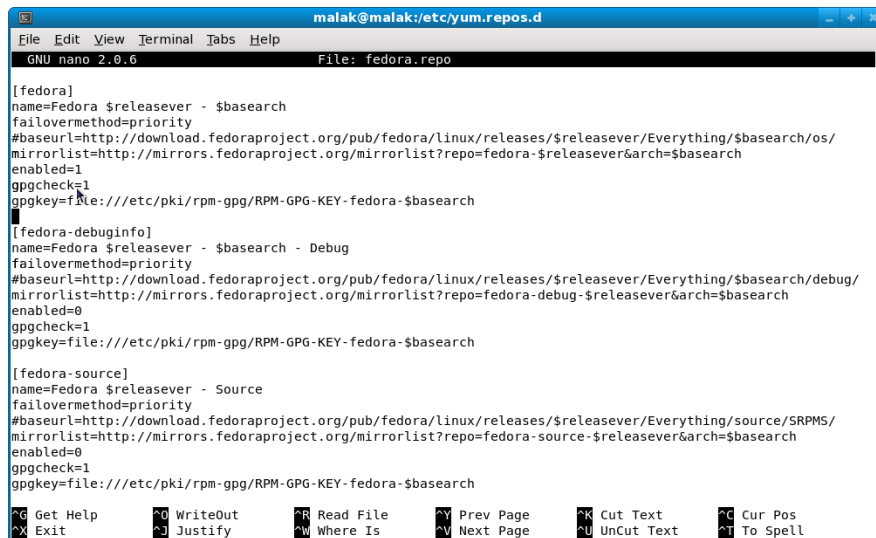
# PUT YOUR REPOS HERE OR IN separate files named file.repo
# in /etc/yum.repos.d
```

The bottom of the terminal shows the nano editor's command shortcuts: ^G Get Help, ^O WriteOut, ^R Read File, ^Y Prev Page, ^K Cut Text, ^C Cur Pos, ^X Exit, ^J Justify, ^W Where Is, ^V Next Page, ^U UnCut Text, ^T To Spell.

- Dans un système Red Hat / Fedora / Centos le fichier à modifier est `/etc/yum.conf`
- Il se peut que sur la page web du “repository”, il y a un fichier qui s'installe automatiquement qui installe les fichiers nécessaires

Les fichiers infos pour les “repositories” Red Hat / Fedora / CentOS

- Vous pourrez aussi avoir des fichiers séparés dans `/etc/yum/repo.d` qui sont nommés “file.repo” où “file” représente normalement le nom du “repository”



```
malak@malak:/etc/yum/repos.d
File Edit View Terminal Tabs Help
GNU nano 2.0.6 File: fedora.repo

[fedora]
name=Fedora $releasever - $basearch
failovermethod=priority
#baseurl=http://download.fedoraproject.org/pub/fedora/linux/releases/$releasever/Everything/$basearch/os/
mirrorlist=http://mirrors.fedoraproject.org/mirrorlist?repo=fedora-$releasever&arch=$basearch
enabled=1
gpgcheck=1
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-fedora-$basearch

[fedora-debuginfo]
name=Fedora $releasever - $basearch - Debug
failovermethod=priority
#baseurl=http://download.fedoraproject.org/pub/fedora/linux/releases/$releasever/Everything/$basearch/debug/
mirrorlist=http://mirrors.fedoraproject.org/mirrorlist?repo=fedora-debug-$releasever&arch=$basearch
enabled=0
gpgcheck=1
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-fedora-$basearch

[fedora-source]
name=Fedora $releasever - Source
failovermethod=priority
#baseurl=http://download.fedoraproject.org/pub/fedora/linux/releases/$releasever/Everything/source/SRPMS/
mirrorlist=http://mirrors.fedoraproject.org/mirrorlist?repo=fedora-source-$releasever&arch=$basearch
enabled=0
gpgcheck=1
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-fedora-$basearch

^G Get Help ^O WriteOut ^R Read File ^V Prev Page ^K Cut Text ^C Cur Pos
^X Exit ^J Justify ^W Where Is ^N Next Page ^U UnCut Text ^T To Spell
```

– *Normalement sur les pages web des “repositories” le texte à intégrer est disponible pour du copie-collage*

Les fichiers infos pour les “repositories” Ubuntu / Debian

- Dans un système Ubuntu / Debian le fichier à modifier est `/etc/apt/sources.list`
- Il se peut que sur la page web du “repository”, il y a un fichier qui s'installe automatiquement qui installe les fichiers nécessaires
- *Normalement sur les pages web des “repositories” le texte à intégrer est disponible pour du copie-collage*
- *Ubuntu organise ses “repositories” en quatre catégories, soit “main”, “restricted”, “universe” et “multiverse”*

File Edit View Terminal Help

GNU nano 2.0.9

File: sources.list

```
deb cdrom:[Ubuntu 9.04 _Jaunty Jackalope_ - Release i386 (20090420.1)]/ jaunty main restricted
deb http://archive.ubuntu.com/ubuntu jaunty main restricted
deb-src http://archive.ubuntu.com/ubuntu jaunty main restricted

deb http://security.ubuntu.com/ubuntu jaunty-security main restricted
deb-src http://security.ubuntu.com/ubuntu jaunty-security main restricted

## Major bug fix updates produced after the final release of the
## distribution.
deb http://archive.ubuntu.com/ubuntu jaunty-updates main restricted
deb-src http://archive.ubuntu.com/ubuntu jaunty-updates main restricted

## Uncomment the following two lines to add software from the 'universe'
## repository.
## N.B. software from this repository is ENTIRELY UNSUPPORTED by the Ubuntu
## team. Also, please note that software in universe WILL NOT receive any
## review or updates from the Ubuntu security team.
# deb http://archive.ubuntu.com/ubuntu jaunty universe
# deb-src http://archive.ubuntu.com/ubuntu jaunty universe
# deb http://archive.ubuntu.com/ubuntu jaunty-updates universe
# deb-src http://archive.ubuntu.com/ubuntu jaunty-updates universe
# deb http://security.ubuntu.com/ubuntu jaunty-security universe
# deb-src http://security.ubuntu.com/ubuntu jaunty-security universe

## N.B. software from this repository is ENTIRELY UNSUPPORTED by the Ubuntu
```

[Read 36 lines]

^G Get Help

^O WriteOut

^R Read File

^Y Prev Page

^K Cut Text

^C Cur Pos

^X Exit

^J Justify

^W Where Is

^V Next Page

^U UnCut Text

^T To Spell

Synaptic Package Manager

FileEditPackageSettingsHelp

Reload

Mark All Upgrades

Apply

Properties

Quick search

Search

All

Communication

Communication (restricted)

Cross Platform

Development

Documentation

Editors

Email

Embedded Devices

GNOME Desktop Environment

Games and Amusement

Graphics

Internationalization and localization

Interpreted Computer Languages

KDE Desktop Environment

Libraries

Libraries - Development

S	Package	Installed Version	Latest Version	Description
☐	abiword		2.6.6-0ubuntu1	efficient, featureful word processor with collaboration
☐	abiword-common		2.6.6-0ubuntu1	efficient, featureful word processor with collaboration
☐	abiword-help		2.6.6-0ubuntu1	online help for AbiWord
☐	abiword-plugin-grammar		2.6.6-0ubuntu1	grammar checking plugin for AbiWord
☐	abiword-plugin-mathview		2.6.6-0ubuntu1	equation editor plugin for AbiWord
☐	abiword-plugins		2.6.6-0ubuntu1	transitional plugins package for AbiWord
☐	abrowser		3.0.8+nobinonly-0ubuntu1	meta package for the unbranded abrowser
☐	abrowser-3.0-branding		3.0.8+nobinonly-0ubuntu1	package that ships the abrowser branding

efficient, featureful word processor with collaboration

Get Screenshot

AbiWord is a full-featured, efficient word processing application. It is suitable for a wide variety of word processing tasks, and is extensible with a variety of plugins.

This package includes many of the available import/export plugins allowing AbiWord to interact with ODT, WordPerfect, and other formats. It also includes tools plugins, offering live collaboration with AbiWord users on Linux and Windows (using TCP or Jabber/XMPP), web translation and dictionary support, and more.

Additional plugins that require significant amounts of extra software to function are in the various abiword-plugin-* packages.

Sections

Status

Origin

Custom Filters

Search Results

Successfully marked available upgrades

**Fermer les services qui
ne vous sont pas
nécessaires**

Fermer les services qui ne vous sont pas nécessaires

- Si vous n'accédez pas votre ordinateur à distance par certains voies, les services non-utilisés devraient être fermés afin de limiter ces pistes d'accès par des “crackers”
 - ftp
 - sshd
 - vnc
 - httpd
 - sendmail
 - netconsole



Computer



malak's Home



Trash



82.0 GB Media



Calculator



Preferences >



Administration >



Help



About GNOME



About Fedora



About this Computer



Lock Screen



Log Out malak...



Shut Down...



Add/Remove Software



Authentication



Bootloader



Date & Time



Display



Firewall



Language



Network



Network Device Control



Printing



Root Password



SELinux Management



Services



Software Sources



Update System



Users and Groups

Service Configuration



Program Service Help



Enable



Disable



Customize



Start



Stop



Restart



Help

	Name	Remarks
	NetworkManager	start and stop Ne
	anacron	run left over cron
	atd	
	auditd	
	avahi-daemon	
	bluetooth	Bluetooth service
	capi	
	chargen-dgram	
	chargen-stream	
	cpuspeed	
	crond	
	cups	The CUPS schedu
	cups-config-daemon	
	daytime-dgram	
	daytime-stream	
	denyhosts	Enable execution
	discard-dgram	
	discard-stream	
	dnsmasq	
	dund	Bluetooth Dial-Up
	echo-dgram	
	echo-stream	
	fedora-iso-live	

The **NetworkManager** service is started once, usually when the system is booted, runs in the background and wakes up when needed.

- This service is disabled.
- The status of this service is unknown.

Description

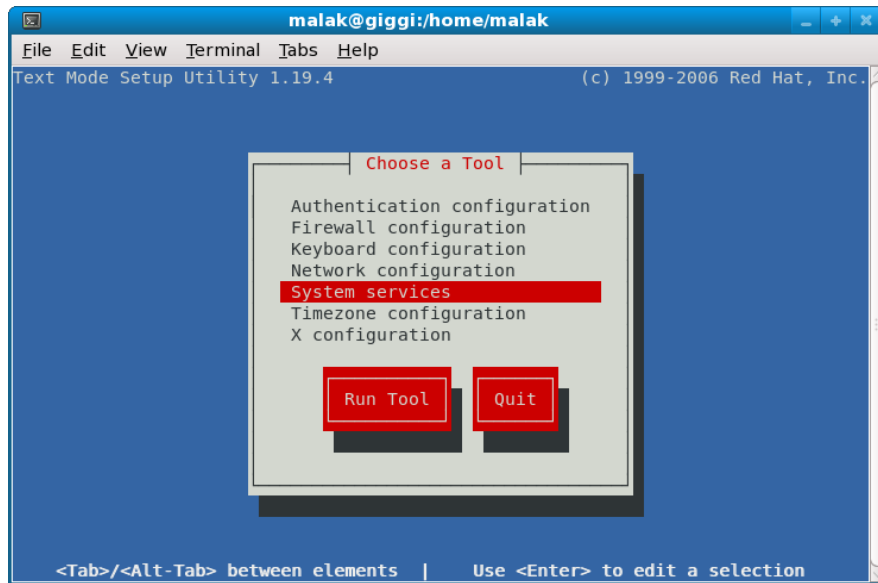
NetworkManager is a tool for easily managing network connections

Services sur Ubuntu

- Présentation des services disponibles sur Ubuntu 9.04 Jaunty Jackalope Live CD



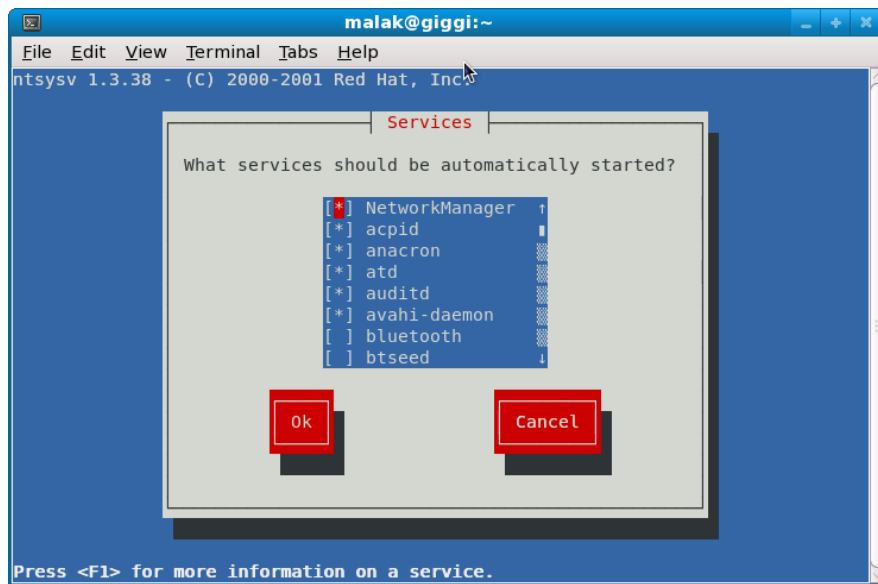
Fermer les services qui ne vous sont pas nécessaires



- Sur un système Red Hat / CentOS / Fedora et dérivés, en tant de “root” entrer setup et vous aurez ce menu; choisir “System services”

Fermer les services qui ne vous sont pas nécessaires

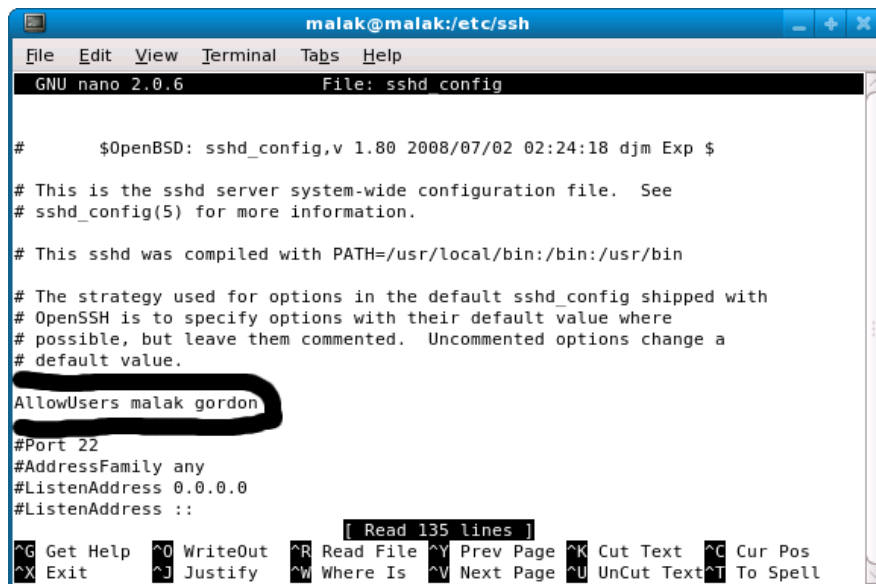
- Puis, dans la liste de services, surligner les services visés avec les flèches haut et bas, et choisir de l'avoir activé ou désactivé au démarrage du système en cliquant sur `<espace>` (un étoile indique qu'il sera activé)



Limitier l'accès SSH à certains utilisateurs

Limiter l'accès SSH à certains utilisateurs

- En tant de “root”, ouvrir le fichier `/etc/ssh/sshd_config` avec un éditeur de texte et insérer la ligne “AllowUsers” suivi par les noms d'utilisateurs autorisé, séparés par des espaces “ “
- Assurer-vous qu'il n'y a pas de “#” au début de la ligne, sinon la commande serait rendue nulle



```
malak@malak:/etc/ssh
File Edit View Terminal Tabs Help
GNU nano 2.0.6 File: sshd_config

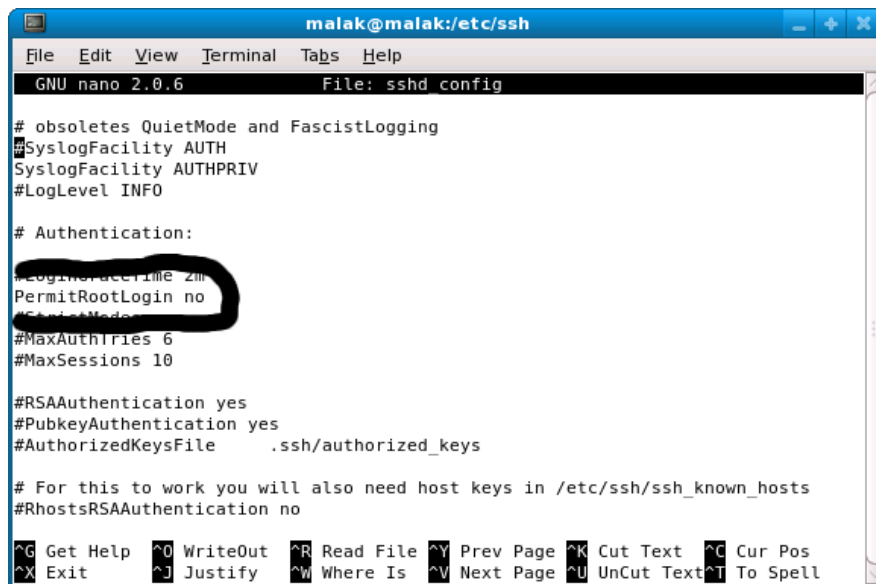
# $OpenBSD: sshd_config,v 1.80 2008/07/02 02:24:18 djm Exp $
# This is the sshd server system-wide configuration file. See
# sshd_config(5) for more information.
# This sshd was compiled with PATH=/usr/local/bin:/bin:/usr/bin
# The strategy used for options in the default sshd_config shipped with
# OpenSSH is to specify options with their default value where
# possible, but leave them commented. Uncommented options change a
# default value.
AllowUsers malak gordon
#Port 22
#AddressFamily any
#ListenAddress 0.0.0.0
#ListenAddress ::

[ Read 135 lines ]
^G Get Help ^O WriteOut ^R Read File ^Y Prev Page ^K Cut Text ^C Cur Pos
^X Exit ^J Justify ^W Where Is ^V Next Page ^U UnCut Text ^T To Spell
```

**Ne pas permettre l'accès
SSH direct au compte
“root”**

Ne pas permettre l'accès SSH direct au compte “root”

- En tant de “root”, ouvrir le fichier `/etc/ssh/sshd_config` avec un éditeur de texte et éditer la ligne “PermitRootLogin” pour que “no” est indiqué au lieu de “yes”, et supprimer le “#” au début de la ligne, sinon la commande sera rendue nulle



```
malak@malak:/etc/ssh
File Edit View Terminal Tabs Help
GNU nano 2.0.6 File: sshd config

# obsoletes QuietMode and FascistLogging
#SyslogFacility AUTH
SyslogFacility AUTHPRIV
#LogLevel INFO

# Authentication:
#LoginGraceTime 2m
PermitRootLogin no
#StrictMode yes
#MaxAuthTries 6
#MaxSessions 10

#RSAAuthentication yes
#PubkeyAuthentication yes
#AuthorizedKeysFile .ssh/authorized_keys

# For this to work you will also need host keys in /etc/ssh/ssh_known_hosts
#RhostsRSAAuthentication no

^G Get Help ^O WriteOut ^R Read File ^Y Prev Page ^K Cut Text ^C Cur Pos
^X Exit ^J Justify ^W Where Is ^V Next Page ^U UnCut Text ^T To Spell
```

```

Apr 26 13:54:26 malak sshd[23323]: pam_unix(sshd:auth): check pass; user unknown
Apr 26 13:54:26 malak sshd[23323]: pam_unix(sshd:auth): authentication failure; logname= uid=0 euid=0 tty=ssh ruser= rhost=202.105.49.16
Apr 26 13:54:26 malak sshd[23323]: pam_succeed_if(sshd:auth): error retrieving information about user tomcat
Apr 26 13:54:27 malak sshd[23320]: Failed password for invalid user root from 202.105.49.16 port 43998 ssh2
Apr 26 13:54:28 malak sshd[23323]: Failed password for invalid user tomcat from 202.105.49.16 port 42446 ssh2
Apr 26 13:54:28 malak sshd[23322]: Received disconnect from 202.105.49.16: 11: Bye Bye
Apr 26 13:54:28 malak sshd[23321]: Invalid user cady from 202.105.49.16
Apr 26 13:54:28 malak sshd[23325]: input_userauth_request: invalid user cady
Apr 26 13:54:28 malak sshd[23321]: pam_unix(sshd:auth): check pass; user unknown
Apr 26 13:54:28 malak sshd[23321]: pam_unix(sshd:auth): authentication failure; logname= uid=0 euid=0 tty=ssh ruser= rhost=202.105.49.16
Apr 26 13:54:28 malak sshd[23321]: pam_succeed_if(sshd:auth): error retrieving information about user cady
Apr 26 13:54:28 malak sshd[23324]: Received disconnect from 202.105.49.16: 11: Bye Bye
Apr 26 13:54:30 malak sshd[23326]: Invalid user marine from 202.105.49.16
Apr 26 13:54:30 malak sshd[23327]: input_userauth_request: invalid user marine
Apr 26 13:54:30 malak sshd[23326]: pam_unix(sshd:auth): check pass; user unknown
Apr 26 13:54:30 malak sshd[23326]: pam_unix(sshd:auth): authentication failure; logname= uid=0 euid=0 tty=ssh ruser= rhost=202.105.49.16
Apr 26 13:54:30 malak sshd[23326]: pam_succeed_if(sshd:auth): error retrieving information about user marine
Apr 26 13:54:30 malak sshd[23325]: Connection closed by 202.105.49.16
Apr 26 13:54:30 malak sshd[23321]:
Apr 26 13:54:31 malak sshd[23328]: User root from 202.105.49.16 not allowed because not listed in AllowUsers
Apr 26 13:54:31 malak sshd[23329]:
Apr 26 13:54:31 malak sshd[23328]: pam_unix(sshd:auth): authentication failure; logname= uid=0 euid=0 tty=ssh ruser= rhost=202.105.49.16 user=$
Apr 26 13:54:31 malak sshd[23326]: Failed password for invalid user marine from 202.105.49.16 port 45914 ssh2
Apr 26 13:54:32 malak sshd[23327]: Received disconnect from 202.105.49.16: 11: Bye Bye
Apr 26 13:54:33 malak sshd[23328]: Failed password for invalid user root from 202.105.49.16 port 49276 ssh2
Apr 26 13:54:33 malak sshd[23329]: Received disconnect from 202.105.49.16: 11: Bye Bye
Apr 26 13:54:36 malak sshd[23330]: Invalid user global from 202.105.49.16
Apr 26 13:54:36 malak sshd[23331]: input_userauth_request: invalid user global
Apr 26 13:54:36 malak sshd[23330]: pam_unix(sshd:auth): check pass; user unknown
Apr 26 13:54:36 malak sshd[23330]: pam_unix(sshd:auth): authentication failure; logname= uid=0 euid=0 tty=ssh ruser= rhost=202.105.49.16
Apr 26 13:54:36 malak sshd[23330]: pam_succeed_if(sshd:auth): error retrieving information about user global
Apr 26 13:54:37 malak sshd[23332]: User root from 202.105.49.16 not allowed because not listed in AllowUsers
Apr 26 13:54:37 malak sshd[23333]: input_userauth_request: invalid user root
Apr 26 13:54:37 malak sshd[23332]: pam_unix(sshd:auth): authentication failure; logname= uid=0 euid=0 tty=ssh ruser= rhost=202.105.49.16 user=$
Apr 26 13:54:38 malak sshd[23330]: Failed password for invalid user global from 202.105.49.16 port 49425 ssh2
Apr 26 13:54:38 malak sshd[23334]: Invalid user marine from 202.105.49.16
Apr 26 13:54:38 malak sshd[23335]: input_userauth_request: invalid user marine
Apr 26 13:54:38 malak sshd[23331]: Received disconnect from 202.105.49.16: 11: Bye Bye
Apr 26 13:54:38 malak sshd[23334]: pam_unix(sshd:auth): check pass; user unknown
Apr 26 13:54:38 malak sshd[23334]: pam_unix(sshd:auth): authentication failure; logname= uid=0 euid=0 tty=ssh ruser= rhost=202.105.49.16
Apr 26 13:54:38 malak sshd[23334]: pam_succeed_if(sshd:auth): error retrieving information about user marine
Apr 26 13:54:39 malak sshd[23332]: Failed password for invalid user root from 202.105.49.16 port 53047 ssh2
Apr 26 13:54:39 malak sshd[23333]: Received disconnect from 202.105.49.16: 11: Bye Bye

```

Installer “denyhosts”

Installer “denyhosts”

- denyhosts est un logiciel en scripte Python qui analyse les journaux de système pour le serveur sshd afin de déterminer les adresses internet (123.456.789.012) desquelles des essais répétés ratés de faire une connexion par ssh proviennent. Il détermine aussi les comptes visés. Il détermine la fréquence d'essais de chaque adresse internet.
- Par la suite d'une campagne répétée d'attaque contre votre système d'une adresse internet, il modifie le fichier /etc/hosts.deny avec son adresse internet pour que le système refuse des demandes provenant de cette adresse.

Installer “denyhosts”

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- Par la suite d'une campagne répétée d'attaque contre votre système d'une adresse internet, il modifie le fichier /etc/hosts.deny avec son adresse internet pour que le système refuse des demandes provenant de cette adresse. À noter que DenyHosts modifie le fichier spécifiquement pour le ssh, mais ce fichier peut agir pour tout service ou n'importe quel autre service.

```
#
# hosts.deny This file contains access rules which are used to
# deny connections to network services that either use
# the tcp_wrappers library or that have been
# started through a tcp_wrappers-enabled xinetd.
#
# The rules in this file can also be set up in
# /etc/hosts.allow with a 'deny' option instead.
#
# See 'man 5 hosts_options' and 'man 5 hosts_access'
# for information on rule syntax.
# See 'man tcpd' for information on tcp_wrappers
#
# The portmap line is redundant, but it is left to remind you that
# the new secure portmap uses hosts.deny and hosts.allow. In particular
# you should know that NFS uses portmap!
#
# DenyHosts: Sun Apr 26 22:07:50 2009 | sshd: 202.105.49.16
sshd: 202.105.49.16
# DenyHosts: Mon Apr 27 00:35:22 2009 | sshd: 211.103.181.208
sshd: 211.103.181.208
# DenyHosts: Mon Apr 27 05:18:22 2009 | sshd: 216.160.205.138
sshd: 216.160.205.138
# DenyHosts: Mon Apr 27 14:43:55 2009 | sshd: 59.125.137.41
sshd: 59.125.137.41
# DenyHosts: Mon Apr 27 20:28:56 2009 | sshd: 218.240.43.35
sshd: 218.240.43.35
# DenyHosts: Tue Apr 28 02:20:57 2009 | sshd: 74.213.167.92
sshd: 74.213.167.92
# DenyHosts: Tue Apr 28 04:56:00 2009 | sshd: 218.213.69.172
sshd: 218.213.69.172
# DenyHosts: Tue Apr 28 09:47:32 2009 | sshd: 202.125.47.222
sshd: 202.125.47.222
# DenyHosts: Tue Apr 28 17:24:03 2009 | sshd: 202.104.151.151
sshd: 202.104.151.151
# DenyHosts: Wed Apr 29 02:50:07 2009 | sshd: 221.8.79.67
sshd: 221.8.79.67
# DenyHosts: Thu Apr 30 21:19:08 2009 | sshd: 202.52.108.220
sshd: 202.52.108.220
# DenyHosts: Fri May 1 12:47:09 2009 | sshd: 115.127.0.130
sshd: 115.127.0.130
```

File Edit View Terminal Tabs Help

```
[malak@giggi ~]$ su
```

```
Password:
```

```
[root@giggi malak]# yum install denyhosts
```

```
Loaded plugins: refresh-packagekit
```

```
Setting up Install Process
```

```
Parsing package install arguments
```

```
Resolving Dependencies
```

```
--> Running transaction check
```

```
---> Package denyhosts.noarch 0:2.6-13.fc10 set to be updated
```

```
--> Finished Dependency Resolution
```

```
Dependencies Resolved
```

Package	Arch	Version	Repository	Size
=====				
Installing:				
denyhosts	noarch	2.6-13.fc10	fedora	97 k

```
Transaction Summary
```

```
=====
```

Install	1 Package(s)
Update	0 Package(s)
Remove	0 Package(s)

```
Total download size: 97 k
```

```
Is this ok [y/N]: y
```

```
Downloading Packages:
```

```
denyhosts-2.6-13.fc10.noarch.rpm | 97 kB 00:00
```

```
Running rpm_check_debug
```

```
Running Transaction Test
```

```
Finished Transaction Test
```

```
Transaction Test Succeeded
```

```
Running Transaction
```

```
Installing : denyhosts 1/1
```

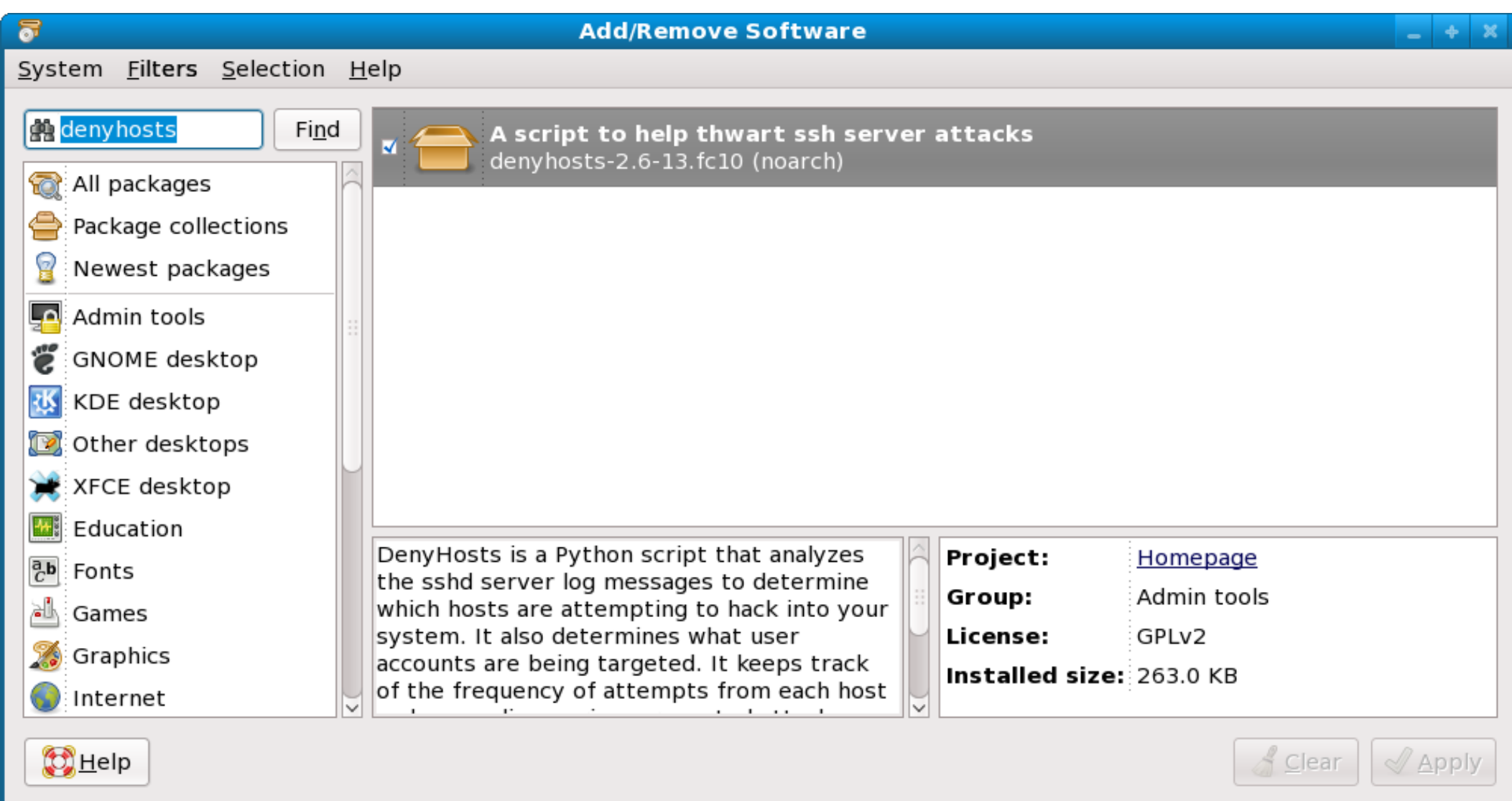
```
Installed:
```

```
denyhosts.noarch 0:2.6-13.fc10
```

```
Complete!
```

```
[root@giggi malak]#
```


Installer “denyhosts”

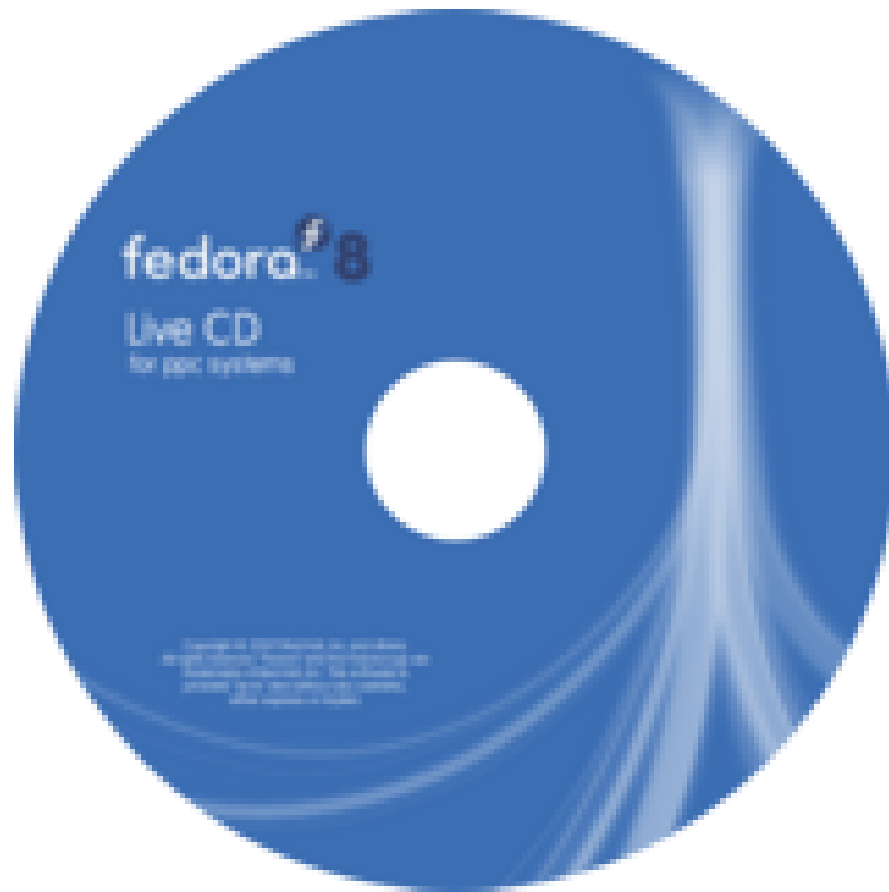


**Protéger l'intégrité
physique de votre
ordinateur**

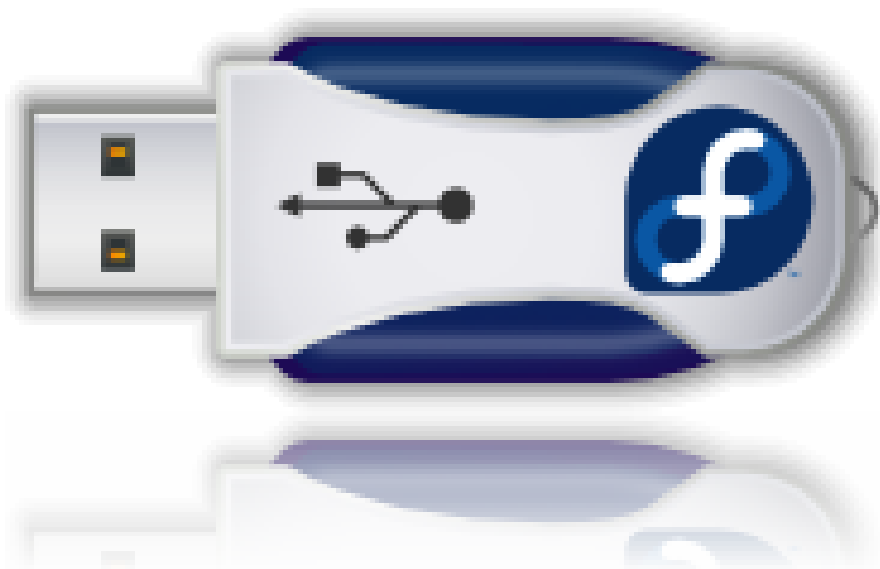
Protéger l'intégrité physique de votre ordinateur

- Que vous êtes débutant ou expert, il y a toujours quelqu'un qui connaît plus que vous quant à un sujet donné ... donner leur accès physique à votre clavier, ils pourraient faire toutes sortes de mal, et/ou vol d'informations personnelles, et/ou effacer vos fichiers, et/ou installer des logiciels suspects, etc. ...
- *Ça vous semble banale comme suggestion?*

Insérez une de ceux-ci dans votre ordinateur...



Ou encore une de ceux-ci:



Hé bein on le discute, pourquoi pas apporter son propre disque dur, soit un HDD USB, soit un HDD traditionnel ...



Protégez votre ordinateur!

- C'est assez facile de fermer et/ou débrancher votre ordinateur et insérer un “Live-CD” ou un “Live-USB”, grandement en vogue de ces jours, ou même une disque dure USB, ou même si on a le temps à passer, une disque dure traditionnelle afin d'avoir accès à vos fichiers personnels ou afin d'installer des logiciels néfastes ...

... et le match est perdu!

Merci!

Questions et discussion

Noter bien:

- Cette présentation a été composé principalement en avril, 2009, et a été complété en août 2009. Elle a été composé sur des systèmes Fedora 9, 10, et 11. Les saisies viennent de Fedora 9, 10 et 11, et Ubuntu 9.04;
- Je ne suis pas un expert en linux; tout mes conseils ici résument un petit peu de ce que j'ai appris
- des 40 ans de sagesse cumulé dans la culture Unix, le gros bon sens, et le résultat d'y avoir parlé au sujet avec un professionnel en informatique, dont c'était moi qui lui fournissait les conseils!

Noter bien:

- Sans que je les ai soumis, plusieurs de mes conseils se sont parus peu après dans la parution juin 2009 de Linux Format!