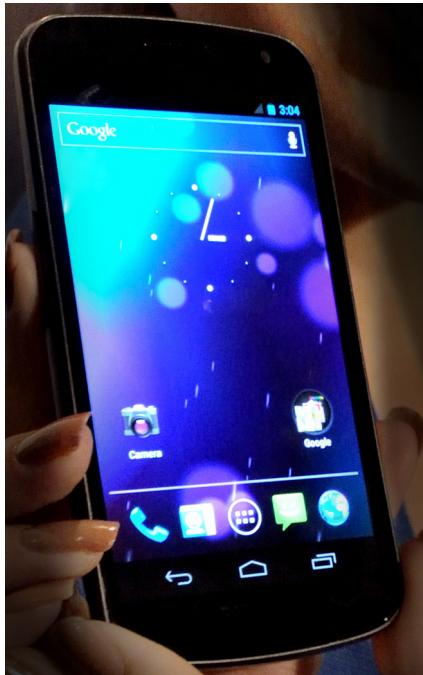


Corso GNU/Linux base - Lezione 5

Login e logout utente root
Gestione di utenti e password
Gestione dei permessi
Amministrazione remota dei sistemi: SSH

Sistema multi-utente

- Perchè un sistema multi-utente?



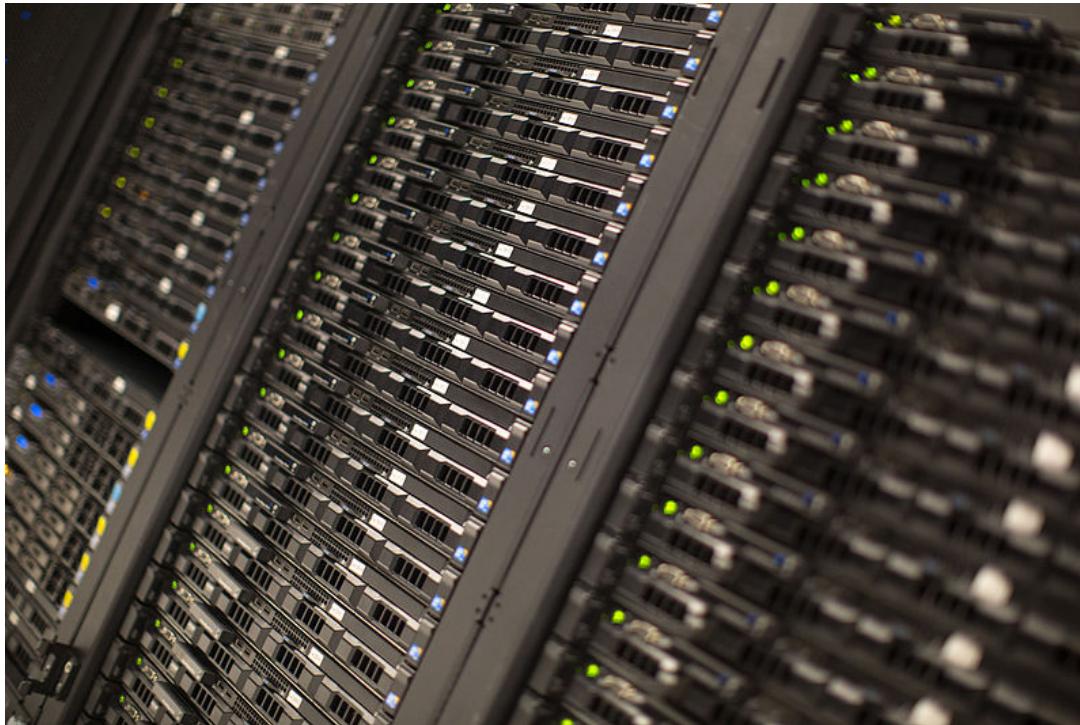
Sistema multi-utente

- Perchè più utenti dovrebbero accedere contemporaneamente?



Sistema multi-utente

- **Perchè Come possono più utenti lavorare contemporaneamente?**



Server cluster Wikimedia Foundation

Sistema multi-utente

- **qualsiasi sistema GNU/Linux**

- Permette l'isolamento degli utenti
- Permette la collaborazione in gruppi
- Permette una capillare gestione dei permessi

→ **La figura dell'amministratore di sistema**

- È una figura tecnica
 - Non rendete il vostro capo sysadmin
- Gestire privacy e sicurezza
- Manutenzione software

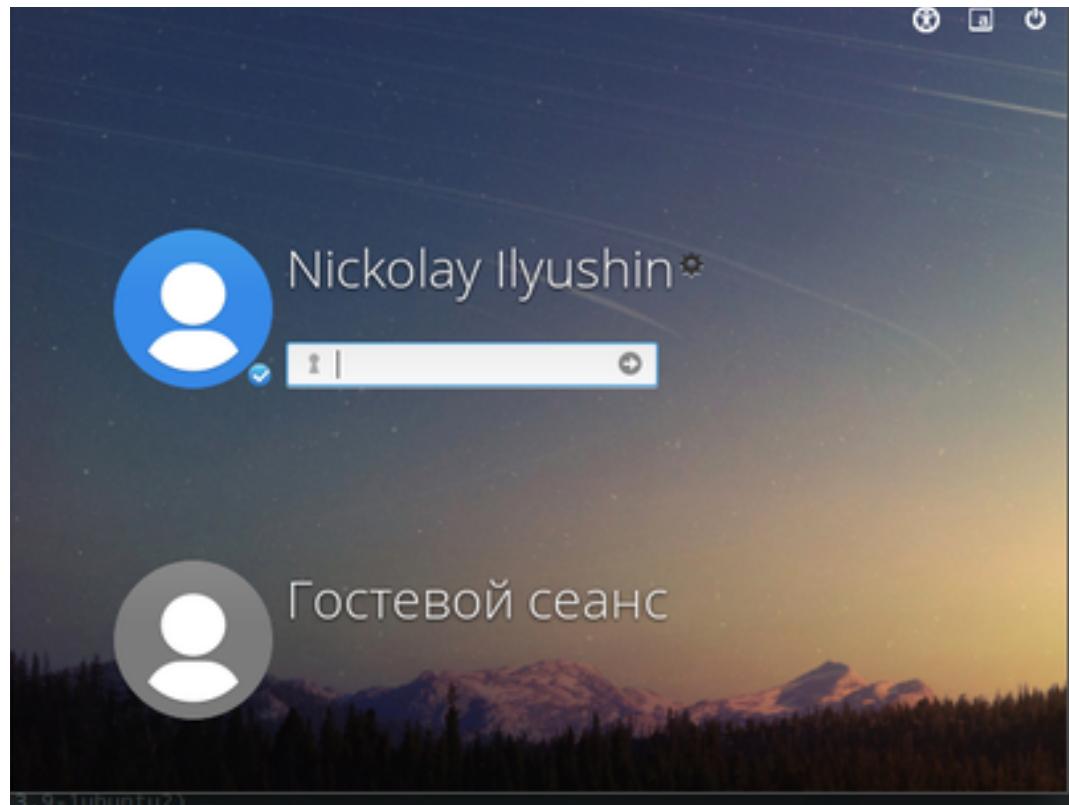


Accesso / cambio di utenza

- **Gli utenti devono poter entrare e uscire dalla sessione**
- **Gli utenti possono lavorare in contemporanea**
 - Amministratore compreso

Accesso / cambio di utente

- Tramite interfaccia grafica desktop



Gestore di login LightDM in Elementary OS

Accesso / cambio di utente

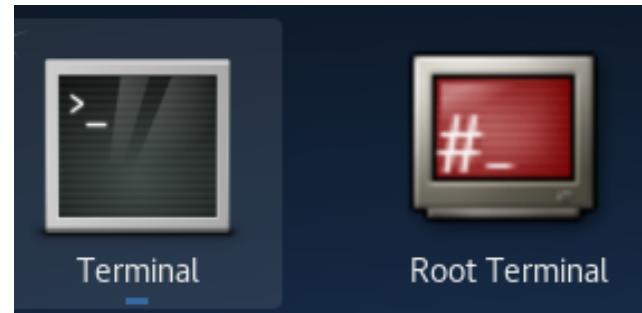
- Tramite interfaccia a riga di comando



Terminale di emergenza in
Devuan GNU/Linux

Accesso / cambio di utente

- **Ad accesso desktop effettuato**
 - Tramite emulatore di terminale grafico



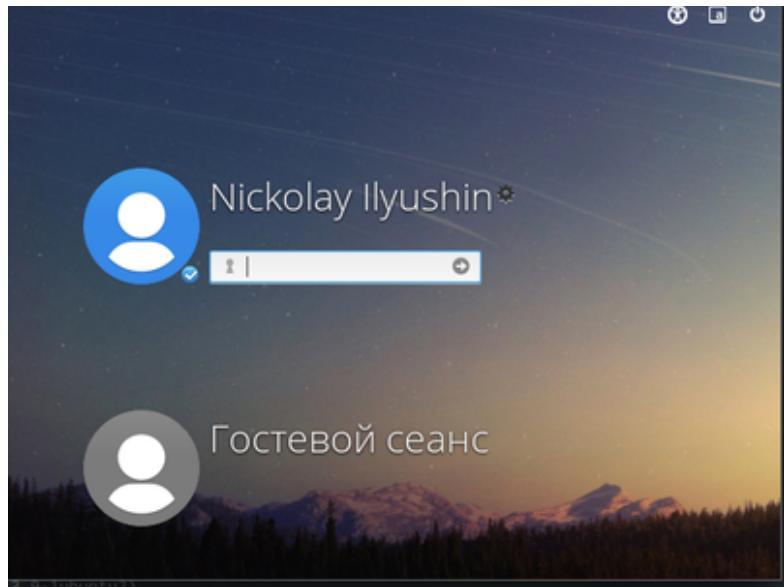
```
boz@reyboz-station: ~  
boz@reyboz-station:~$ whoami  
boz  
boz@reyboz-station:~$ □
```

```
boz@reyboz-station: ~  
root@reyboz-station:~# whoami  
root  
root@reyboz-station:~# █
```



Accesso da utente `root`

- **Come può loggarsi l'utente root?**
 - Anche da interfaccia grafica desktop?
 - Cosa comporta?



Accesso da utente `root`

- Login tramite comando CLI `su`

```
boz@reyboz-station: ~ ×  
boz@reyboz-station:~$ whoami  
boz  
boz@reyboz-station:~$ su  
Password:  
root@reyboz-station:/home/boz# whoami  
root  
root@reyboz-station:/home/boz# exit  
exit  
boz@reyboz-station:~$ whoami  
boz  
boz@reyboz-station:~$ █
```

Diventare root da CLI: su VS sudo

- Login tramite comando `sudo`

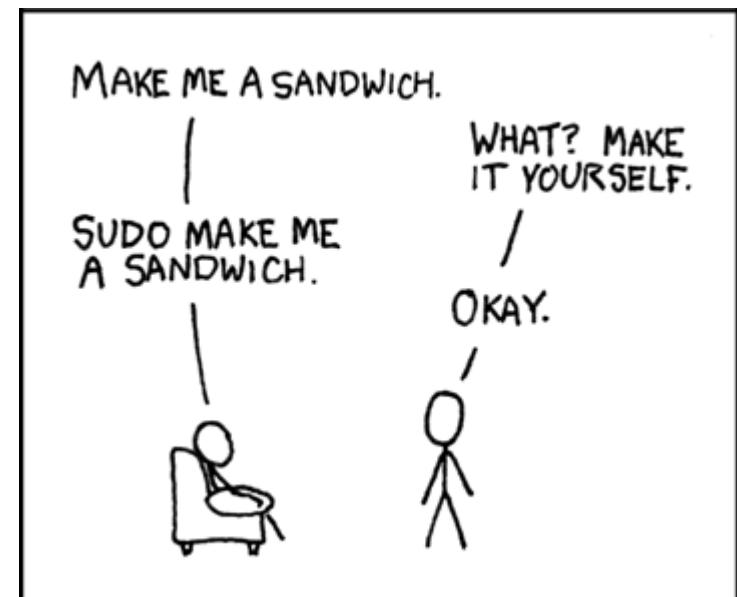
```
boz@reyboz-station: ~  
  
boz@reyboz-station:~$ whoami  
boz  
boz@reyboz-station:~$ sudo su  
[sudo] password for boz:  
root@reyboz-station:/home/boz# whoami  
root  
root@reyboz-station:/home/boz# exit  
exit  
boz@reyboz-station:~$ whoami  
boz  
boz@reyboz-station:~$ █
```

```
boz@reyboz-station: ~  
  
boz@reyboz-station:~$ whoami  
boz  
boz@reyboz-station:~$ sudo -i  
root@reyboz-station:~# whoami  
root  
root@reyboz-station:~# exit  
logout  
boz@reyboz-station:~$ whoami  
boz  
boz@reyboz-station:~$ █
```

Accesso da utente `root`

- Operazioni tramite comando CLI
`sudo`

```
boz@reyboz-station: ~  
  
boz@reyboz-station:~$ whoami  
boz  
boz@reyboz-station:~$ sudo whoami  
[sudo] password for boz:  
root  
boz@reyboz-station:~$
```



<https://www.xkcd.com/149/>

Diventare root da CLI: su VS sudo

- ***su [utente]***

- Esegue un vero e proprio login
- Richiede nome utente e password
 - Nome utente predefinito: root
 - Non tutti gli utenti possono loggarsi

- ***sudo***

- Ideato per concedere temporanei privilegi
- Non tutti gli utenti sono abilitati a lanciarlo



Diventare root da CLI: su VS sudo

- Chi può eseguire `su`?

```
guendalina@reyboz-station: /home/boz      x
boz@reyboz-station:~$ whoami
boz
boz@reyboz-station:~$ su guendalina
Password:
guendalina@reyboz-station:/home/boz$ whoami
guendalina
guendalina@reyboz-station:/home/boz$ L
```

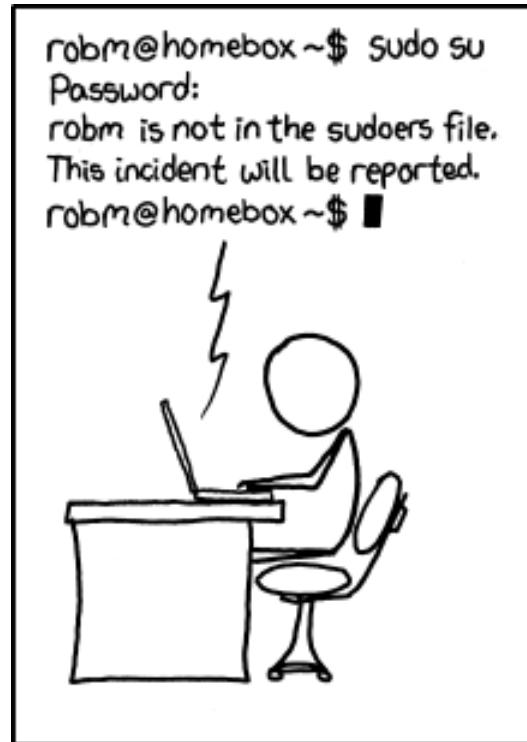
Diventare root da CLI: su VS sudo

- Chi può eseguire `sudo`?

```
guendalina@reyboz-station: /home/boz
guendalina@reyboz-station:/home/boz$ sudo rm -Rf /
We trust you have received the usual lecture from the local System
Administrator. It usually boils down to these three things:
#1) Respect the privacy of others.
#2) Think before you type.
#3) With great power comes great responsibility.

[sudo] password for guendalina:
guendalina is not in the sudoers file. This incident will be reported.
guendalina@reyboz-station:/home/boz$ █
```

Diventare root da CLI: su VS sudo



<https://xkcd.com/838/>

Gestione dei permessi

- **Gestione capillare dei permessi**
 - Isolamento degli utenti
 - Collaborazione fra utenti
 - È possibile far parte di un gruppo

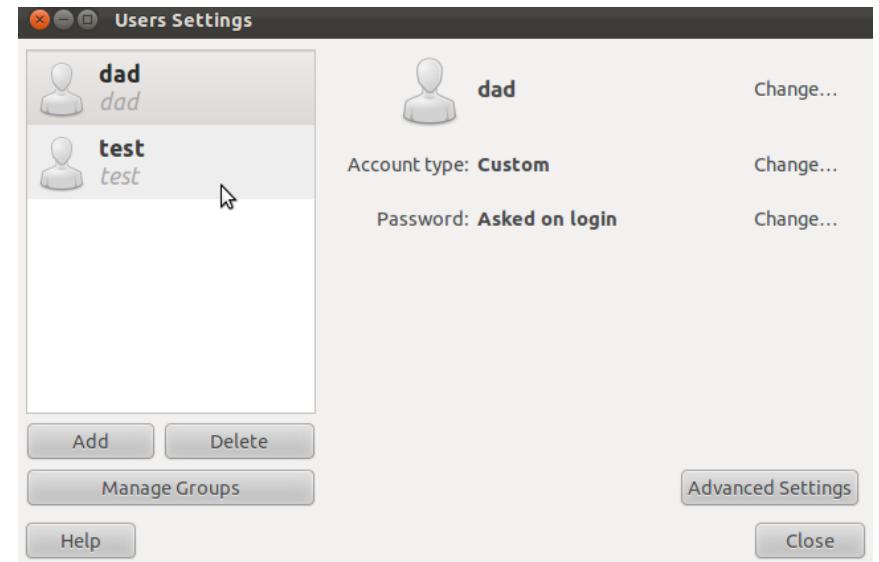


Gestione di utenti e password

- Da interfaccia grafica

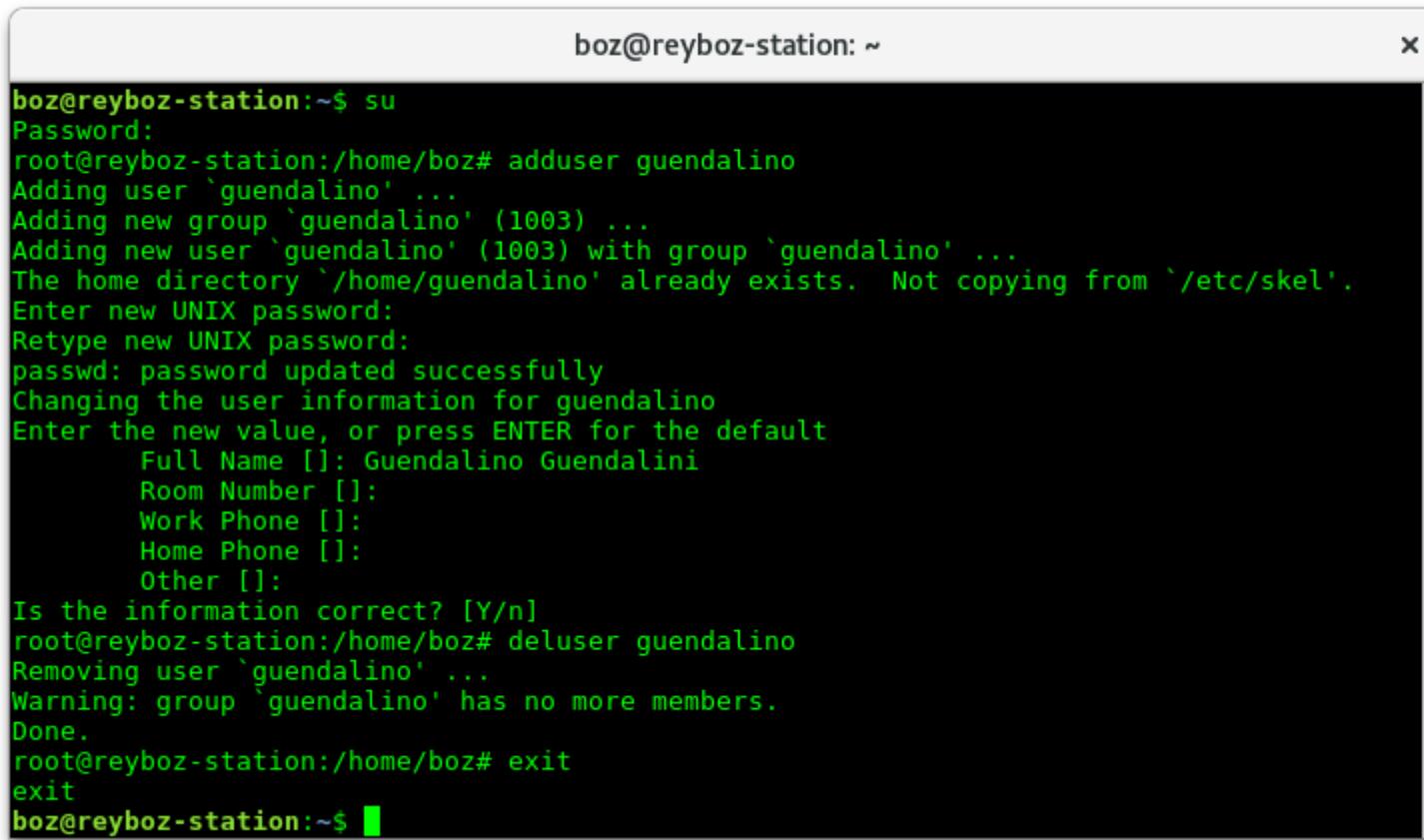


Gestione dei permessi con GNOME system tools in Ubuntu GNOME



Gestione di utenti e password

- Da riga di comando



A terminal window titled "boz@reyboz-station: ~" showing the creation and deletion of a user account named "guendalino". The session starts with "su" to become root, followed by "adduser guendalino", which adds the user and creates a group with the same name. It then asks for a new password and updates it successfully. The user information is then modified, asking for a full name ("Guendalino Guendalini"), room number, work phone, home phone, and other details. Finally, the user is asked if the information is correct, and "Y" is entered. The user is then deleted with "deluser guendalino", and a warning message is displayed about the group being empty. The session ends with "exit".

```
boz@reyboz-station:~$ su
Password:
root@reyboz-station:/home/boz# adduser guendalino
Adding user `guendalino' ...
Adding new group `guendalino' (1003) ...
Adding new user `guendalino' (1003) with group `guendalino' ...
The home directory `/home/guendalino' already exists. Not copying from `/etc/skel'.
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
Changing the user information for guendalino
Enter the new value, or press ENTER for the default
    Full Name []: Guendalino Guendalini
    Room Number []:
    Work Phone []:
    Home Phone []:
    Other []:
Is the information correct? [Y/n]
root@reyboz-station:/home/boz# deluser guendalino
Removing user `guendalino' ...
Warning: group `guendalino' has no more members.
Done.
root@reyboz-station:/home/boz# exit
exit
boz@reyboz-station:~$
```

Gestione dei permessi

- **Gestione capillare dei permessi:**
 - Chi può leggere il file?
 - Chi può scriverci dentro?
 - Chi può eseguirlo come comando?

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