

Grado en Ingeniería Informática	Laboratorio – <b>Práctica 3</b>	<b>SI</b>
<b>Sistemas Informáticos</b>	Curso 2024/25	

# User management

## Main goal

- Create and remove user properly.
- Understand basic concepts concerning user management.

1. Create a new group named “prueba” with GID 5000, do not use any automatization tool.
2. Create (without automatization tools, neither adduser or useradd command) a new user named “manolito” and add it to the group “prueba”.
  - a. Its UID will be 5001. Add phone number, mail, etc... in GECOS (`chfn`). The kind of shell will be `/bin/bash`. Do not forget to create and configure the working directory (`$HOME`).
  - b. Add a temporal password that the user must change during the first system login. Password must be changed every 3 months. Account expires 1<sup>st</sup> January 2026.
3. Log to the new account generated through a different terminal and change the password by an “easy” one (4-5 numbers?)<sup>1</sup>.
4. As user **manolito**, try to break the password of the rest of system users with a cracking tool (over `/etc/shadow`)<sup>2</sup>. What problems does a normal user face in order to use this tool?
5. Try it now, but as user root.
6. Remove the user “manolito” and all its files in the system (not only those in its `$HOME`)
7. Create the account again but now making use of automatization tools. Check the appropriate files to see that everything is set as you want.
8. Enable the *cracklib*<sup>3</sup> module in PAM for the command `passwd`, configure it to force the size of new passwords to at least 10 characters and check its utility (try this one, that should no work: `Qw12$e`).
9. Configure `sudo` correctly to allow the new user to create new users by its own.
10. Add to that user the possibility to reboot the system from command line.

<sup>1</sup> Warning, the `pam_unix` module imposes some restrictions to the password that might need to be modified. Take a look at its man page to eliminate length and case restrictions.

<sup>2</sup> Clue: John the Ripper. One more clue: a Debian package exists (`john`).

<sup>3</sup> Install the `cracklib` package previously: `apt install libpam-cracklib`

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## Homework (for training purpose): Shell scripting

1. Download the file [www.ce.unican.es/SI/LabFiles/Lista.txt](http://www.ce.unican.es/SI/LabFiles/Lista.txt). Given the student list of this course, create a script able to automatically create a new account for each student, with the following requirements for each account:
  - a. user name: surname + first name character (like unican mail). Use this name for the \$HOME directory.
  - b. Password 1<sup>st</sup> and 3<sup>rd</sup> character of its name and surnames (6 chars total).
  - c. The kind of shell will be `/bin/bash`
  - d. Account expires at the end of the course..
  - e. Add additional information... in GECOS (`chfn`)