COMPUTER SCIENCE DEPARTMENT LABORATORY
https://www.lab.inf.uc3m.es/en/home

Connecting to Picasso Remote Lab
https://picasso.lab.inf.uc3m.es

Version 1.0 (January 2024)

Index

1. Laboratory account status

In this guide you will find the procedure to connect to the **Linux virtual classroom** of the Computer Science Department Laboratory.

As you already know, you need a **Laboratory account** to access to this facility. If you do not have an account yet, you must complete the registration at this link.

https://www.lab.inf.uc3m.es/en/services/account-opening/

Account opening

In this page you could open an account to use the computer facilities from the Laboratory of the Computer Science and Engineering Department in **Leganes Campus** (4.0.F16, 4.0.F18, 2.2.C05 and 2.2.C06).

Only students and professors who have at least one subject given at those laboratories are allowed to have an account. Before its opening, official subject lists of each degree will be checked in order to prove its veracity.

Open your account

Campus Global user:
Campus Global password:
Note: The form button will be activated when the given password satisfies the security requirements.

Laboratory password:
Complexity level: It is not secure enough
Repeat Laboratory password:

Request account Clear

Account status

Here you could see your account status. Please, introduce your NIA and you could see the result.

Campus Global user:
Campus Global password:

Status

Illustration 1. Account opening and account status checking

If you already have an account but you **cannot remember your password**, you will be able to go to this link and change it.

https://www.lab.inf.uc3m.es/en/services/password-change/

Password Change

At this page you could change your Linux/Windows user password belonging to the Computer Science Department Laboratory.

Campus Global user:
Campus Global password:
Note: The form button will be activated when the given password satisfies the security requirements.

Laboratory password:
Complexity Level: It is not secure enough
Repeat Laboratory password:

Update password Clear

Illustration 2. Password changing

2. Picasso access

In this part, you will see the next step to access to the **Linux and Windows virtual classroom** from anywhere you are. You only **need** an **Internet browser**, such as Firefox or Chrome.

Moreover, as an additional layer of security in this environment, one of two these conditions must be met:

- Connect within the UC3M network, with Eduroam WiFi or with a physical wired connection.

- Connect through the UC3M VPN.

When you launch your Internet browser, you should go to this link.

https://picasso.lab.inf.uc3m.es

2.1. Login

Once you have an account, you can access to the remote system with your **Lab login and password**.

You will see this login page:

Illustration 3: Login view

2.2 Choosing your environment

When you have correctly introduced your credentials, you will be automatically redirected to a computer in the virtual laboratory classroom.

Illustration 4: Picasso Remote Desktop view

2.2.1 Debian Virtual Room (Aula Virtual Debian)

If you want to use GNU/Linux, you will need to click on the "Aula Virtual Debian (Escritorio)" selection. Automatically you will be redirected to an Debian Linux available desktop.
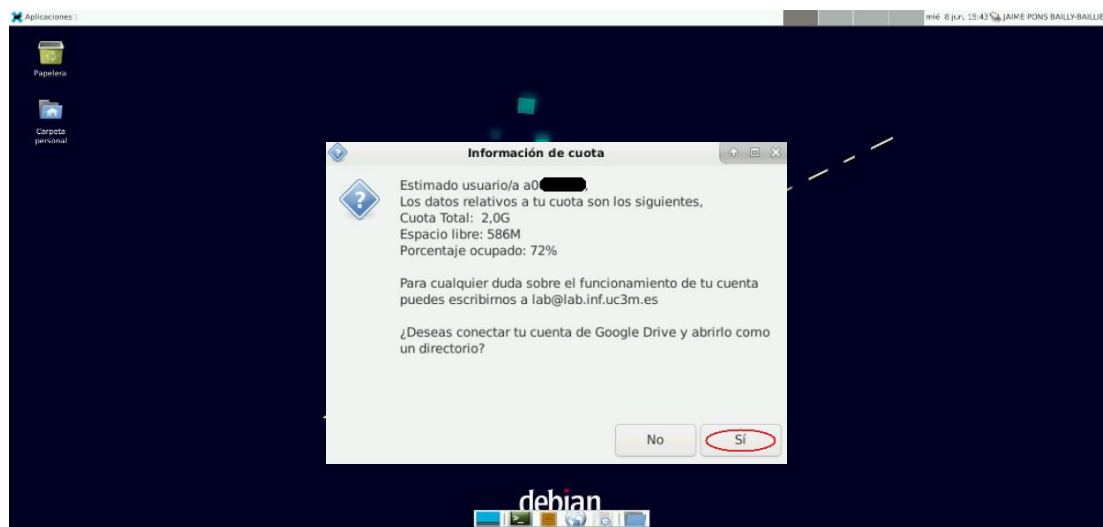

Illustration 5: Linux Remote Desktop view and google Drive information.
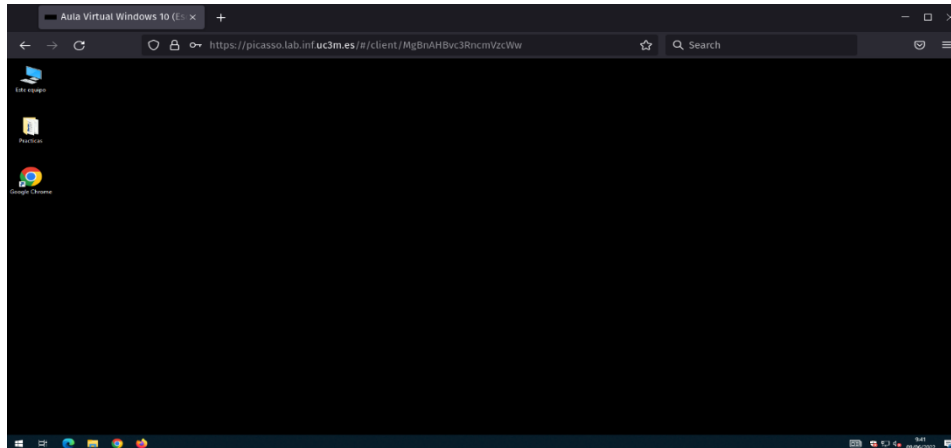
2.2.2 Windows Virtual Room

Illustration 6: Windows remote view

If you prefer to use Windows, you should choose "Aula Virtual Windows 10 (Escritorio)". In your browser you will see an environment like the one in the image above.

2.2.3 Guernika SSH

Guernika is a GNU/Linux environment but without a desktop. So that, you can use a Linux terminal with you personal account.

Remember that to access Guernika Linux environment, you can also use your own SSH client as described in this documentation:

[Guernika SSH](#)

2.2.4 Avignon Cluster SSH

If you have to use the Avignon Cluster to launch jobs with the queue management SLURM, you can access using directly SSH or using Picasso.

If you prefer to use SSH client, you should use this command.

```
ssh        -l        <usuario+a        cuenta        en        laboratorio>        avignon.lab.inf.uc3m.es
<usuario+a en lab>@avignon.lab.inf.uc3m.es's password: <clave >
Linux avignon-frontend 5.10.0-18-amd64 #1 SMP Debian 5.10.140-1 (2022-09-02) x86_64
```

You have to know that Avignon is different than other Lab envirnoment. Your personal data is not mounted directly in your home, but it is in a separate directory $HOME/LAB_DATA.

```
######################################################################
SERVICIO REMOTO AVIGNON
-----------------------


En este espacio podrás lanzar tus trabajos en un cluster de equipos
mediante el gestor de colas SLURM.

IMPORTANTE DATOS PERSONALES
---------------------------
Para almacenar tus datos y resultados personales, utiliza el espacio
habilitado en tu $HOME/LAB_DATA. Todos los datos que se dejen en el
directorio $HOME y no se hayan salvado en LAB_DATA pueden ser eliminados
por necesidades del servicio.

######################################################################
```

Please, remember to save all your important data and information in this directory or you will lose it.

2.3 Keyboard shortcut

If you are trying to use any keyboard shortcut, maybe you realize that it is not working properly. But here we have a solution, which is to turn your browser in mode "Fullscreen". After that, the keyboard shortcuts should work correctly.

How can we turn the browser in mode Fullscreen?

Simply pressing the "F11" button on our keyboard, or going to settings and looking for the words "Zoom" or "Size". Next to that word we should find an icon where we can read a text such as "Fullscreen".

When we have finished of using this mode, we can turn the browser into a normal screen pressing "F11" again.

3. Sharing files

The normal methods to share files in this environment, such as **drag and drop**, are completely secure, so you can use this way to share files with the virtual machine. Currently we have disabled the automatic Laboratory account mounting in this environment, in order to use the Google Drive storage. As a result, you should not consider this virtual environment storage as a permanent storage, and the information and data that you want to keep safe, you have to upload to Google Drive.

If you want to share files between your computer and your remote desktop environment, we will explain you some secure methods to do it.

3.1 Drag & Drop

As we said before, this is the simpliest method to share files between your physical machine and the virtual one.

Once you have done the "drag & drop" method into the browser, you can find the file shared in your home directory, "/home/alumno/a0XXXXX".

Also you can use another easy method to share files, pressing at same time the buttons "Alt+Control+Shift" and using the Guacamole Menu.
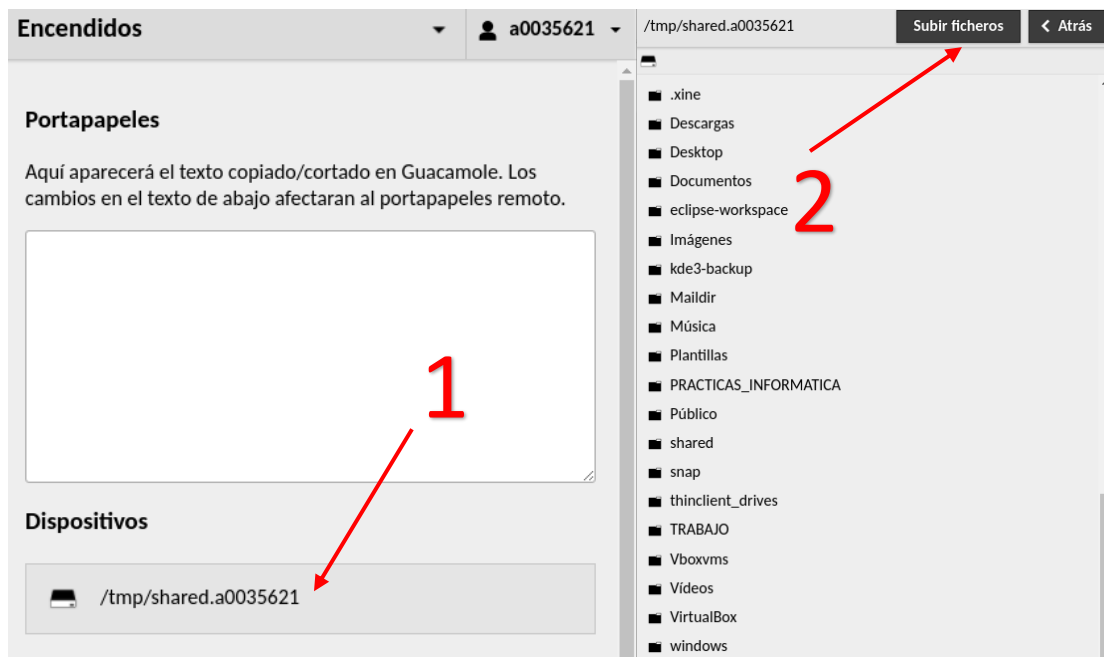
Illustration 8: Guacamole Menu

In this ilustration we want to show you which is the method to share files.

1. Click with your mouse on your NIAs shared directory.
2. Click on "Subir Ficheros" to send a file from your computer to the virtual environment.
3. Double click on the name of the file that you want to download.

3.2 Google Drive

As you already know, with your University account you have unlimited space available on **Google Drive**. You can find more information in the **link below** (in spanish).

[Automatic Google Drive data mount on Linux Clients](#)

4. Contact

You can send an email to laboratorio.informatica@uc3m.es with the description of the problem, we will answer you as soon as possible.