

PROFESSIONAL FAMILY: Computing and communications

Vocational education and training (VET) program code: CFGS ICA0








VET Program name: Network computer systems administration

Academic Year: 23-24

ACTIVITY NAME AND NUMBER

Activity 1 Virtual machines. Installation and basic configuration of Debian GNU/Linux.


Goal of the activity

-  Understanding the purpose of operating systems.
Understanding what an open-source operating system is.
-  Understanding the purpose of virtual machines.
-  Installing software to manage virtual machines.
-  Creating and configuring virtual machines.
-  Installing and initial configuration of open-source operating systems.
-  Sharing data between virtual machines and physical machines
-  Integration of foreign languages (English)

Time to develop the activity


-  4 hours

Methodology and students grouping

-  **Methodology:**
 - Group of students splitted into 2 subgroups each of them a half of the group. One classroom is required for each subgroup
 - Seminar and practical exercise.

-  **Students grouping:** Individual.

Activity description

-  [Short seminar](#) about:
 - virtual machines
 - operating systems

- open-source operating systems.

 **Practical exercise:**

- Installation of software to create and manage virtual machines (VirtualBox or VMware).
- Installation and initial configuration of an open-source operating system (Debian 11 or higher).

Check that student has:


- Understood the goals of this activity.
- Reached the goals of this activity.


Resources to develop this activity

 **Online resource** with:

- Documentation
- List of tasks the student has to do
- (optional) Forms to fill

 Virtual machine management software.

 Open-source operating systems installation software.


 Internet and laptops

Teachers team role

 Lead the seminar of this activity.

 Help students to do the practical exercise of this activity.

 Get a score for the practical exercise of this activity.

 Feedback to each student.

 Check that each student has understood the goals of the activity.

Evaluating the activity

 Main features:

- Individual
- Hetero-evaluation (Teachers team evaluates the activity)
- Quantitative (Each student get a mark)
- Qualitative (Feedback and comments to each student).