

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 4 Deployment or installation of applications using Docker containers.

Goal of the activity

- Basic ideas about containers and running applications by using containers.
- Docker: a tool designed to make it easier to create, deploy, and run applications by using containers.
- Managing images and containers with Docker.
- Running applications with the help of Docker.
- Using Docker to build, share and run applications.

Time to develop the activity

- 5 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:
 - Containers
 - Docker
 - Running applications via Docker.
 - Using Docker to build, share and run applications.
- Practical exercise:

- Checking, reading, setting, modifying and deleting partition tables.
- Checking, reading, setting, modifying, and deleting partitions.
- Installing, modifying, mounting and unmounting filesystems
- Creating, modifying, deleting, mounting and unmounting volumes.
- 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
- Access (local or cloud) to a Linux operating system.
- 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 evaluate the activity)
 - Quantitative (Each student get a mark)
 - Qualitative (Feedback and comments to each student).