Computer Systems – Activities 1
UD 06. VIRTUAL MACHINES

Computer Systems
CFGS DAW

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Licencia

Nomenclatura

A lo largo de este tema se utilizarán distintos símbolos para distinguir elementos importantes dentro del contenido. Estos símbolos son:

Actividad opcional. Normalmente hace referencia a un contenido que se ha comentado en la documentación por encima o que no se ha hecho, pero es interesante que le alumno investigue y practique. Son tipos de actividades que no entran para examen

Atención. Hace referencia a un tipo de actividad donde los alumnos suelen cometer equivocaciones.

UD06. VIRTUAL MACHINES
Activities

1.1   Activity 1

Investigate how to create a virtual machine and do a dual installation with Windows 10 and Ubuntu (Linux).

This video could help you https://www.youtube.com/watch?v=nBD4KqH5CT8

- Share your difficulties and doubts in forum (and how have you solved them) in forum, in order to help your class mates.

- Share a screenshot in forum of your dual boot working :)

Tip 1: if your computer has a problem installing Windows 10 in Virtual box, you can install instead Windows 7 32 bits.

Tip 2: You should install first Windows and lastly Ubuntu (Linux). When you do the partitions, Linux should have enough space to be installed.

Tip 3: If you don't have a Windows 10 license, there is an evaluation versions of Windows 10 in https://www.microsoft.com/en-us/evalcenter/evaluate-windows-10-enterprise but for our activities you can use any version of Windows 10.

1.2   Activity 2

Go to this course to learn Docker https://www.katacoda.com/courses/docker and do the first three scenarios:

- Deploying Your First Docker Container

- Deploy Static HTML Website as Container

- Building Container Images

In order to do this scenarios you don't need to install Docker (you can do it using only your own browser). Use the forum to post any doubt or if you success, any tip for your classmates.

1.3   Activity 3

1.   Go to this free course to learn Docker

     https://www.katacoda.com/courses/docker

     • In this course you don't need to install anything, you can do every task using navigator in a remote machine :)

2.   From this course, study at least following scenarios:

     •   Deploying Your First Docker Container

     •   Deploy Static HTML Website as Container

     •   Building Container Images

1.4   Activity 4

1.   Investigate what is Docker and his GUI Kitematic using class notes and proposed Cheat Sheet. Also this video can help you https://www.youtube.com/watch?v=E2qzYArejf0

2.   Post in forum Docker advantages and disadvantages versus a standard Virtual Machine.

3.   Try to download an image called "**ubuntu**" using Docker commands and create two different containers using that image. Post your success or doubts in our forum.

4.   Modify one of the containers of point 3 creating a file in your home saying "Hello, my name is → MY NAME". Then create a new image using the modified container and upload it to "Docker hub". Check if it works right. Share your image name to let us to download it :) Also post your success or your doubts in forum.

     •   TIP: commands like docker commit, pull, push, login, can be useful in this exercise.

5.   Try to download an image called "theasp/novnc" using Docker commands and create a container. Post your success or doubts in our forum.

6.   Try to connect to GUI of that Ubuntu container connecting with your browser to its NOVNC server (VNC is a program to control remotely a computer and NOVNC is a version of VNC that can be used without installing a client, controlling computer using a web browser like Firefox). Share your success or doubts in forum.