**Workcase 3**

**Команда** Defense of the Ancients

**Виконували студенти группи КСМ-13Б**

**Міньков Ілля**

**Колотуша Микола**

**Виконав Колотуша Микола**

**1.Cloning a Virtual Machine:**

a. Open VirtualBox and select the virtual machine you want to clone.

b. Right-click on the virtual machine in the list and choose "Clone."

c. Specify a new name for the cloned virtual machine and choose the desired options, such as cloning with the current settings or creating new UUIDs for disks, etc.

d. Complete the cloning process.

**Виконав Колотуша Микола**

**2.Transferring a Virtual Machine:**

If you need to transfer a virtual machine to another virtual environment, you need to export it from the current environment. Follow these steps:

a. Shutdown the virtual machine in the current environment.

b. Create a backup of the virtual machine, including the virtual hard disk files and configuration files.

c. Copy these files to an external storage device or upload them to another machine.

d. Install the virtual environment (e.g., VirtualBox or VMWare) on the new machine.

e. Import the virtual machine into the new environment by specifying the path to the copied files.

**Виконав Ілля Міньков**

**3.Setting Up Networking Between Virtual Machines:**

In VirtualBox, you can set up different types of network configurations:

Network Address Translation (NAT): This connects virtual machines to the internet through the host system. Internal virtual machines use the host as a proxy to connect to the network.

Bridged: This mode allows virtual machines to obtain IP addresses as if they were directly connected to the host's network. It enables interaction with other devices on the network.

Host-Only: It directs virtual machines into an isolated network without internet access but allows interaction between virtual machines and the host system.

Internal Network: This creates an isolated network between virtual machines, but they do not have access to external networks or the internet.

**Виконав Ілля Міньков**

**4.Sharing Information Between the Main OS and Virtual Machines:**

To exchange files between the host (main OS) and virtual machines, you can use the "Shared Folders" feature in VirtualBox:

a. Enable Shared Folders in the virtual machine settings.

b. Install VirtualBox Guest Additions in the guest OS.

c. Restart the guest OS.

d. Open the file manager in the guest OS and navigate to the folder you configured as shared.

e. Here, you can copy files from the host to the guest and vice versa.

For audio files or other types of data, you can use the same Shared Folders feature or upload/download the files to/from the internet within the virtual machine.

To copy a file from the virtual machine's desktop to the host OS, simply copy it from the virtual machine's desktop to the shared folder, and it will be accessible in the host OS through the shared folder.

We have learned how to clone a virtual machine, transfer a virtual machine, set up networks between virtual machines, and share information between the host OS and virtual machines.