

ICD – Infraestruturas e Centros de Dados

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Warm-up

- Install VirtualBox 6.1 (<https://www.virtualbox.org>)
- Configure Host-only network
 - File -> Host Network Manager (Mac OSX)

Warm-up

Host Network Manager

Create

Remove

Properties

Name	IPv4 Address/Mask	IPv6 Address/Mask	DHCP Server
vboxnet0	10.0.0.1/24		<input checked="" type="checkbox"/> Enable

Adapter

DHCP Server

☐ Configure Adapter Automatically

☒ Configure Adapter Manually

IPv4 Address:

10.0.0.1

IPv4 Network Mask:

255.255.255.0

IPv6 Address:

IPv6 Prefix Length:

0

Reset

Apply

Close

Warm-up

Host Network Manager

Create

Remove

Properties

Name	IPv4 Address/Mask	IPv6 Address/Mask	DHCP Server
vboxnet0	10.0.0.1/24		<input checked="" type="checkbox"/> Enable

Adapter

DHCP Server

☒ Enable Server

Server Address: 10.0.0.2

Server Mask: 255.255.255.0

Lower Address Bound: 10.0.0.3

Upper Address Bound: 10.0.0.254

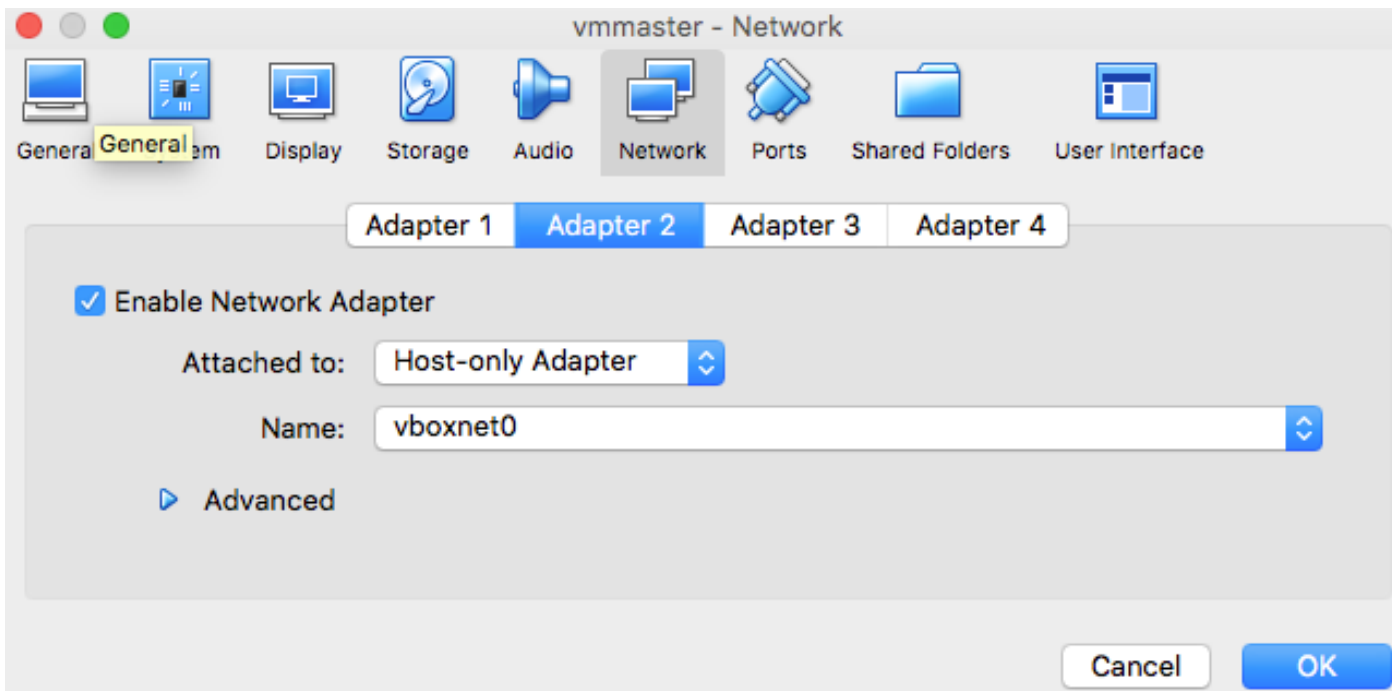
Reset

Apply

Close

Warm-up

- Setup one Centos 8 (64-bit) virtual machine
- Plan CPU, RAM (1GB) and Disk (8GB) resources so that multiple VMs can be deployed at the same host
 - VDI disk
- Configure an additional network adapter (settings)



Warm-up

- Repeat the process to create another host adapter for network 10.10.10.X network
- Create another network adapter for the VM

Warm-up

- Install Centos from ISO file (Centos 8 boot iso)
- Launch the VM
 - If necessary add user to sudoers (visudo)
 - username ALL=(ALL) NOPASSWD:ALL
 - “ip add” command lists the available network interfaces
 - Configure network with nmtui for enp0s8 (enp0s9 will only be used later)

Manual

IP -> 10.0.0.3/24

automatically connect

disable ipv6

Warm-up

- Test SSH from host to the VM
- Configure SSH key access (/etc/ssh/sshd_config)
 - `chmod 700 .ssh`
 - `chmod 600 .ssh/authorized_keys`
 - `sudo systemctl restart sshd`
- Disable firewall
 - `systemctl stop firewalld`
 - `systemctl disable firewalld`

Warm-up

- Clone the VM to create a new one
 - Generate new MAC for the Network Adapters
 - Launch Second VM and configure network (IP 10.0.0.4/24)
 - `sudo nmcli connection down enp0s8`
 - `sudo nmcli connection up enp0s8`
 - Test connection between VMs and Host