

8.3 Communicating with external hosts or VMs

A container can be configured to support network communication hosts external to Labtainers. For example, consider a VirtualBox VMM that hosts a Linux VM that runs Labtainers and a Windows VM. Assume the Windows VM has a fixed IP of 192.168.1.12 and the container will be assigned a network address of 192.168.1.2. To permit network communication between a container on the Linux VM and the Windows VM:

- Define a host-only network in VirtualBox with ip address/mask 192.168.1.1/24, and assign that to the two VMs, configuring the VM network links to use promiscuous mode.
- Start both VMs. On the Linux VM, make note of the ethernet interface associated with the host-only network (assumed to be `enp0s8` below).
- On the Linux VM, ensure the network interface is in promiscuous mode, `sudo ifconfig enp0s8 promisc`
- In the container `start.config` file, define a network as:

```
NETWORK LAN
  MASK 192.168.1.0/24
  GATEWAY 192.168.1.1
  MACVLAN_EXT 1
  IP_RANGE 192.168.1.0/24
```

where the MACVLAN value is the Nth network interface (alphabetically ordered), that lacks an assigned IP address.

- Assign 192.168.1.2 to the container in the `start.config`

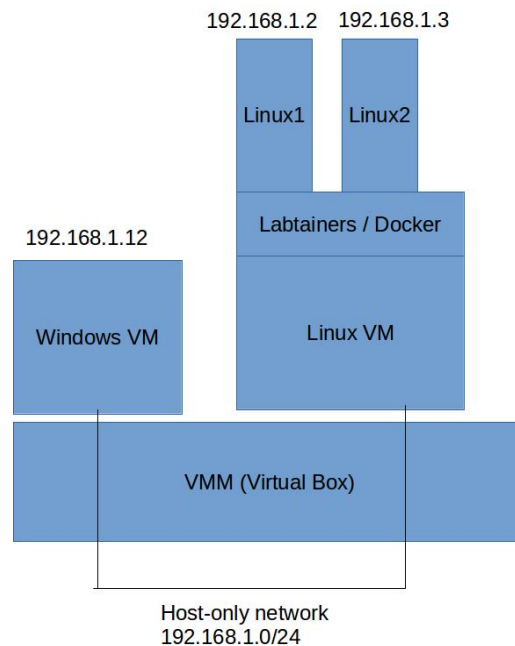


Figure 2: Networking with external hosts.

Also see the description of Multi-user labs in [12](#).