

How to configure your Node to be able to host VMs

▼ Details

Hosting Virtual Machines requires some configurations steps, even with SlapOS. If you want to serve VMs instances from your SlapOS node(s), follow this guide.

If your node has been installed from dedicated disk image (such as USB key), there is no need of this configuration.

Network Configuration

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We can now start proper network configuration of SlapOS to host Virtual machines.

If you want to host virtual machines, you will need to configure a bridge in order to support multiple tap interfaces used in virtual machines like KVM. Then we can run slapformat and get ready to use the server.

Using bridges on your computer/server can sometimes be tricky. This is why it is not enabled by default on SlapOS. For example, it won't work properly if using Wi-Fi.

Please also note that KVM instances won't have internet access if you don't configure bridge, but if you only plan to only develop/test it, it should not be a problem.

Note : the VIFIB cloud, handled by SlapOS team, uses bridge configured automatically by the SlapOS disk image.

Bridge (Debian)

```
/etc/network/interfaces
iface eth0 inet manual
auto br0
iface br0 inet dhcp
bridge_ports eth0

/etc/rc.local
/opt/slapos/bin/slapformat -c /etc/opt/slapos/slapos.cfg
/opt/slapos/bin/bang /etc/opt/slapos/slapos.cfg
```

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Note: this will not work with Wi-Fi connection.

On a Debian based distribution (Debian, Ubuntu, Mint, ...), setting up a bridge can be achieved by changing the file /etc/network/interfaces and restarting network. Make sure you add relevant physical interfaces to the bridge. Make also sure that if you add a bridge to a remote server, you still have a way to contact the server in case of failure of the configuration (this happens very frequently).

Bridge (Generic)

```
/etc/rc.local
brctl addbr br0
brctl addif br0 eth0
ip l s dev br0 up
```

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Note : this will not work with Wi-Fi connection.

On a generic GNU/Linux distribution, bridge setup can be achieved entirely from /etc/rc.local, together with slapformat. This is not the most beautiful way to achieve the expected result but it works.

Please also take not that any interface added to a bridge should no longer be configured by the system. The configuration file for that interface should just be removed.

SlapOS Configuration

```
# nano /etc/opt/slapos/slapos.cfg
```

Change under [slapformat] parameters to show:

- interface_name = br0
- create_tap = true

Then run slapformat again:

```
# slapos node format --now
```

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Here we need to tell SlapOS installation that we should use our newly created "br0" bridge as interface to use.

Then we ask slapformat (the tool that allocates IPs for each partition) to create "TAP" virtual interfaces for each partition, then connect them to the bridge.

Note: make sure you are using latest SlapOS version. "create_tap" option is not available in old releases.

KVM configuration

```
# modprobe kvm
# modprobe kvm_intel
# modprobe kvm_amd
# chmod 666 /dev/kvm
```

Change under [slapformat] parameters to show:

- interface_name = br0
- use_tap = true

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- Make sure you have activated virtualization technology in the BIOS of your computer.
- Load the required kernel modules (Debian: # modprobe kvm kvm-intel or modprobe kvm kvm-amd) and then change the rights of /dev/kvm to 777.