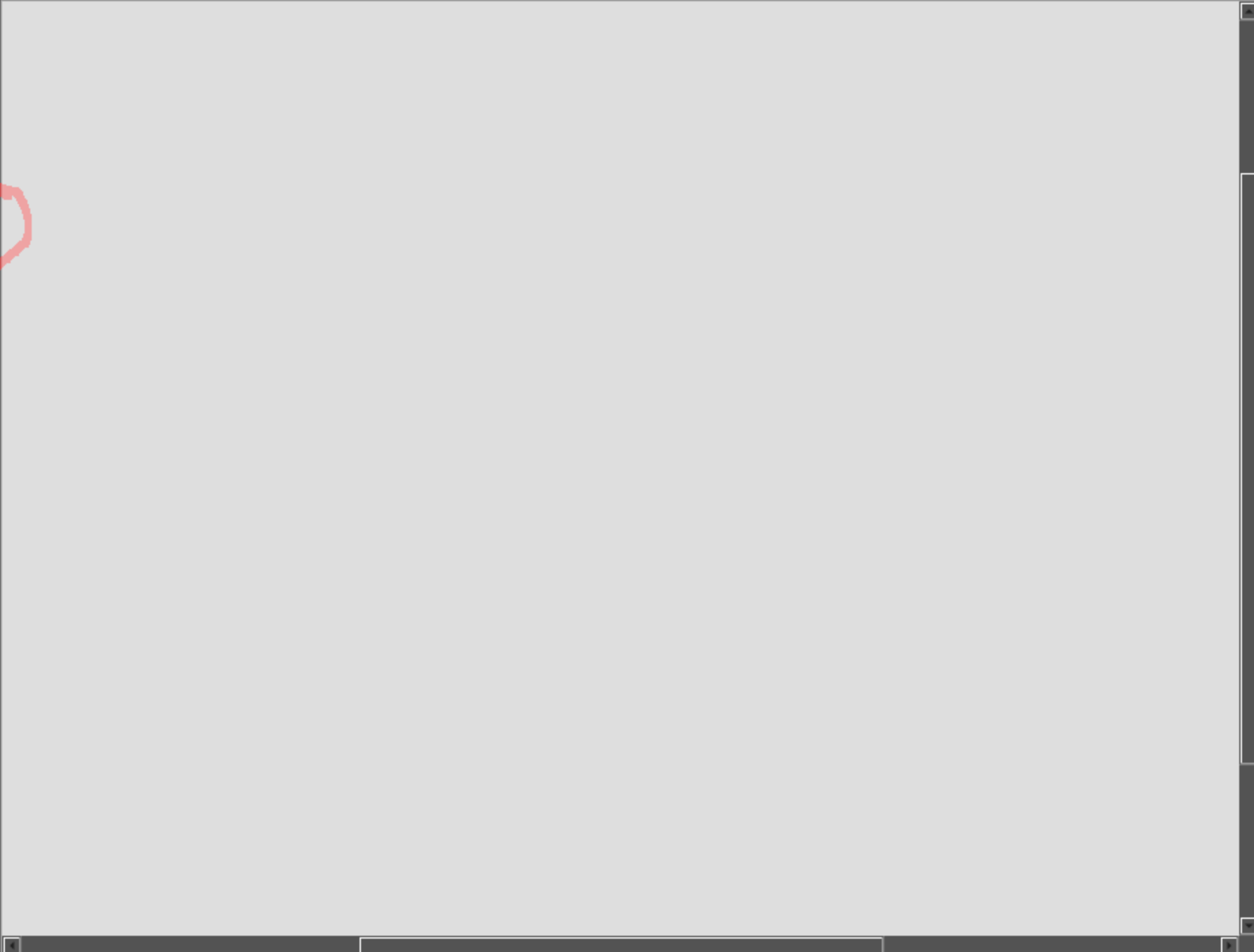


File Edit View Control Node Annotate Tools Help



Topology Summary

Node	Console
------	---------

Servers Summary

● gns3 CPU 12.4%, RAM 17...



End devices

- Filter
- Cloud
 - Linux Core 4.7.7 + ovs + quagga
 - NAT
 - VPCS



+ New template

Topology Summary

Node	Console
------	---------

Servers Summary

gns3 CPU 11.5%, RAM 17...

New template

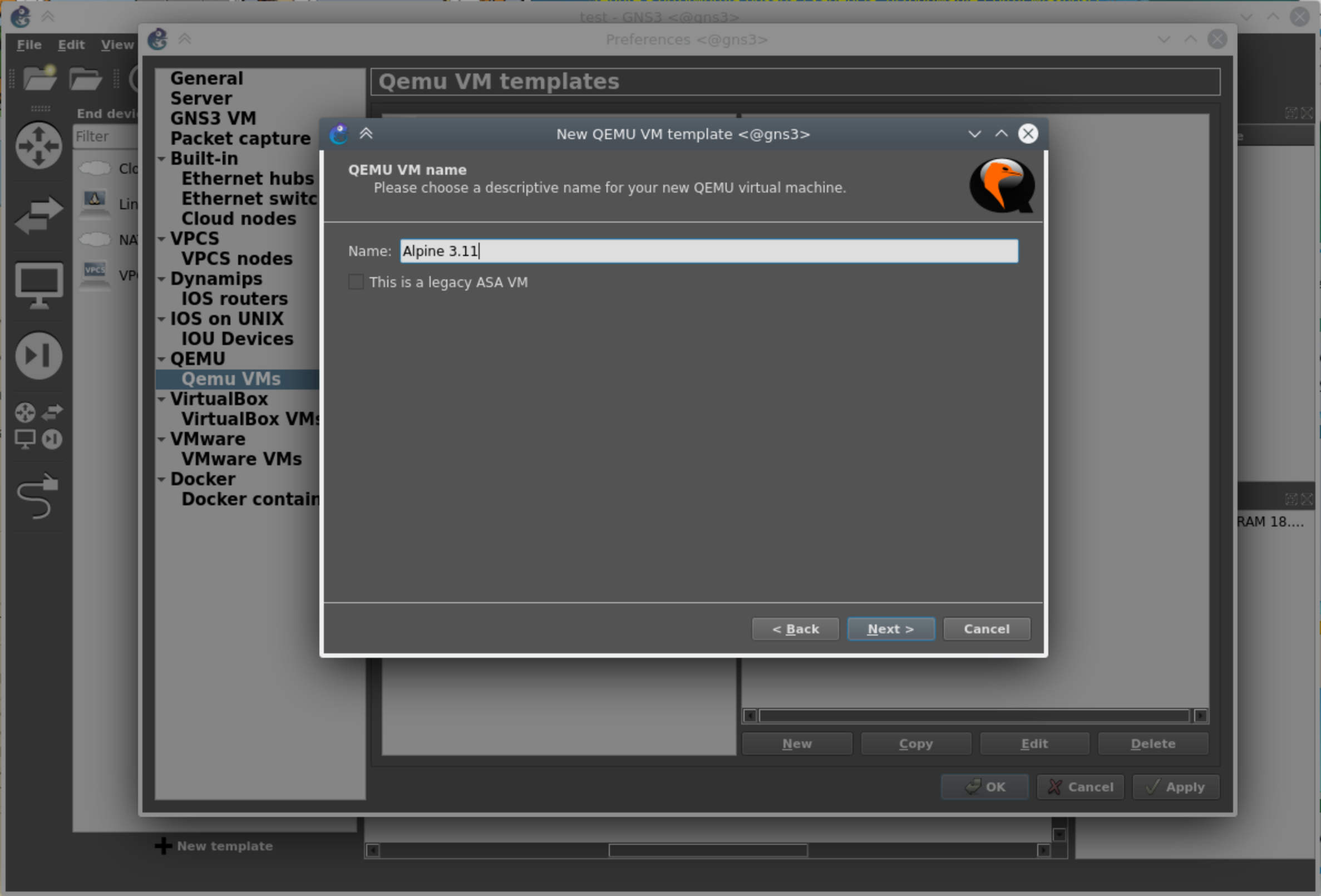
Please select how you want to create a new template

- Install an appliance from the GNS3 server (recommended)
- Import an appliance file (.gns3a extension)
- Manually create a new template

< Back

Next >

Cancel



Qemu VM templates

New QEMU VM template <@gns3>

QEMU VM name

Please choose a descriptive name for your new QEMU virtual machine.

Name:

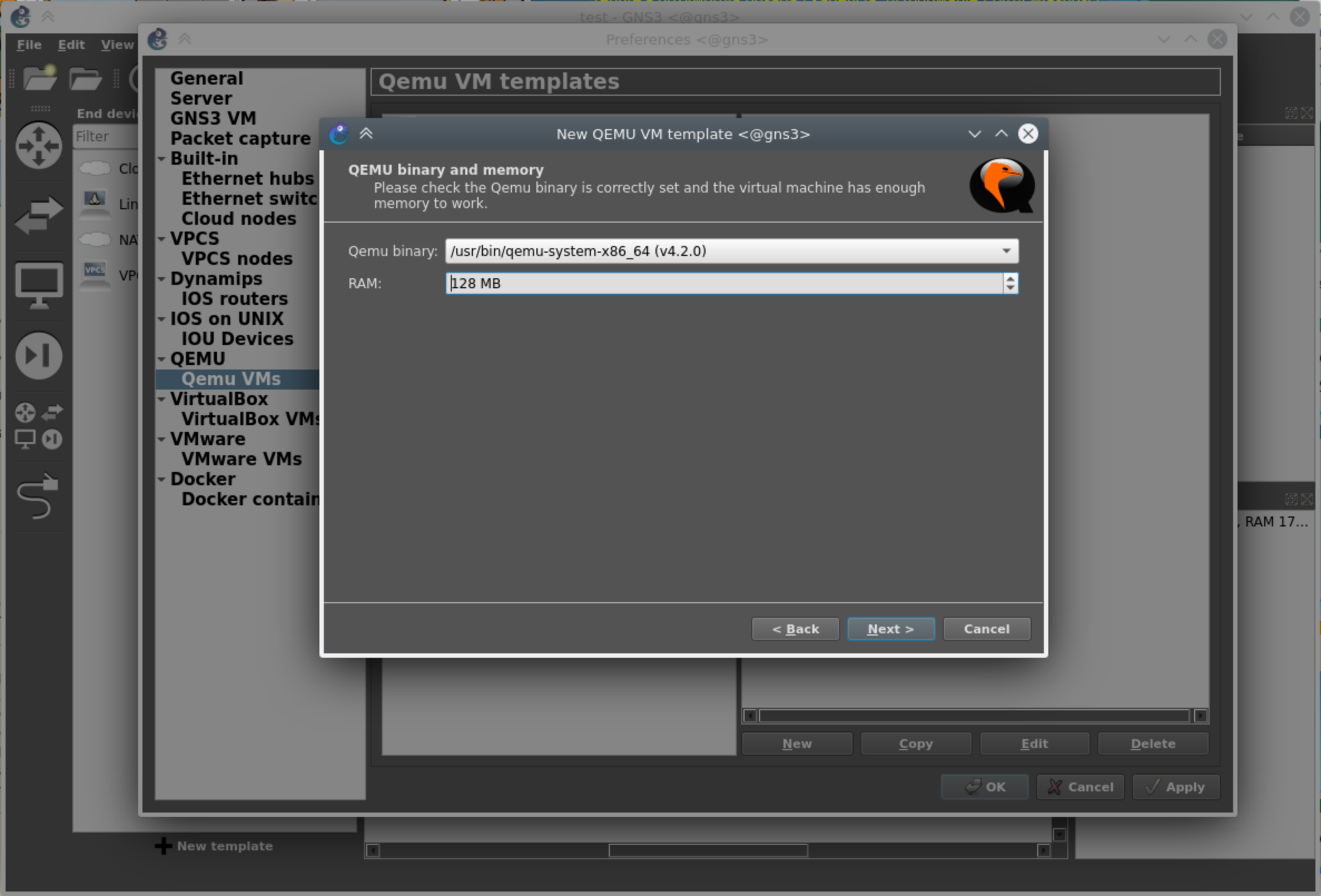
This is a legacy ASA VM

< Back Next > Cancel

+ New template

New Copy Edit Delete

OK Cancel Apply



- General
- Server
- GNS3 VM
- Packet capture
- Built-in
 - Ethernet hubs
 - Ethernet switch
 - Cloud nodes
- VPCS
 - VPCS nodes
- Dynamips
 - IOS routers
 - IOS on UNIX
 - IOU Devices
- QEMU
 - Qemu VMs**
- VirtualBox
 - VirtualBox VMs
- VMware
 - VMware VMs
- Docker
 - Docker contain...

Qemu VM templates

New QEMU VM template <@gns3>

QEMU binary and memory
Please check the Qemu binary is correctly set and the virtual machine has enough memory to work.

Qemu binary: /usr/bin/qemu-system-x86_64 (v4.2.0)

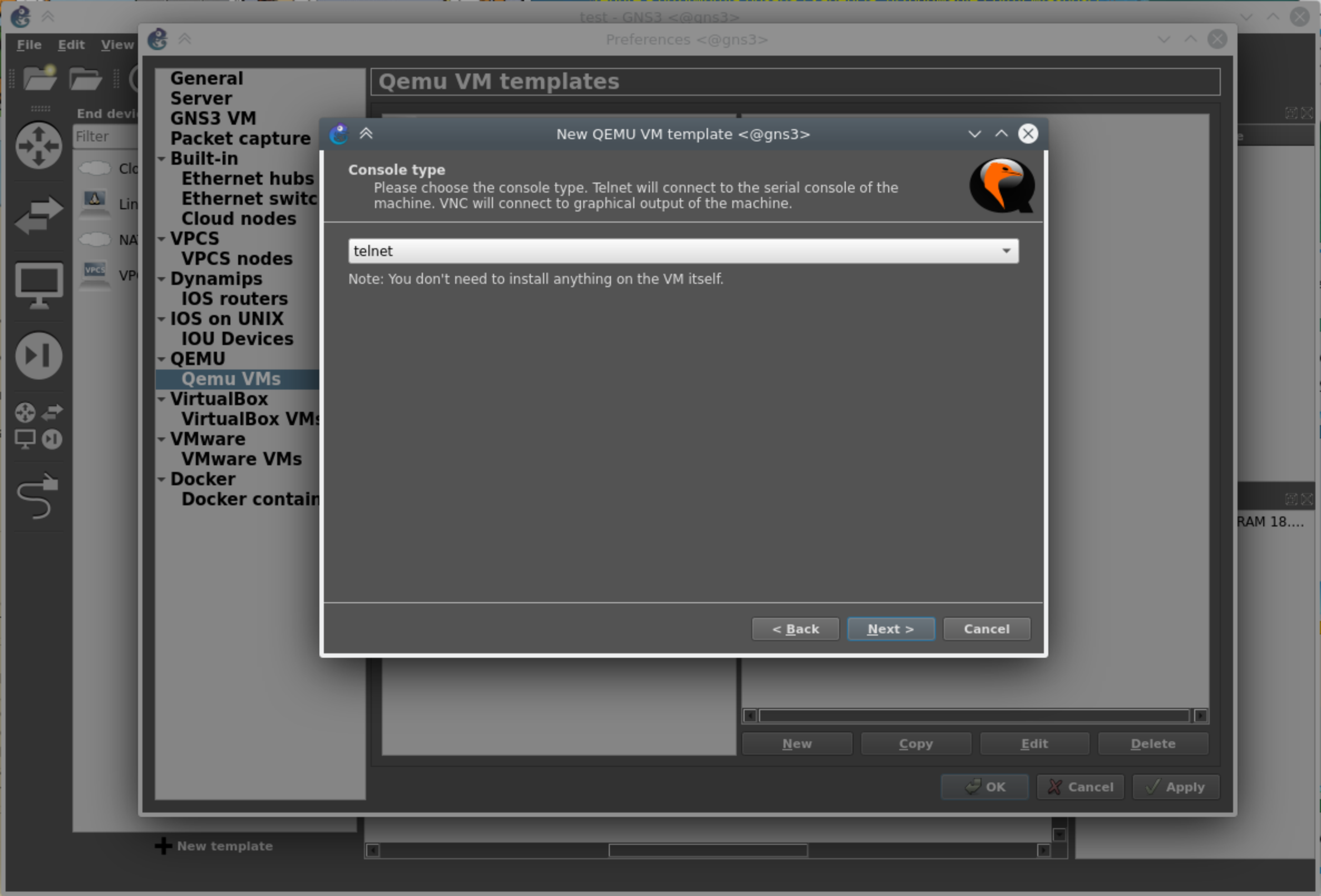
RAM: 128 MB

< Back Next > Cancel

New Copy Edit Delete

OK Cancel Apply

+ New template



- General
- Server
- GNS3 VM
- Packet capture
- Built-in
 - Ethernet hubs
 - Ethernet switch
 - Cloud nodes
- VPCS
 - VPCS nodes
- Dynamips
 - IOS routers
 - IOS on UNIX
 - IOU Devices
- QEMU
 - Qemu VMs**
- VirtualBox
 - VirtualBox VMs
- VMware
 - VMware VMs
- Docker
 - Docker contain

Qemu VM templates

New QEMU VM template <@gns3>

Console type
Please choose the console type. Telnet will connect to the serial console of the machine. VNC will connect to graphical output of the machine.

telnet

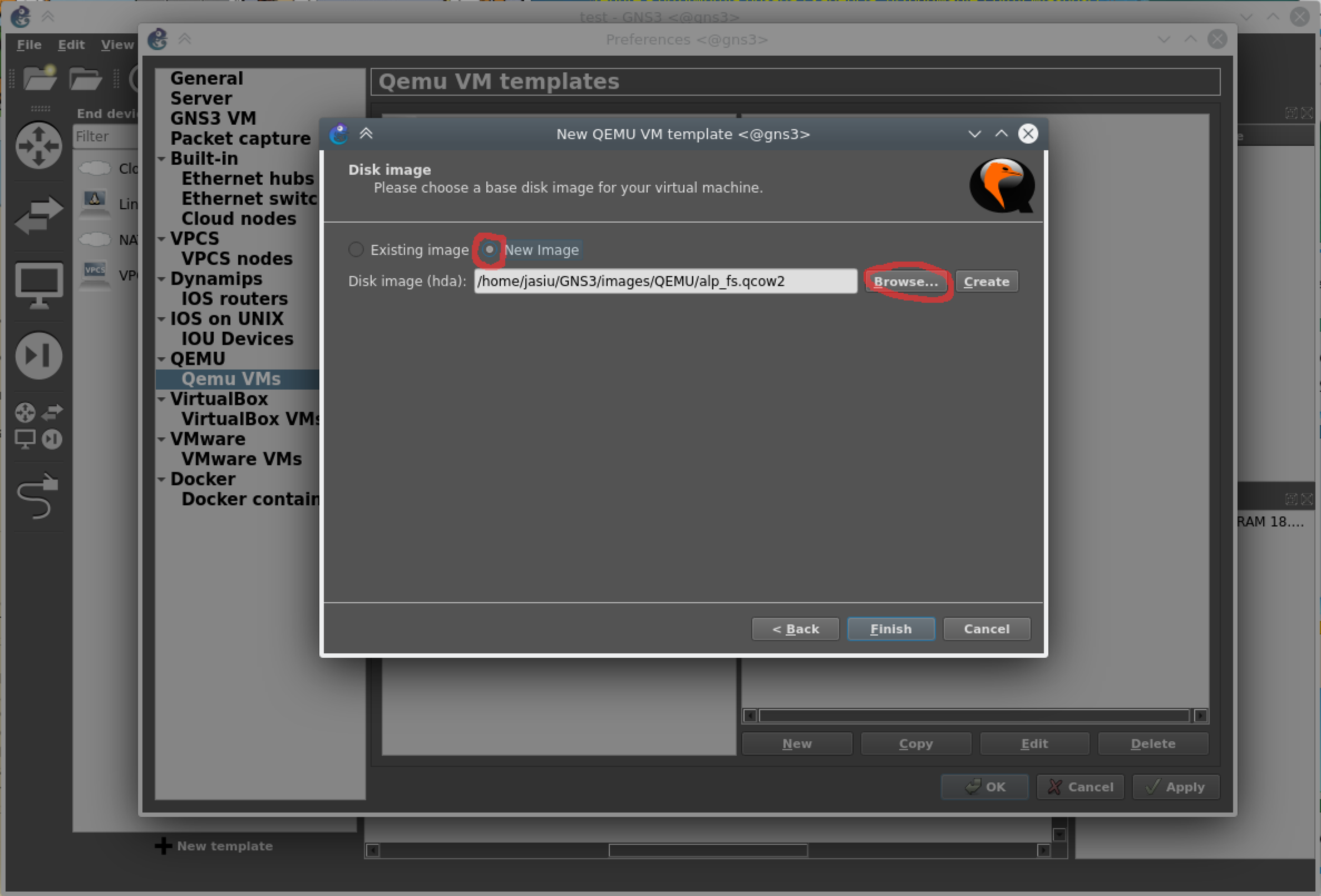
Note: You don't need to install anything on the VM itself.

< Back Next > Cancel

New Copy Edit Delete

OK Cancel Apply

+ New template



- General
- Server
- GNS3 VM
- Packet capture
- Built-in
 - Ethernet hubs
 - Ethernet switch
 - Cloud nodes
- VPCS
 - VPCS nodes
- Dynamips
 - IOS routers
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 - IOU Devices
- QEMU
 - Qemu VMs**
- VirtualBox
 - VirtualBox VMs
- VMware
 - VMware VMs
- Docker
 - Docker contain...

Qemu VM templates

New QEMU VM template <@gns3>

Disk image

Please choose a base disk image for your virtual machine.

Existing image New Image

Disk image (hda): /home/jasiu/GNS3/images/QEMU/alp_fs.qcow2

Browse...

Create

< Back

Finish

Cancel

New

Copy

Edit

Delete

OK

Cancel

Apply

+ New template

- End dev
- Filter
- Cloud nodes
- Linux VMs
- Networks
- VPCS
- VirtualBox VMs
- VMware VMs
- Docker containers

- General
- Server
- GNS3 VM
- Packet capture
- Built-in
 - Ethernet hubs
 - Ethernet switches
 - Cloud nodes
- VPCS
 - VPCS nodes
- Dynamips
 - IOS routers
 - IOS on UNIX
 - IOU Devices
- QEMU
 - Qemu VMs**
- VirtualBox
 - VirtualBox VMs
- VMware
 - VMware VMs
- Docker
 - Docker containers

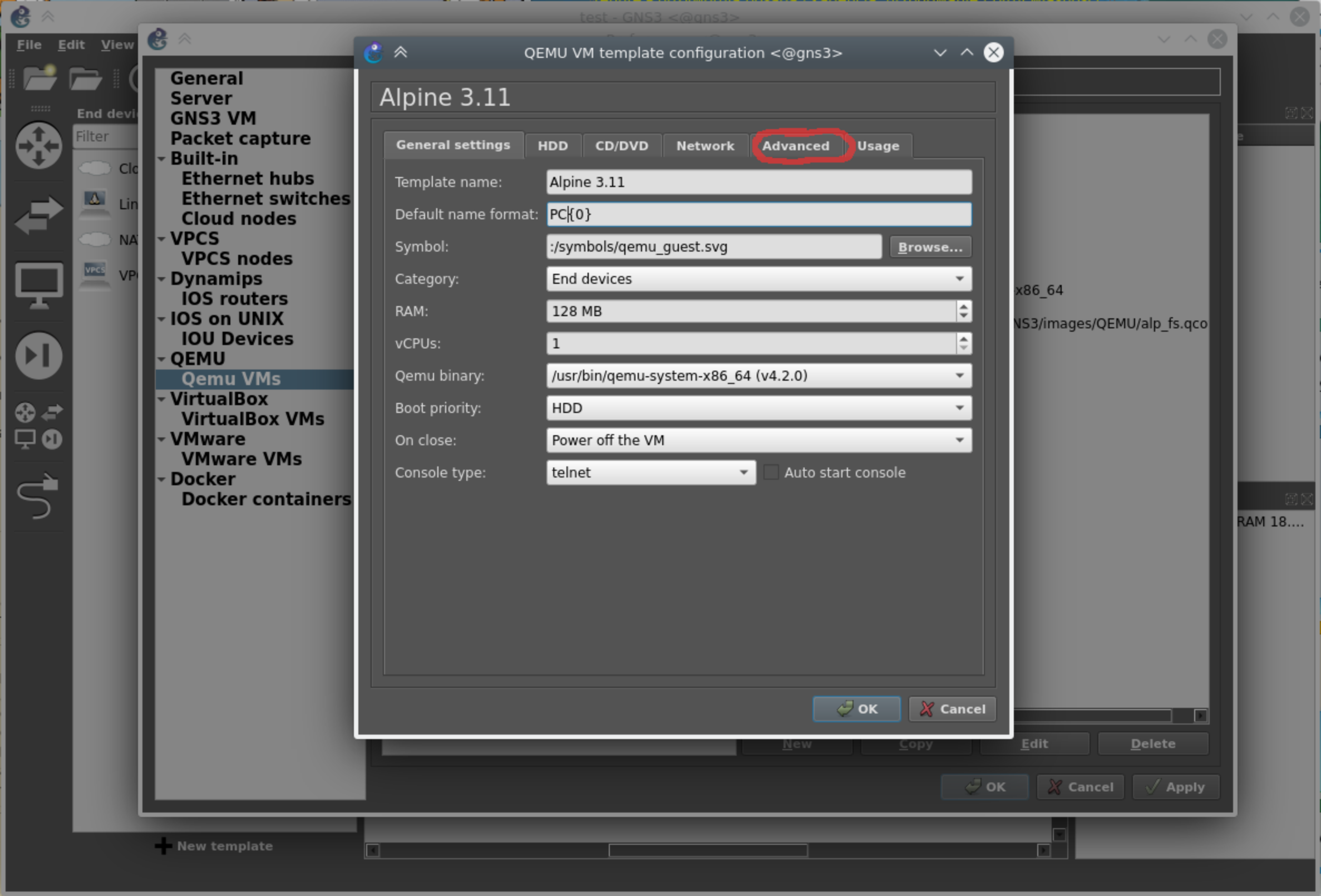
Qemu VM templates

- Linux Core 4.7.7 + ovs + quag...
- Alpine 3.11**

General	
Template name:	Alpine 3.11
Template ID:	none
Default name format:	{name}-{0}
Server:	gns3
Console type:	telnet
Auto start console:	False
CPUs:	1
Memory:	128 MB
Linked base VM:	True
QEMU binary:	qemu-system-x86_64
Hard disks	
Disk image (hda):	/home/jasiu/GNS3/images/QEMU/alp_fs.qco
Disk interface (hda):	ide
Network	
Adapters:	1
Name format:	Ethernet{0}
Type:	e1000
Optimizations	
CPU throttling:	disabled
Process priority:	normal
Additional options	
Options:	-nographic
On close:	power_off

New Copy **Edit** Delete

OK Cancel Apply



Alpine 3.11

General settings | HDD | CD/DVD | Network | **Advanced** | Usage

Template name:

Default name format:

Symbol:

Category:

RAM:

vCPUs:

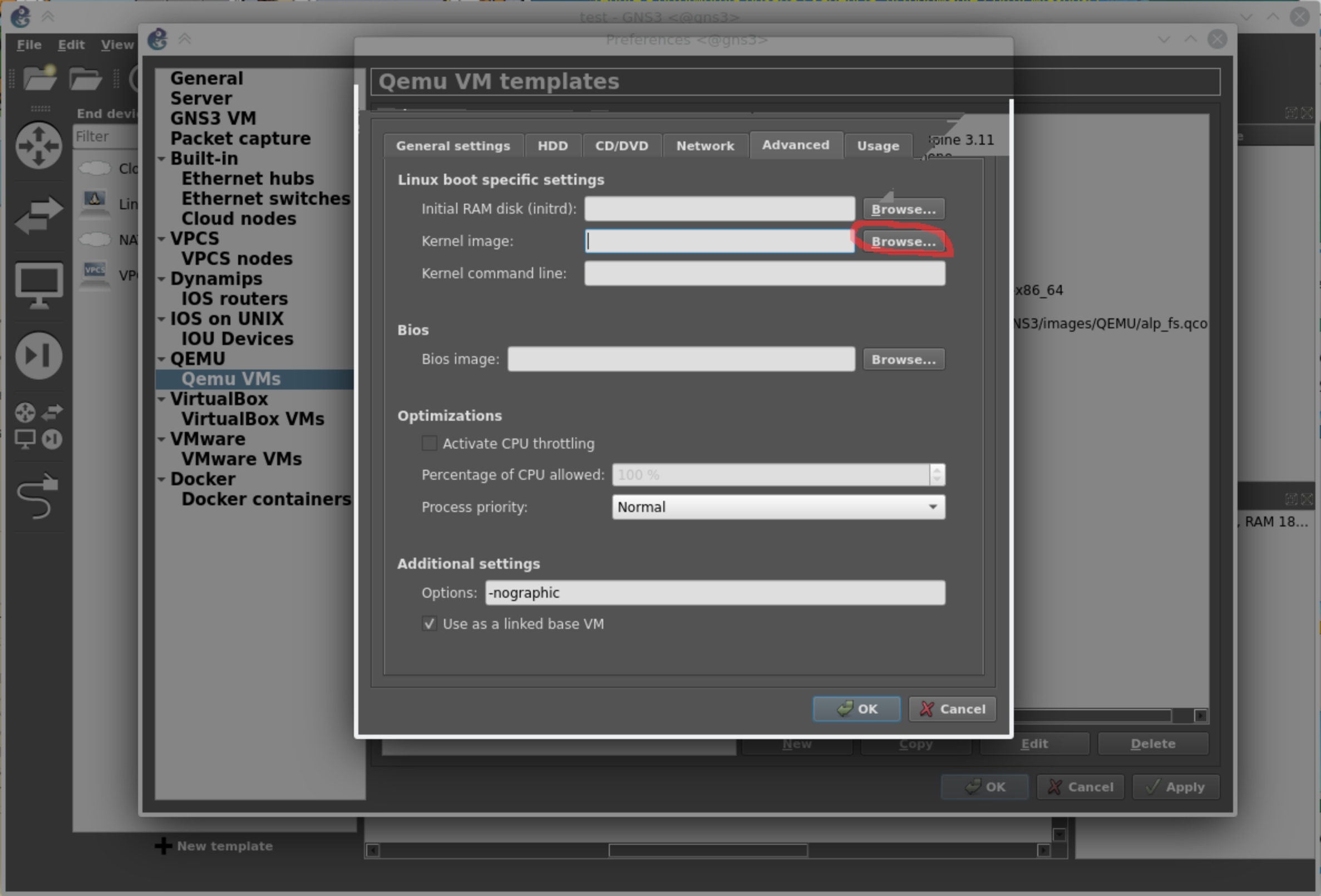
Qemu binary:

Boot priority:

On close:

Console type: Auto start console

+ New template



Qemu VM templates

- General settings
- HDD
- CD/DVD
- Network
- Advanced
- Usage

Linux boot specific settings

Initial RAM disk (initrd):

Kernel image:

Kernel command line:

Bios

Bios image:

Optimizations

Activate CPU throttling

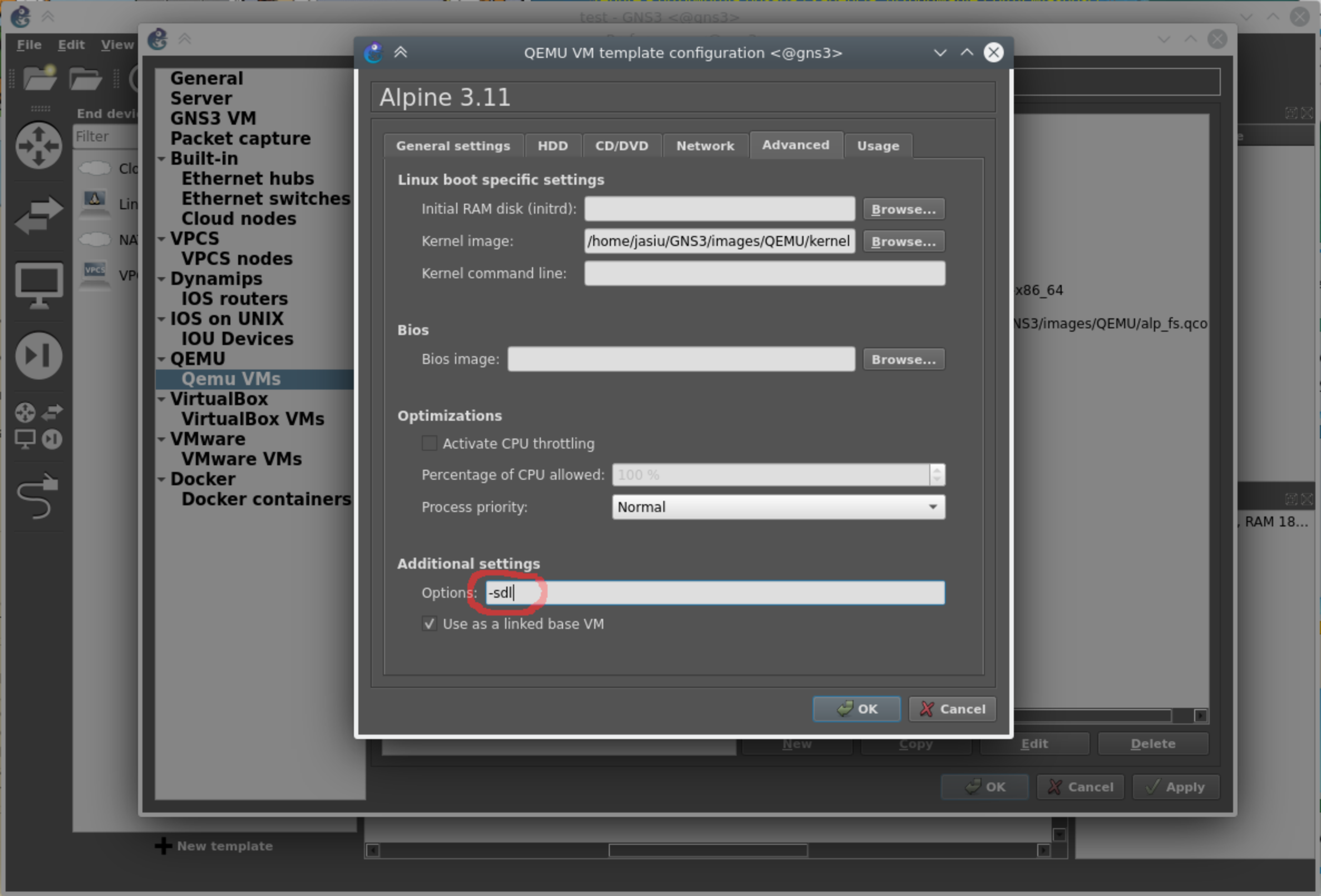
Percentage of CPU allowed:

Process priority:

Additional settings

Options:

Use as a linked base VM



QEMU VM template configuration <@gns3>

Alpine 3.11

General settings HDD CD/DVD Network Advanced Usage

Linux boot specific settings

Initial RAM disk (initrd):

Kernel image:

Kernel command line:

Bios

Bios image:

Optimizations

Activate CPU throttling

Percentage of CPU allowed:

Process priority:

Additional settings

Options:

Use as a linked base VM

OK

Cancel

Edit

Delete

OK

Cancel

Apply

+ New template

- General
- Server
- GNS3 VM
- Packet capture
- ▼ Built-in
 - Ethernet hubs
 - Ethernet switches
 - Cloud nodes
- ▼ VPCS
 - VPCS nodes
- ▼ Dynamips
 - IOS routers
- ▼ IOS on UNIX
 - IOU Devices
- ▼ QEMU
 - Qemu VMs**
- ▼ VirtualBox
 - VirtualBox VMs
- ▼ VMware
 - VMware VMs
- ▼ Docker
 - Docker containers

Qemu VM templates

-  Linux Core 4.7.7 + ovs + quag...
-  **Alpine 3.11**

General	
Template name:	Alpine 3.11
Template ID:	none
Default name format:	PC{0}
Server:	gns3
Console type:	telnet
Auto start console:	False
CPUs:	1
Memory:	128 MB
Linked base VM:	True
QEMU binary:	qemu-system-x86_64
Hard disks	
Disk image (hda):	/home/jasiu/GNS3/images/QEMU/alp_fs.qco
Disk interface (hda):	ide
Network	
Adapters:	1
Name format:	Ethernet{0}
Type:	e1000
Linux boot	
Kernel image:	/home/jasiu/GNS3/images/QEMU/kernel
Optimizations	
CPU throttling:	disabled
Process priority:	normal
Additional options	
Options:	-sdl
On close:	power_off

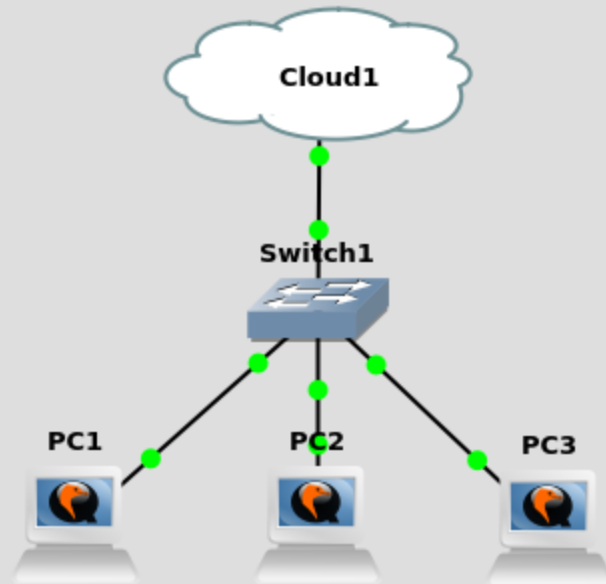
+ New template



All devices

Filter

- ATM switch
- Alpine 3.11
- Cisco 3660 124-15.T14
- Cisco 7200 124-24.T5
- Cloud
- Ethernet hub
- Ethernet switch
- Frame Relay switch
- Linux Core 4.7.7 + ovs ...
- NAT
- VPCS



Topology Summary

Node	Console
Cloud1	none
PC1	telnet localhost:5000
PC2	telnet localhost:5002
PC3	telnet localhost:5005
Switch1	none
e0 <=> eth0 Cloud1 e1 <=> e0 PC1 e2 <=> e0 PC2 e3 <=> e0 PC3	

QEMU (PC3)



```

o:~# ping 10.0.1.136
PING 10.0.1.136 (10.0.1.136) 56(84) bytes of data.
64 bytes from 10.0.1.136: icmp_seq=1 ttl=64 time=0.902 ms
64 bytes from 10.0.1.136: icmp_seq=2 ttl=64 time=1.19 ms
^C
--- 10.0.1.136 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1003ms
rtt min/avg/max/mdev = 0.902/1.046/1.190/0.144 ms
o:~# ping cs.put.poznan.pl
PING cs.put.poznan.pl (150.254.30.29) 56(84) bytes of data.
64 bytes from leo.cs.put.poznan.pl (150.254.30.29): icmp_seq=1
64 bytes from leo.cs.put.poznan.pl (150.254.30.29): icmp_seq=2
^C
--- cs.put.poznan.pl ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1001ms
rtt min/avg/max/mdev = 7.964/8.382/8.801/0.418 ms
o:~#
o:~#
o:~#
o:~#
o:~#
o:~#

```



```

o:~# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 link/loopback 00:00:00:00:00:00
inet 127.0.0.1/8 scope host local
    valid_lft forever preferred_lft 0
inet6 ::1/128 scope host
    valid_lft forever preferred_lft 0
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 link/ether 0c:42:0a:42:5d:00
inet 10.0.1.136/24 scope global
    valid_lft forever preferred_lft 0
inet6 2001:470:71:61c:e42:aff:fe80:420a:425d:0001 scope link
    valid_lft forever preferred_lft 0

```

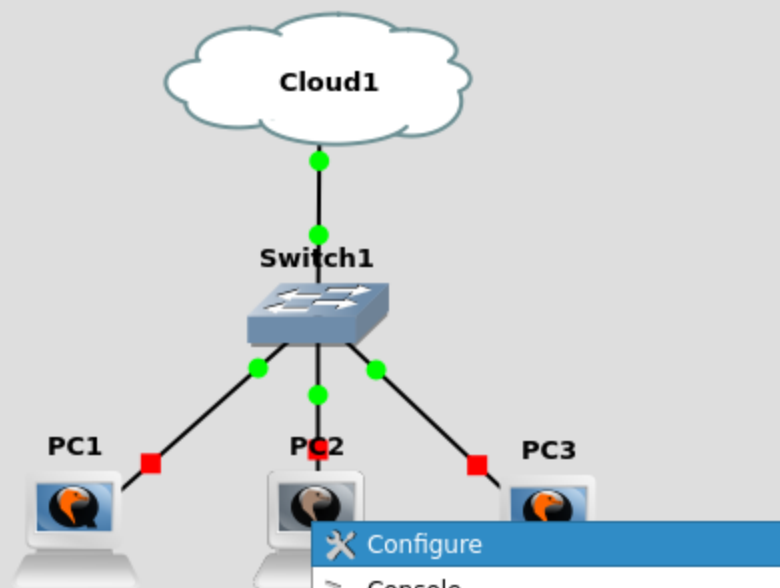


```

* Checking local files
* Remounting root file
[ 5.982211] EXT4-fs
* Remounting filesystem
* Mounting local files
* Starting networking

```

+ New template



- ✕ Configure
- > Console
- ▶ Start
- ⏸ Suspend
- Stop
- 🔄 Reload
- 📄 Custom console
- 📄 Change hostname
- 📄 Change symbol
- 📄 Duplicate
- 📄 Show node information
- 📄 Show in file manager
- 📄 Raise one layer
- 📄 Lower one layer
- 🔒 Lock item
- ✖ Delete

Topology Summary

Node	Console
▶ Cloud1	none
▶ PC1	telnet localhost:5000
▶ PC2	telnet localhost:5002
▶ PC3	telnet localhost:5005
▶ Switch1	none

Servers Summary

- ▶ gns3 CPU 16.4%, RAM 30.3%



Node properties <@gns3>

PC2 configuration

General settings | HDD | CD/DVD | **Network** | Advanced | Usage

Adapters: 2

Base MAC: 0c:42:0a:42:5d:00

Type: Intel Gigabit Ethernet (e1000)

Custom adapters: [Configure custom adapters](#)

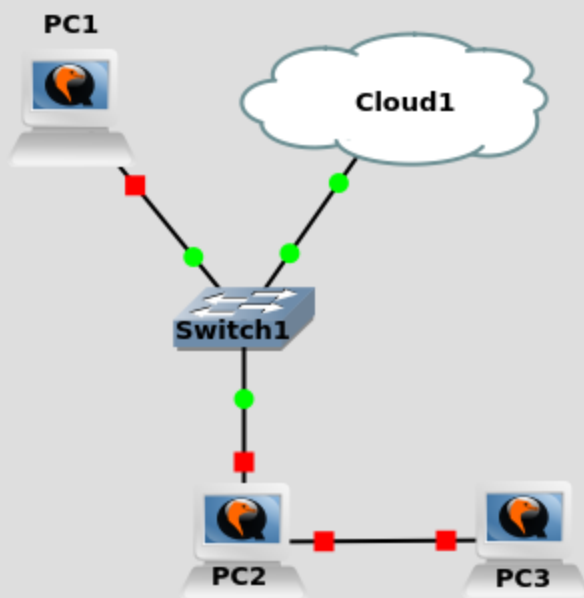
Use the legacy networking mode

Reset OK Cancel Apply

Topology Summary

Node	Console
	none
	telnet localhost:5000
	telnet localhost:5002
	telnet localhost:5005
	none

Node	Usage
	U 11.5%, RAM 30.4%

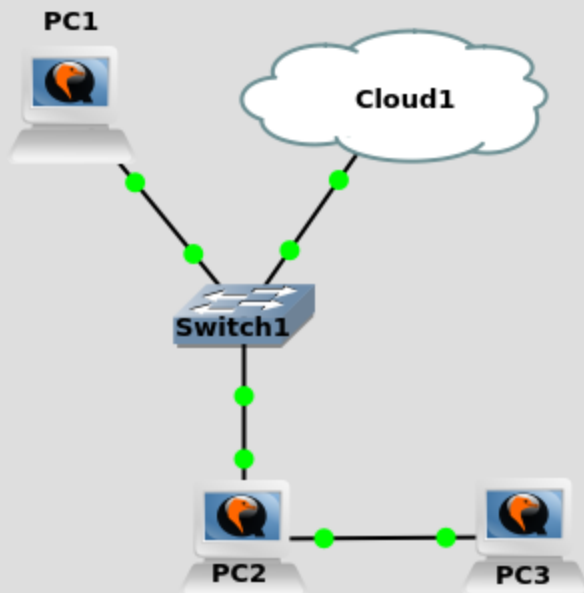


Topology Summary

Node	Console
▶ Cloud1	none
▶ PC1	telnet localhost:5000
▶ PC2	telnet localhost:5002
▶ PC3	telnet localhost:5005
▶ Switch1	none

Servers Summary

▶ gns3 CPU 10.6%, RAM 30.5%



Topology Summary

Node	Console
▶ Cloud1	none
▶ PC1	telnet localhost:5000
▶ PC2	telnet localhost:5002
▶ PC3	telnet localhost:5005
▶ Switch1	none

QEMU (PC2-0)

```

o:~#
o:~# ifconfig eth1 192.168.0.1 up
o:~# iptables -t nat -A POSTROUTING -o eth0 -j MASQUERADE

```

QEMU (PC3-0) <@gns3>

```

nameserver 1.1.1.1
~
~
~
o:~#
o:~# echo nameserver 1.1.1.1 > /etc/resolv.conf
o:~# ifconfig eth0 192.168.0.2 up
o:~# ip route add default via 192.168.0.1
o:~# traceroute cs.put.poznan.pl
traceroute to cs.put.poznan.pl (150.254.30.29), 30 hops max, 46 byte packets
 1 192.168.0.1 (192.168.0.1) 0.302 ms 1.071 ms 0.858 ms
 2 10.0.1.2 (10.0.1.2) 1.237 ms 1.267 ms 1.214 ms
 3 poz-bng101.neo.tpnet.pl (83.1.5.122) 3.125 ms 4.479 ms 4.326 ms

```