

Proxmox Kubernetes

- [Virtual Machine Setup](#)

Virtual Machine Setup

Download the `debian-12-generic-amd64.raw` file from

<https://cloud.debian.org/images/cloud/bookworm/latest/>.

1. Create the virtual machine
2. Add a cloud-init drive on the VM
3. Import the cloud image: `qm importdisk $VMID /mnt/pve/assets/template/iso/debian-12-generic-amd64.raw local-lvm --format qcow2`
4. Setup cloud-init: `qm set $VMID --cicustom "user=cloud-init:snippets/user.yaml,network=cloud-init:snippets/network.yaml"`

Example config files:

user.yaml

```
#cloud-config
hostname: zsottvXX
manage_etc_hosts: true
fqdn: zsottvXX.zsnet.ca
user: zsadmin
ssh_authorized_keys:
  - ssh-rsa KEY COMMENT
chpasswd:
  expire: False
users:
  - default

# Setup ntp
ntp:
  enabled: true
  ntp_client: chrony
  servers: []
  pools:
    - time.zsnet.ca

# Add gnupg
bootcmd:
  - DEBIAN_FRONTEND=noninteractive apt-get -yq update
```

```
- DEBIAN_FRONTEND=noninteractive apt-get -yq install gnupg
```

```
# Configure apt repositories
```

```
apt:
```

```
primary:
```

```
- arches: [default]
```

```
uri: http://mirror.csclub.uwaterloo.ca/debian/
```

```
security:
```

```
- arches: [default]
```

```
uri: http://mirror.csclub.uwaterloo.ca/debian-security/
```

```
sources_list: |
```

```
deb $PRIMARY $RELEASE main contrib
```

```
deb $PRIMARY $RELEASE-updates main contrib
```

```
deb $SECURITY $RELEASE-security main contrib
```

```
package_update: true
```

```
package_upgrade: true
```

```
package_reboot_if_required: true
```

```
# Install packages
```

```
packages:
```

```
- qemu-guest-agent
```

network.yaml

```
version: 1
```

```
config:
```

```
- type: physical
```

```
name: eth0
```

```
mac_address: 'xx:yy:zz:aa:bb:cc'
```

```
subnets:
```

```
- type: dhcp4
```

```
- type: ipv6_slaac
```

```
- type: nameserver
```

```
address:
```

```
- '2602:815:9000::53'
```

```
- '2602:815:9000:1::53'
```

```
search:
```

```
- 'zsnet.ca'
```