

There are a lot of ways to create a virtual machine using kvm in linux. I will introduce the one I think is the most convenient.

### Assumptions:

1. Ubuntu 14.04 or later.
2. Native system (physical machine).

### Step by Step:

1. install qemu-kvm, libvirt-bin and check if hardware supports the necessary virtualization extensions for KVM.  
`sudo apt install qemu-kvm libvirt-bin`  
`kvm-ok`
2. install uvtool and uvtool-libvirt `sudo apt -y install uvtool`
3. synchronize one specific cloud-image. Use *xenial(16.04)* for example here.  
`uvtool-simplestreams-libvirt sync release=xenial arch=amd64`
4. create ssh key if you don't have one. `ssh-keygen`
5. create a new virtual machine `uvtool-kvm create firsttest release=xenial`
6. connect to the running VM `uvtool-kvm ssh firsttest --insecure`

### Reference:

<https://help.ubuntu.com/lts/serverguide/virtualization.html>

### Other options:

1. qemu-kvm: directly using qemu-kvm gives you flexibility, but you need setup everything yourself.
2. virt-manager: a gui-based tool, very intuitive to use, but you need GUI somewhere.
3. ...