QUICKEMU SETUP

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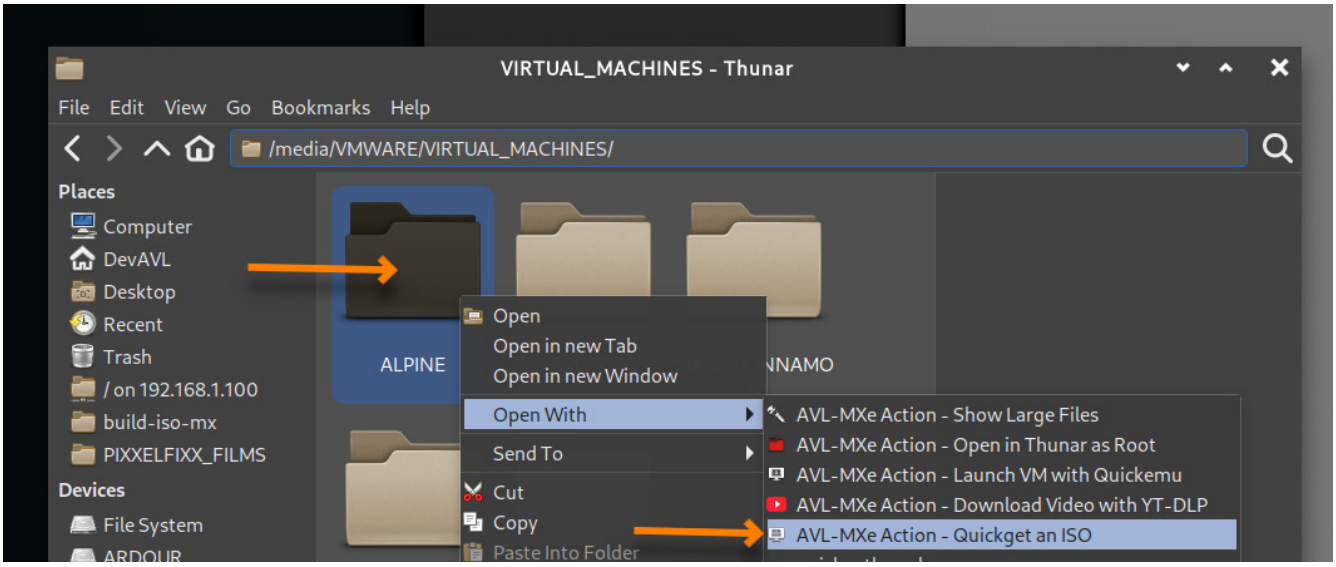
AV Linux and MX Moksha 25 comes with a new feature targeted to Developers, ISO builders and Distro junkies to run Virtual Machines ('VM') from the File Manager with Quickemu a wrapper script for Qemu/KVM. This allows to easily download and run VM's without a dedicated separate program like Virtualbox or Gnome Boxes. These instructions will assume that the hardware portion of your system have the proper UEFI or BIOS settings to support Virtualization, if not do a web search of how to enable this functionality in your specific computer model.

USING QUICKGET

Quickemu has a feature called 'Quickget' that will allow you to download both Linux Distros and Windows ISO's to run in a VM. It looks after the downloading and setting up an automatic configuration file with sensible defaults. In AV Linux and MX Moksha 25 this has all been integrated into the File Manager so you can easily create a Folder and have Quickget download an ISO file to it and then run the ISO in a VM seamlessly. In the screenshot I have made a folder for 'ALPINE' Linux and right-clicking on the folder shows an 'Open With' option to 'Quickget an ISO'.



You will be asked to select or create a folder and once selected the Quickget ISO Selector will appear. Depending on the speed of your internet it could possibly take several seconds for the list to populate and the Selector to appear. In the screenshot I have selected an Alpine Linux ISO to download. Click the 'Download' button and a new Terminal window will open to display the download progress in case any interactive input is needed.

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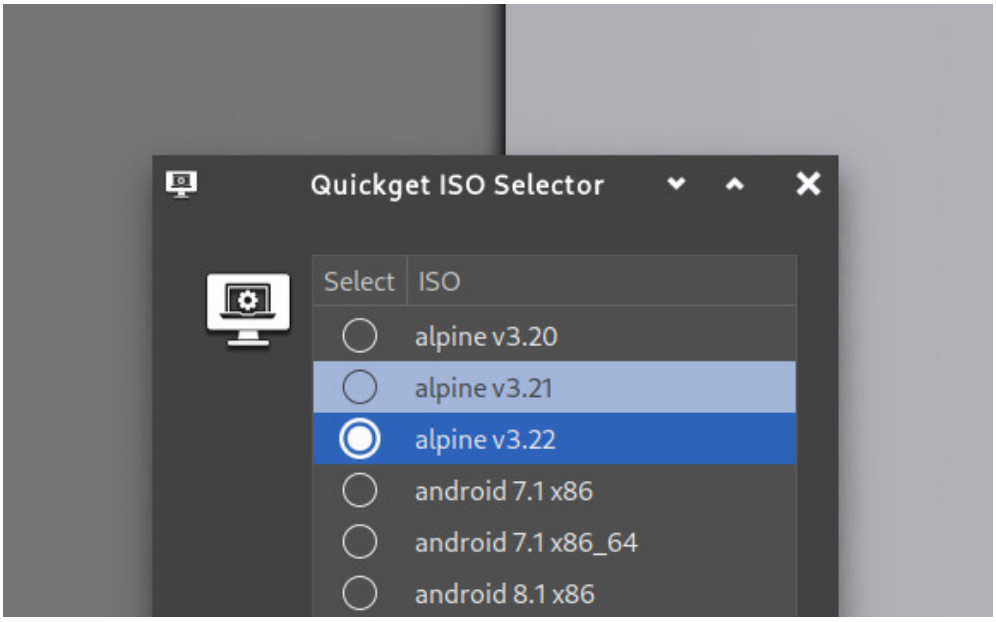

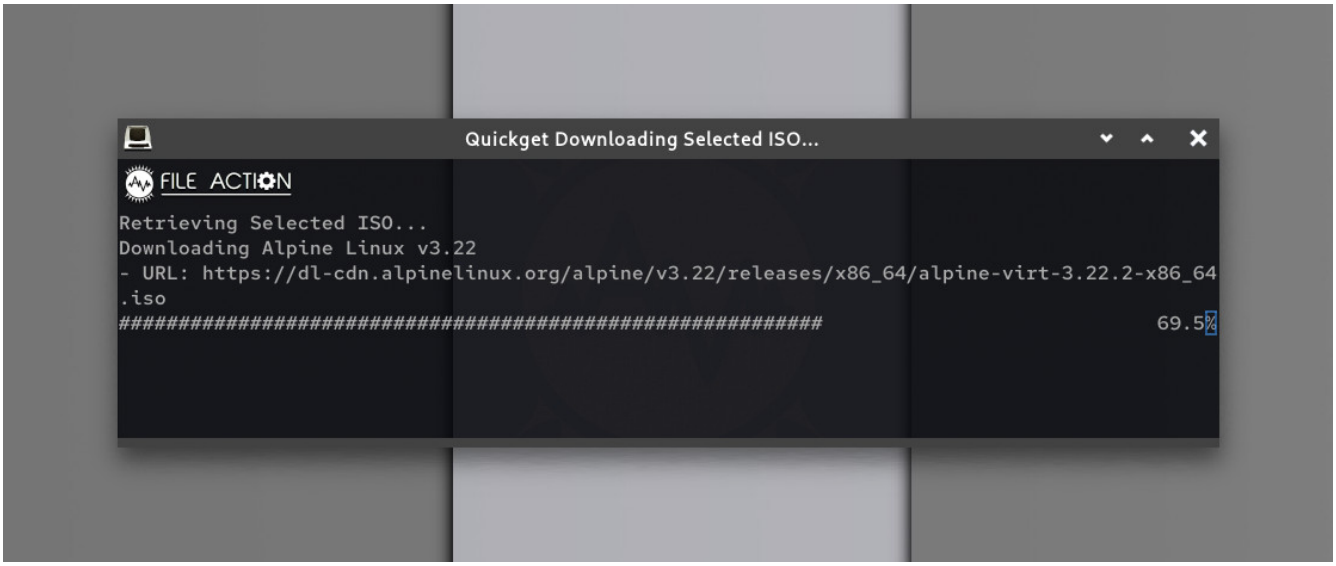

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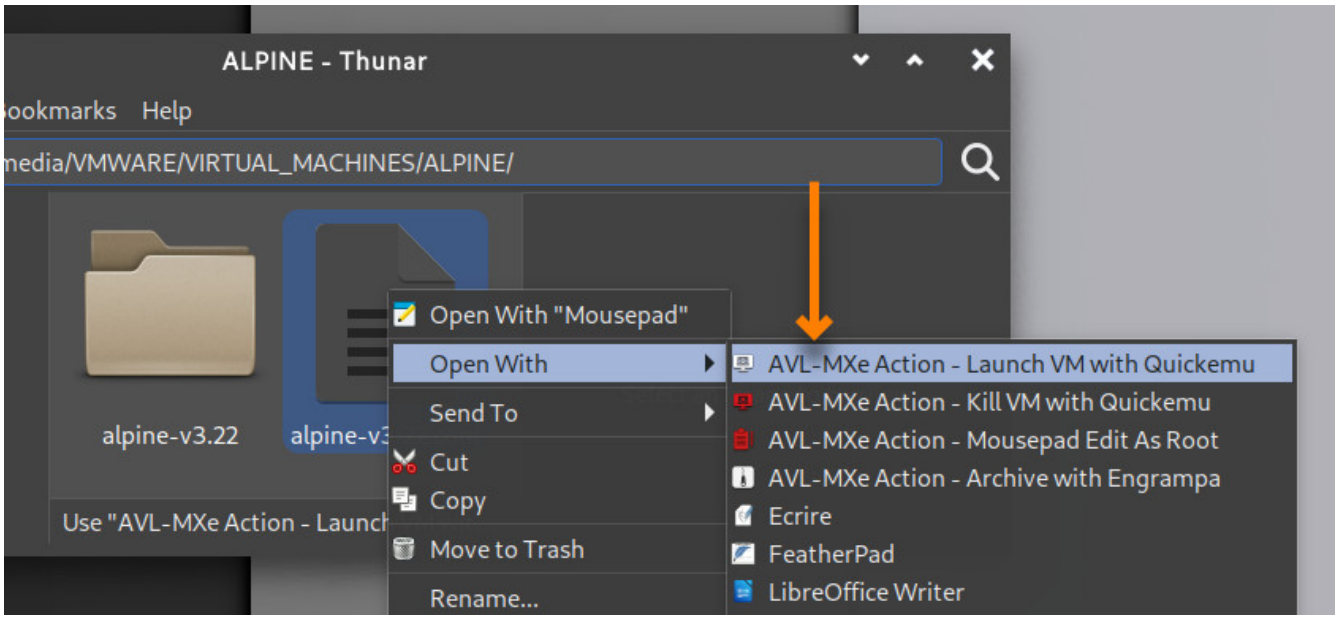
Once the ISO has completed downloading you can run the ISO in a VM from the File Manager again by right-clicking on the '.conf' file that Quickget created and using the 'Open With' action to "Launch VM with Quickemu". The VM will launch in its own new Window using the Spice Viewer.



It is also possible to use Quickemu with an ISO file you have downloaded yourself from somewhere else or to use it as a development tool to test ISO's you have created with MX Snapshot. In this case you will need to manually create a simple conf file to accompany the ISO. I find it simplest to have everything contained in the same folder. Here is an example using an MX Linux 25 XFCE4 ISO of what Quickemu conf file contains.
You should name the conf file without any spaces (ie 'mx25.conf') and it should contain this info.

```
guest_os="linux"
disk_img="./disk.qcow2"
iso="./MX-25_Xfce_ahs_x64.iso"
cpu_cores="4"
ram="8G"
disk_size="32G"
```

Breakdown of conf options:

'guest_os' name isn't really that important, you can call it what you like.
'disk_img' is where you want the VM hard drive placed ('./') means it's within this folder.
'iso' is where your ISO image file is located, again (./') denotes it is within this folder.
'cpu_cores' is how many of your system CPU cores you want to allot to the VM.
'ram' is how many Gb of RAM allotted to the VM.
'disk_size' is the size of the 'disk.qcow2' Virtual Hard Disk.

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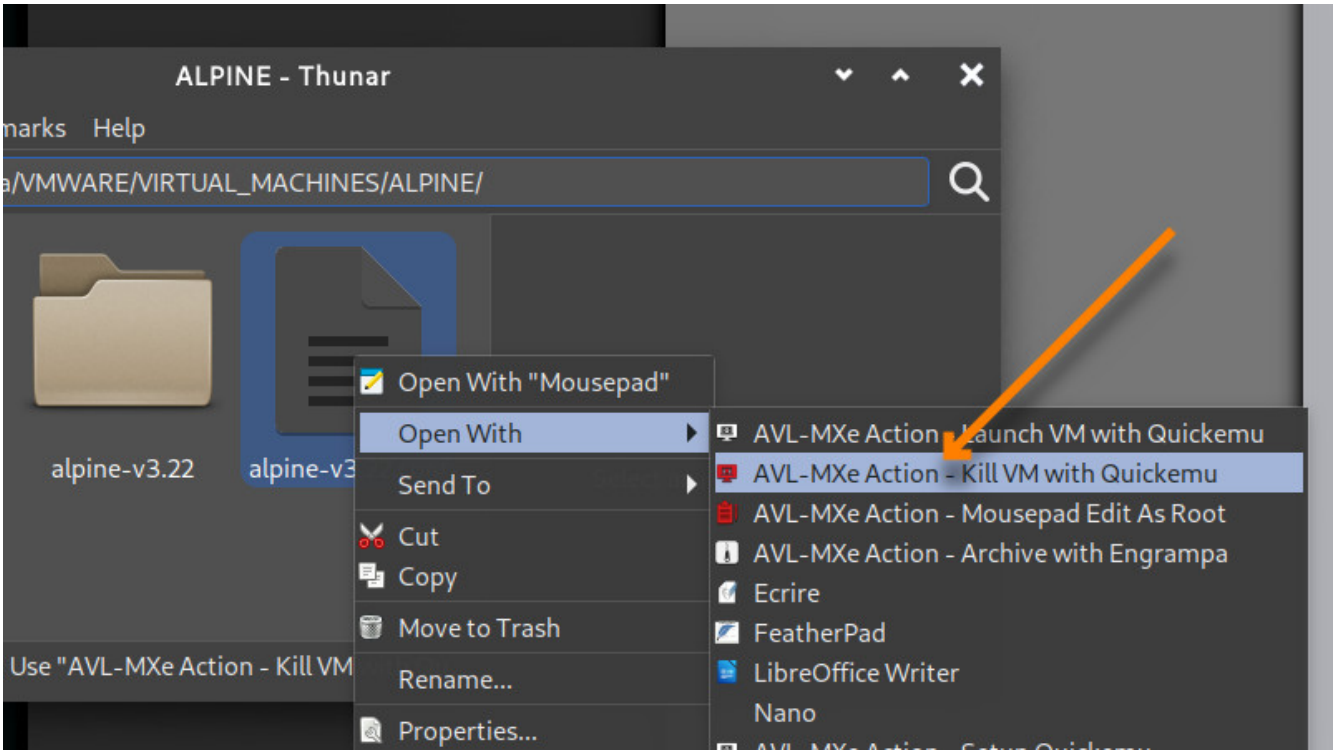
As with a Quickget ISO simply right-click on the conf file and 'Open With' Launch VM with Quickemu to run your ISO as a VM. It is important to note that simply closing the Spice Viewer window does not shut down a running VM, you must shut a running OS down with it's normal Logout/Shutdown procedure. In the event you can't properly shut down a running VM from within it's Viewer window there is a Quickemu command to kill a running VM from its conf file. A right-click 'Open With' launcher has been provided so this can also also be done from the File Manager.



FILE SHARING BETWEEN GUEST VM AND HOST

Quickemu makes use of various 'Spice' tools to work with your VM's, the 'spicy' Viewer is the window your VM runs in and 'spice-webdavd' allows for File and Clipboard transfers from host to the running VM guest. In order for this to work the guest should have 'spice-vdagent', 'spice-webdavd' and 'spice-client-gtk' installed. Please note that AV Linux and MX Moksha 25 already have all of these installed for you so as a host or guest they are fully furnished. When you have all of the Spice prerequisites installed in your guest VM then you will have automatic File Sharing between the guest and the ~/Public folder in the host system! As an example here is a running VM guest of 'MX-Moksha'. If I navigate and open the 'Network' section in the left-hand file pane I will see there is a Network 'Spice client folder'. Clicking on this folder will open a Network share in the lower left hand pane of the File Manager and that share is linked to the ~/Public folder on the host.

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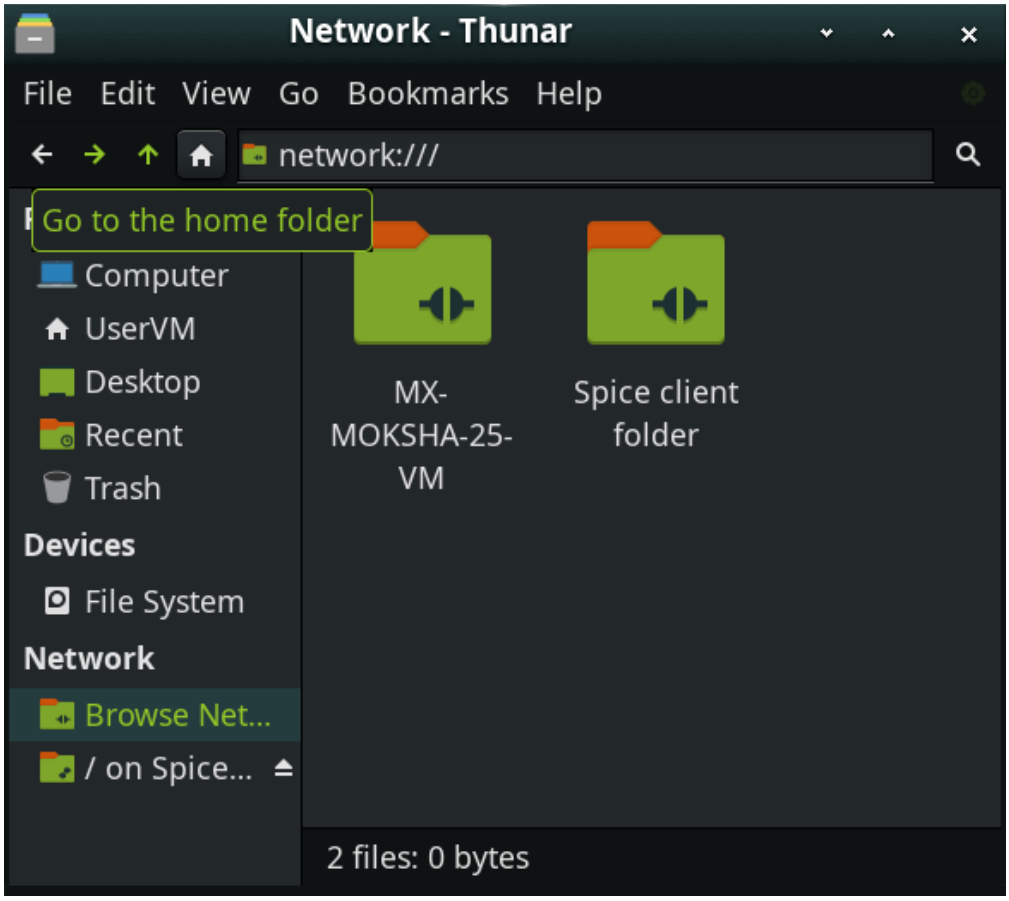

In the event that the 'Spice client folder' doesn't open when clicked it may be worthwhile to check if the 'spice-webdavd' daemon is enabled and running. This can be checked in a Terminal like this:

`systemctl status spice-webdavd`

If spice-webdavd is not enabled then you can try starting it manually:

`systemctl start spice-webdavd`

If you want spice-webdavd to autostart in an installed VM:

`systemctl enable spice-webdavd`

FULLSCREEN HOTKEYS

You can resize your VM window to fullscreen with Shift+F11 and revert to a window with Shift+F12.