Setup Ubuntu Virtual Machine

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Version 1.1 from Dec 11, 2018

1 Summary

This document was created to briefly described the steps required to setup a Ubuntu VirtualBox virtual machine in a windows host.

2 Create Ubuntu Virtual Machine

Create a VM with desire version of Linux

- 1. If required update or install VirtualBox in host (e.g. Windows)
- 2. On host (e.g. windows) download .iso image of desired version of Ubuntu (e.g. 16.04 or 18.04) releases.ubuntu.com/16.04/
- 3. From VirtualBox start a new virtual machine (VM) selecting desired memory, size, etc. once it starts select the .iso image with the desired version of Ubuntu. (Figures 1 3)
- 4. Follow directions to install Ubuntu on VM
- 5. [optional] Add terminal to launcher and customize launcher shortcuts
- 6. Update Ubuntu >> sudo apt-get update

3 Install Guest Addition on VM

Installing guest addition will help the Ubuntu VM integrate properly with Windows so that things like swap folders and copy/paste (text and images) work seamlessly between the Windows and the VM.

1. Update Ubuntu:>> sudo apt-get update

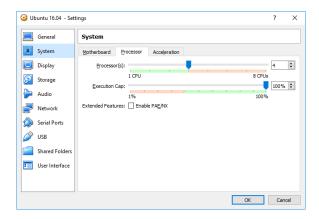


Figure 1: Set number of processors for VM.

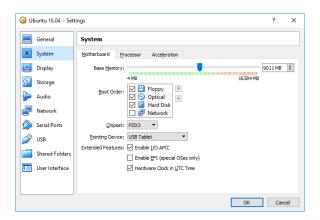


Figure 2: Set amount of memory for VM.

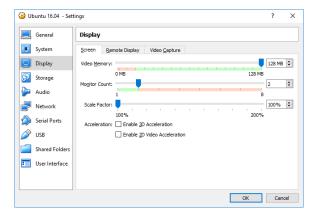


Figure 3: Set number of displays for VM.

- 2. Download version of guest extension corresponding to version of VirtualBox on the VM.
 - download.virtualbox.org/virtualbox/
 - download.virtualbox.org/virtualbox/5.2.22/
- 3. Mount disk image. Run it and follow directions
 - Right-click on .iso
 - select: "Open With" \rightarrow "Disk Image Mounter"
 - click run on pop-up
- 4. Update software:
 - >> sudo apt-get update
- 5. Setup swap directory: (Figure 4) >> sudo adduser <yourUsername> vboxsf
- 6. Close VM after installing guest additions.
- 7. If it does exist add the desire swap folder on the host (e.g. Windows)
- 8. Add desired swap folder in VM settings
- 9. Enable directional clipboard in VirtualBox setting for VM on host. (Figure 5)
- 10. Start VM
- 11. Verify that swap directory is visible in Ubuntu VM and copy paste (images and text) should work in both directions. (Figure 6)

4 Install Other Software

- Update software:
 - >> sudo apt-get update
- Install chrome
 - Option #1 download.deb
 - * Download the latest version from www.google.com/chrome/
 - * click on .deb file to start installation process
 - Option #2 terminal
 - $>> wget \ https://dl.google.com/linux/direct/google-chrome-stable_current_amd 64. debate the latest and better the latest and bett$
 - >> sudo dpkg -i google-chrome-stable_current_amd64.deb
 - [optional] Lock chrome to launcher and set as default
 - [optional] use swap folder to pass favorates from host

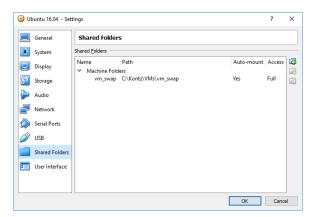


Figure 4: Set swap direction to pass files between host and VM.

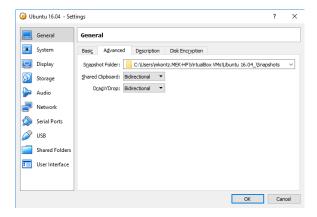


Figure 5: Set up directional host/VM clip-board.

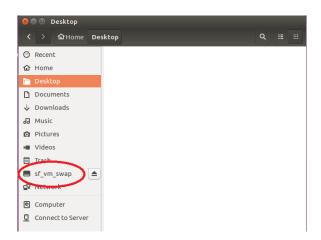


Figure 6: The swap folder in the VM will have the same name as the host folder with an "sf_" prefix.

- Install shutter screen capture tool:
 - >> sudo apt-get install shutter
- Install Sublime Text
 - Search for latest/matching directions to install Sublime Text
 - [optional] Lock Sublime to launcher
- Install TeXstudio (See TeXstudio how to doc)
- Install git:
 - >> sudo apt install git
- Install git-gui:
 - >> sudo apt-get install git-gui
- Install gitk:
 - >> sudo apt-get install gitk
- Install kdiff3:
 - >> sudo apt-get install kdiff3
- Configure Git (See Git Reference)
- Install Beyond Compare
 - Download the latest version from www.scootersoftware.com
 - click on .deb file to start installation process
- Install ssh key (See ssh how to doc)
- Install Remarkable Markdown software (See Markdown how to doc)
- Install cmake through Ubuntu Software Manager

Revision History

Revision	Date	$\mathbf{Author}(\mathbf{s})$	Description
1.0	Dec 8, 2018	Matt Kontz	Created initial version with brief directions
			on setting up a Ubuntu VirtualBox virtual
			machine in a windows host.
1.1	Dec 11, 2018	Matt Kontz	Correct Beyond Compare install notes.