

# Prerequisites for Vagrant, VirtualBox, and Docker Session



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# Why Prerequisites?

- Because of the size of the installable downloads required for this hands-on lab, it is strongly recommended that you preform these steps at home on a fast network before attending the session:
  - Download and Install VirtualBox and Vagrant
  - Clone the git repo that has the lesson material
  - Bring up the Vagrant images at least once to download packages and install Docker Engine

# Some Assembly Required

- Tools you will need to complete this lab:
  - Computer running OS X, Linux, or Windows\*
  - Internet Access to download boxes
  - Text Editor (...i will use Atom.io)
  - GitHub Account
  - PC users must have "*VT-x/AMD-V hardware acceleration*" turned on in your BIOS for VirtualBox to work.



\* Windows users may need an ssh client



# Installing VirtualBox

<https://www.virtualbox.org/wiki/Downloads>



The screenshot shows the VirtualBox website's download page. On the left is a sidebar with navigation links: About, Screenshots, Downloads, Documentation, End-user docs, Technical docs, Contribute, and Community. The main content area is titled 'VirtualBox' and 'Download VirtualBox'. It contains a list of download options for VirtualBox 5.0.20. A green box highlights the 'VirtualBox platform packages' section, and a green arrow points from a text box to the 'VirtualBox 5.0.20 for Linux hosts' link within that section.

**VirtualBox**

## Download VirtualBox

Here, you will find links to VirtualBox binaries and its source code.

### VirtualBox binaries

By downloading, you agree to the terms and conditions of the respective license.

- **VirtualBox platform packages.** The binaries are released under the terms of the GPL version 2.
  - **VirtualBox 5.0.20 for Windows hosts** [x86/amd64](#)
  - **VirtualBox 5.0.20 for OS X hosts** [amd64](#)
  - **VirtualBox 5.0.20 for Linux hosts**
  - **VirtualBox 5.0.20 for Solaris hosts** [amd64](#)
- **VirtualBox 5.0.20 Oracle VM VirtualBox Extension Pack** [All supported platforms](#)  
Support for USB 2.0 and USB 3.0 devices, VirtualBox RDP and PXE boot for Intel cards. See [this chapter from the User Manual](#).  
The Extension Pack binaries are released under the [VirtualBox Personal Use and Evaluation License \(PUEL\)](#).  
*Please install the extension pack with the same version as your installed version of VirtualBox!*  
*If you are using **VirtualBox 4.3.36**, please download the extension pack [here](#).*
- **VirtualBox 5.0.20 Software Developer Kit (SDK)** [All platforms](#)

See the [changelog](#) for what has changed.  
You might want to compare the

- [SHA256](#) checksums or the
- [MD5](#) checksums

**Annotations:**

- A green box highlights the "VirtualBox platform packages" section.
- A green arrow points from a text box to the "VirtualBox 5.0.20 for Linux hosts" link.

Select the appropriate download for your OS

# Installing Vagrant

<https://www.vagrantup.com/downloads.html>



The screenshot shows the 'DOWNLOAD VAGRANT' section of the Vagrant website. On the left is a blue sidebar with 'DOWNLOADS' and 'ARCHIVES' links. The main content area has a heading 'DOWNLOAD VAGRANT' and text explaining that the following are the latest downloads for Vagrant (1.8.3). It also mentions SHA256 checksums and older versions. A green callout box with an arrow points to the download options, which are listed in a table-like structure with horizontal dividers. The options are for Mac OS X, Windows, and Debian, each with its respective logo and supported architectures.

Operating System	Architecture
 <b>MAC OS X</b>	Universal (32 and 64-bit)
 <b>WINDOWS</b>	Universal (32 and 64-bit)
 <b>DEBIAN</b>	32-bit   64-bit

Select the appropriate download for your OS

# Install VirtualBox and Vagrant

- Once you have the downloads for your OS:
  - Install VirtualBox taking all of the defaults
    - If prompted to download extensions say yes
  - Install Vagrant taking all of the defaults



# Clone the Project from GitHub

- You should clone this project and run `vagrant up` to download all of the needed components and they use `vagrant halt` to stop everything until you get to the LISA16 session

```
$ git clone https://github.com/rofrano/lab-vagrant.git
$ cd lab-vagrant
$ vagrant up
$ . . . ← lots will happen here
$ vagrant halt
```

# What did 'vagrant up' do?

- In addition to having Vagrant and VirtualBox installed before the session, by performing these steps you will have:
  - Downloaded a Linux Ubuntu Trusty 64 box
  - Downloaded and installed all of the packages needed for the session
  - Downloaded and installed Docker Engine onto the virtual machine
  - Pull the Docker images needed for the session



That's It !!!