**I want to create a Virtual Machine on my laptop.**

Creating a Virtual Machine on your laptop can be achieved through two primary methods: the Manual (Traditional) approach and utilizing Vagrant.

**Manual Method**:

1. Begin by downloading the ISO image file required for the operating system.

2. Install the Virtual Box executable file, Virtualbox.exe.

Next Steps:

1. Launch Virtual Box and select "New" to initiate the creation of a new virtual machine.

2. Provide essential details such as:

* Name: The desired name for your Virtual Machine.
* Folder: Path to your Virtual Box folder.
* ISO Image: Path to the downloaded ISO image.
* Type: Choose the type of operating system.
* Version: Select the appropriate version for your operating system.
* Allocate memory size for the operating system.

3. Proceed by clicking "Next" and allow a few moments for the Virtual Machine creation process.

4. Once completed, you can right-click on the virtual machine to start it.

5. An isolated environment atop your operating system will be established, enabling various tasks such as executing commands and creating files.

**Using Vagrant**:

1. Install Virtual Box on your system.

2. Install Vagrant software.

3. Search for Vagrant and select the appropriate operating system, e.g., Linux.

4. Download the Vagrant.msi file and install it by double-clicking.

5. Restart your laptop to ensure proper installation.

Additional Steps:

1. Install Git by searching for "install git for windows" and selecting the suitable version (32-bit/64-bit).

2. Download Git.exe and install it by double-clicking, following the installation prompts.

Configuration and Setup:

1. Create a folder with any preferred name.

2. Open the created folder and right-click to access Git Bash.

3. Execute the following commands:

$ vagrant init ubuntu/trusty64

This command will generate a .vagrant file.

$ vagrant up

$ vagrant ssh

Enter the password as "vagrant" to access the virtual machine.

4. Upon successful login, you'll be greeted with the Vagrant@vagrant-ubuntu-trusty-64 prompt.

5. Execute the following commands within the virtual machine:

$ sudo -i

root@vagrant-ubuntu-trusty-64: # apt-get update

root@vagrant-ubuntu-trusty-64: touch file1file2

Maintenance:

Ensure to execute the following command after creation:

$ vagrant destroy

This step is crucial to prevent a slowdown in laptop performance.

**What is Vagrant?**

1. Vagrant is a Virtualization tool.
2. Vagrant is a virtual provisioning tool.
3. With the help of vagrant, we can create a virtual machine.
4. After creating a virtual machine, we can install software's automatically on your laptop.

Ex: apt-get install apache2

**What is purpose of Vagrant?**

1. Building and managing virtual machine environments in a single workflow.
2. With an easy-to-use workflow and focus on automation.
3. Vagrant lowers development environment setup time, increases production status & makes ‘works on my machine’ excuse a relic of the past