

Vagrant Cheat Sheet

Based on this Video - <https://youtu.be/iTaLhEuxJhg>

What is a Cheat Sheet

- ✓ A cheat sheet is **a quick reference guide** that contains essential information or commands related to a specific topic
 - ✓ Makes easier to remember and access important information quickly
 - ✓ Can be used by beginners and experienced professionals as Quick Reference Guide
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Install Vagrant

Download and Install from - <https://developer.hashicorp.com/vagrant/downloads>

vagrant -v	get the vagrant version
vagrant global-status	outputs status of all vagrant machines
vagrant global-status --prune	same as above, but prunes invalid entries
--help	use with any vagrant command to see help options e.g vagrant box --help

Install or Setup a Provider (Virtualbox)

Download and Install from - <https://www.virtualbox.org/wiki/Downloads>

vboxmanage -v	get the version of virtualbox
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Creating Vagrantfile (vagrant env)

Create a new folder and go to the folder location from Command Prompt/Terminal

vagrant init	Initializes a new Vagrant project with a Vagrantfile
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vagrant init <boxpath>	Initialize Vagrant with a specific box vagrant init hashicorp/bionic64
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vagrant validate	validates vagrantfile
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vagrant status	outputs status of the vagrant machine
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Vagrantfile Box Search	https://app.vagrantup.com/boxes/search
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Vagrantfile Generator	https://vagrantfile-generator.vercel.app/
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Starting and Stopping VM

vagrant up	starts vagrant environment (also provisions only on the FIRST vagrant up)
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vagrant halt	stops the vagrant machine
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vagrant suspend (remembers state)	suspends a virtual machine
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vagrant resume	resume a suspended machine (vagrant
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up works just fine for this as well)

vagrant provision	forces reprovisioning of the vagrant machine
vagrant reload	restarts vagrant machine, loads new Vagrantfile configuration
vagrant reload --provision	restart the virtual machine and force provisioning
vagrant status	outputs status of the vagrant machine

Getting into a VM

vagrant ssh	connects to machine via SSH
vagrant ssh <boxname>	If you give your box a name in your Vagrantfile, you can ssh into it with boxname

Cleaning up a VM

vagrant destroy	stops and deletes all traces of the vagrant machine
vagrant destroy -f	same as above, without confirmation

Boxes

vagrant box list	see a list of all installed boxes on your computer
vagrant box add <name> <url>	download a box image to your computer

vagrant box outdated	check for updates vagrant box update
vagrant box remove <name>	deletes a box from the machine
vagrant package	packages a running virtualbox env in a reusable box vagrant package --output mybox.box

Provisioning Commands

Vagrantfile > add block > **config.vm.provision**

```
config.vm.provision "shell",
  inline: "echo Hello, World"
```

```
config.vm.provision "shell", inline: <<-SHELL
  sudo apt-get update
  sudo apt-get install apache2 -y
SHELL
```

OR

Create a separate file having Provision Scripts and provide the location in Vagrantfile

config.vm.provision :shell, path: "provision.sh"

vagrant provision	if VM is already running, runs the provisioners defined in your Vagrantfile
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vagrant reload --provision	reloads the Vagrantfile and runs the provisioners
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Networking

Vagrantfile

Port Forwarding

config.vm.network "forwarded_port", guest: 80, host: 8080

maps port 80 of the VM to port 8080 on the host machine

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config.vm.network "forwarded_port", guest: 80, host: 8080, auto_correct: true
```

```
config.vm.usable_port_range = (8000..9000)
```

Creating Public Network

config.vm.network "public_network", ip: "192.168.1.100"

if IP address is not given, a default IP will be assigned

Creating Private Network

config.vm.network "private_network", ip: "192.168.50.4"

This will create a private network with the IP address of 192.168.50.4

Sharing Folder

By default ./ on your computer is shared as /vagrant on the VM

Edit Vagrantfile

config.vm.synced_folder "./data", "/vagrant_data"

shares the folder data present on the vagrantfile folder to a folder called vagrant_data on the VM

Snapshot Commands

What is a Snapshot

- ✓ Full copy of the VM in its Current state
- ✓ All configurations - disk contents, apps, packages, folders, memory
- ✓ Creates backup of the Virtual Machine
- ✓ Restoring the VM from an earlier state

vagrant snapshot save <name> creates a snapshot from the current state of the machine

vagrant snapshot list lists all snapshots of the current machine

vagrant snapshot restore <name> restores machine from the specific snapshot

vagrant snapshot delete <name> deletes the snapshot

Note: Snapshots do not include the Vagrantfile or any other configuration files in your project directory
These files are separate from the snapshot and can be shared or version controlled separately

Plugin Commands

Plugins are add-ons to enhance functionality of a tool

Available Plugins : <https://github.com/hashicorp/vagrant/wiki/Available-Vagrant-Plugins>

vagrant plugin install <plugin-name> installs the specified Vagrant plugin

vagrant plugin list lists all installed Vagrant plugins

vagrant plugin update <plugin-name>	to update a plugin
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vagrant plugin repair in case of error	to repair installed plugins
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vagrant plugin uninstall <plugin-name>	uninstalls the specified Vagrant plugin
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vagrant plugin expunge	to delete all plugins
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vagrant plugin expunge --reinstall plugins	to reinstall all expunged plugins
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Tips

vagrant -v	get the vagrant version
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vagrant status	outputs status of the vagrant machine
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vagrant global-status	outputs status of all vagrant machines
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References:

- ☐ Vagrant: <https://developer.hashicorp.com/vagrant/downloads>
- ☐ Virtualbox: <https://www.virtualbox.org/wiki/Downloads>
- ☐ Vagrantfile Box Search: <https://app.vagrantup.com/boxes/search>
- ☐ Vagrantfile Generator: <https://vagrantfile-generator.vercel.app/>
- ☐ Available Plugins : <https://github.com/hashicorp/vagrant/wiki/Available-Vagrant-Plugins>

Never Stop Learning

Raghav Pal

AutomationStepByStep.com