

Operating Systems!

OS Tech Bootcamp

(Part 1)

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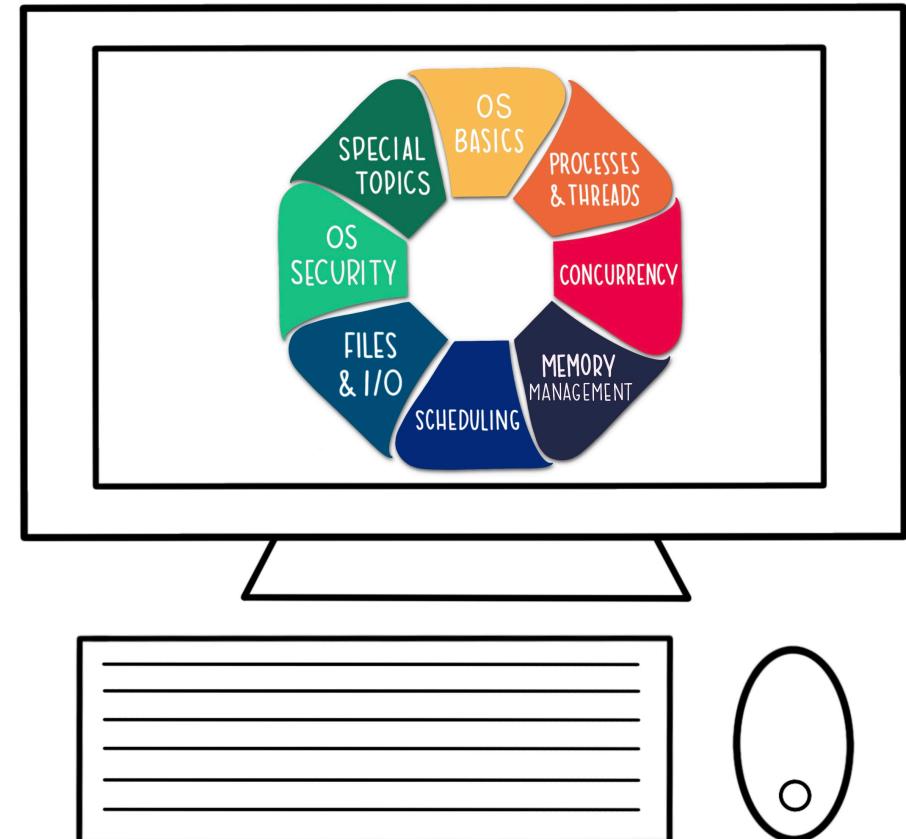
CS 460 - Operating Systems

Fall 2020

<https://www.cs.montana.edu/cs460>

OS Tech Bootcamp (Overview)

- VirtualBox & Vagrant
 - A sandbox
 - standardized work environment
- Basic Command Line
 - An interface to the computer / OS
- Working in C
 - Automating compilation w/ make
 - Debugging w/ gdb
- Teamwork & Communication
 - READMEs & Markdown
 - Git & GitHub
- Coming Up:
 - System programming (fork(), exec())
 - OS internals (e.g., procs, threads)



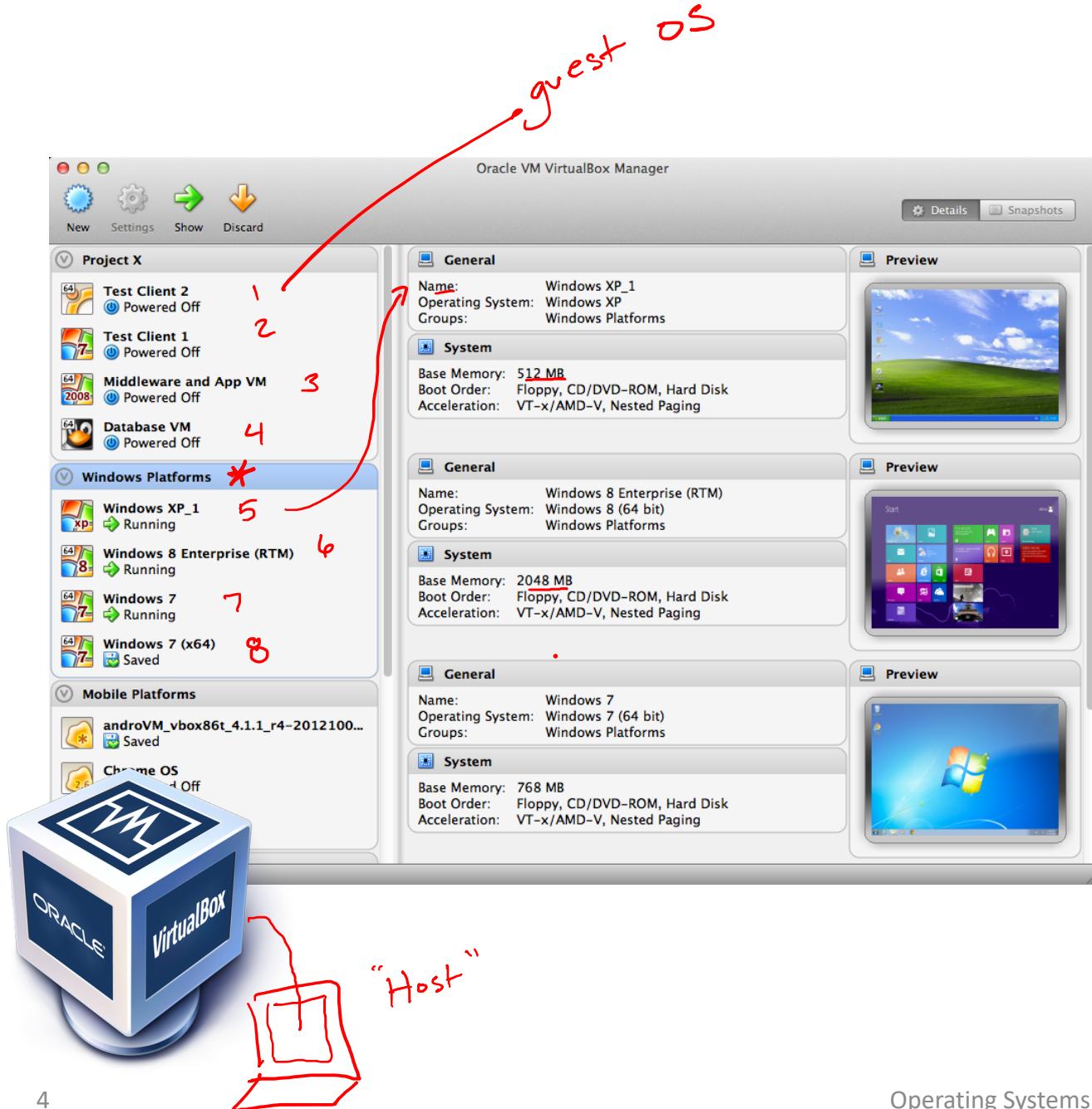
Throughout "bootcamp" we will work through (many) parts of PAO.

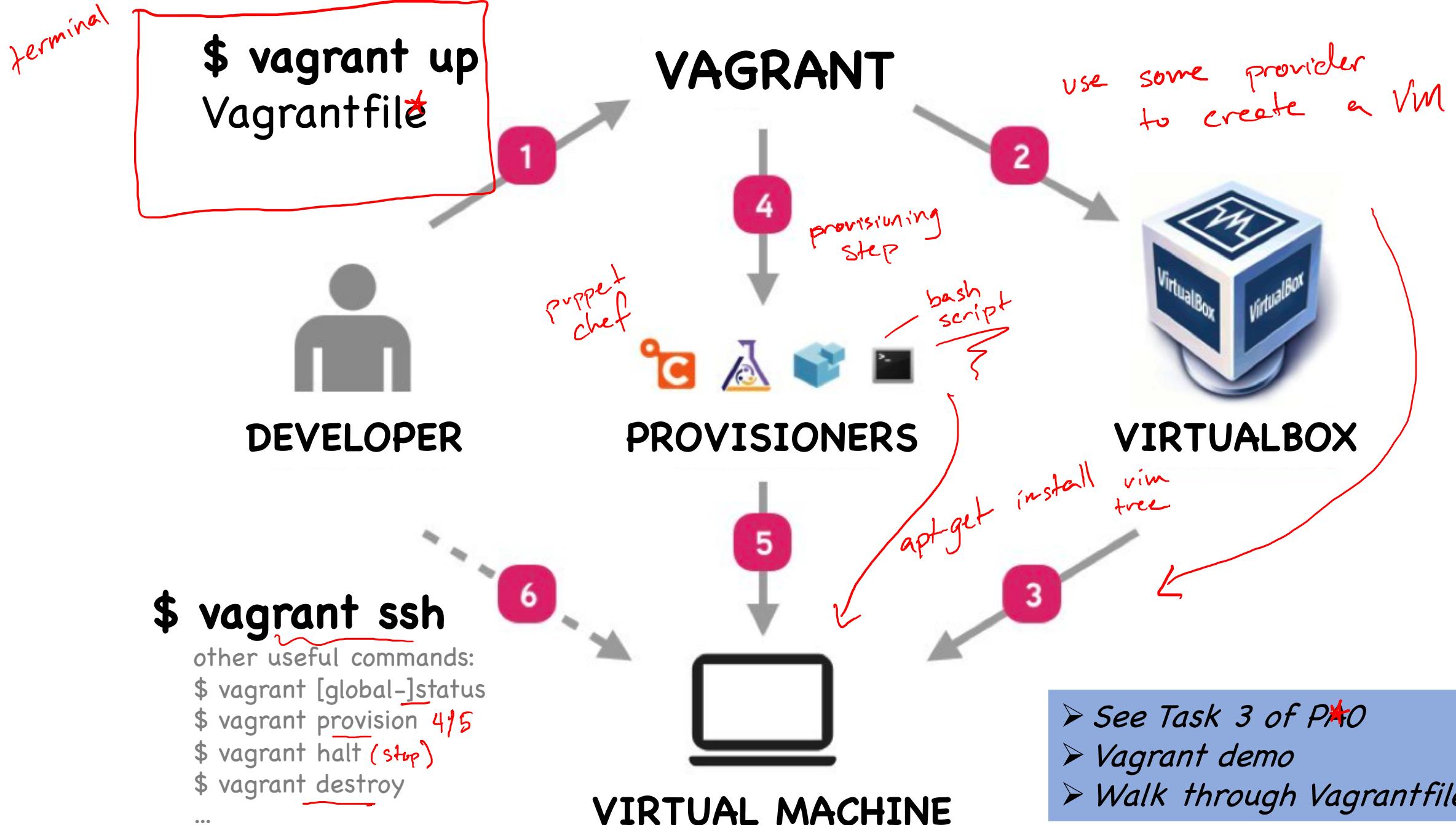
VirtualBox & Vagrant (Task 3)

*Because VirtualBox can help us to standardize our virtual environments...
and because Vagrant can automate a lot of the tedious stuff!*

VirtualBox

- A free and open-source hosted **hypervisor** for x86 virtualization, developed by Oracle
 - VirtualBox can be run under Windows, GNU/Linux, macOS, Sun Solaris and FreeBSD.
 - VirtualBox can run multiple guest OSs under a single host OS
 - It supports the creation and management of **guest virtual machines** running Windows, Linux, BSD, Solaris, etc.





- See Task 3 of PA0*
- Vagrant demo
- Walk through Vagrantfile

READMEs & Markdown (Task 2)

Because communicating important aspects of our projects is... important!

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###Code

```

```javascript
var foo = 'bar';
if(true) foo = 'foo';
```
  
```

###Tables

| First Header | Second Header |
|-----------------------------|------------------------------|
| Content from cell 1 | Content from cell 2 |
| Content in the first column | Content in the second column |

###Lists

- [x] @mentions, #refs, [links](), **formatting**, and tags supported

- [x] list syntax required (any unordered or ordered list supported)

- [x] this is a complete item

- [] this is an incomplete item

what others see

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H3

Code

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Markdown Breakout Activity

→ See Task 2: *READMEs & Markdown (PA0)*

Projects?

Observations?