Lab 1

Saturday, August 26, 2023 10:27 PM

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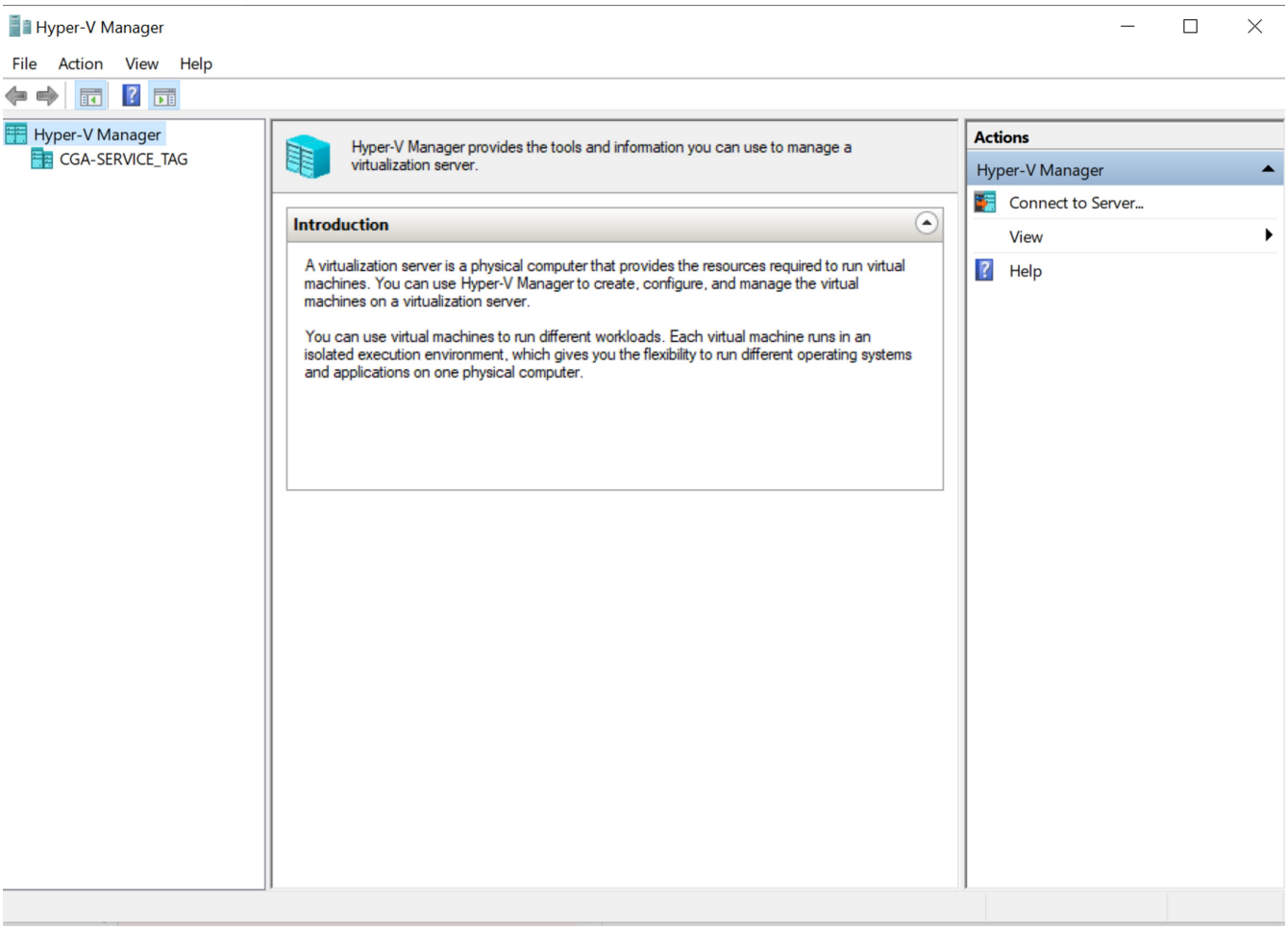
26 August 2023
7330 Computer and Network Security

1. Detail your choice of hypervisor and include a screenshot of the management interface running on your machine [1 point]

I decided to try Hyper-V to see just how well a native Windows program can actually function as compared to other options of install. The graphical user interface looks old, with a Windows XP feel to it. It is limiting just because not all boxes seem to use it, however it is native to Windows and I just never knew that you could make VMs for free.



2. Include a screenshot of the terminal output when issuing the vagrant command. Include a description of what OS and terminal program you chose to use. [2 points]

```
C:\Users\Ryan Younes>vagrant
Usage: vagrant [options] <command> [<args>]

    -h, --help                     Print this help.

Common commands:
     autocomplete    manages autocomplete installation on host
     box             manages boxes: installation, removal, etc.
     cloud           manages everything related to Vagrant Cloud
     destroy         stops and deletes all traces of the vagrant machine
     global-status   outputs status Vagrant environments for this user
     halt            stops the vagrant machine
     help            shows the help for a subcommand
     init            initializes a new Vagrant environment by creating a Vagrantfile
     login
     package         packages a running vagrant environment into a box
     plugin          manages plugins: install, uninstall, update, etc.
     port            displays information about guest port mappings
     powershell      connects to machine via powershell remoting
     provision       provisions the vagrant machine
     push            deploys code in this environment to a configured destination
     rdp             connects to machine via RDP
     reload          restarts vagrant machine, loads new Vagrantfile configuration
     resume          resume a suspended vagrant machine
     serve           start Vagrant server
     snapshot        manages snapshots: saving, restoring, etc.
     ssh             connects to machine via SSH
     ssh-config      outputs OpenSSH valid configuration to connect to the machine
     status          outputs status of the vagrant machine
     suspend         suspends the machine
     up              starts and provisions the vagrant environment
     upload          upload to machine via communicator
     validate        validates the Vagrantfile
     version         prints current and latest Vagrant version
     winrm           executes commands on a machine via WinRM
     winrm-config    outputs WinRM configuration to connect to the machine

For help on any individual command run `vagrant COMMAND -h`
```

In the screenshot, you can see the full help menu of the commands possible through Vagrant after I issued the vagrant command. I downloaded and ran the .msi for Vagrant on my issued Windows 10 machine, and used the default Windows command prompt as a terminal.

3. Detail the Vagrant box that you chose to use for the Install and Specify a Box tutorial. Your level of detail should be understood by a 4/c and should include information such as OS (and distro details if Linux), software installed, company behind the technology used, github repos associated, etc. [2 points]

I chose to use the Ubuntu 12.04 Precise Vagrant box for this tutorial, as this is an operating system I myself have used before. Ubuntu a mostly new user friendly operating system that still utilizes a graphical user interface with windows and applications as much as possible. This gives users that are accustomed to achieving most tasks with such an interface style the option to wean into the command line style that most Linux distributions rely on. Canonical, the company that provides upkeep for the Ubuntu operating system, is a private software company based in South Africa.

4. A screenshot of the files created for the Synchronize Local and Guest Files tutorial. [2 points]

I was able using PowerShell to successfully create a folder called "foo" while logged into Linux, and see it reflected in the virtual machine as well as in the Windows folder.

```
vagrant@VM: $ ls
Desktop  Documents  Downloads  Music  Pictures  Public  Templates  Videos
vagrant@VM: $ ls /vagrant
docker-compose.yml  Files  router  runVagrant.ps1  runVagrant.txt  Vagrantfile  volumes
vagrant@VM: $ touch /vagrant/foo
vagrant@VM: $ exit
logout
Connection to 127.0.0.1 closed.
PS C:\Users\Ryan Younes\OneDrive - Coast Guard Academy\Documents\Fall Classes 2023\CNS\boxes> ls


    Directory: C:\Users\Ryan Younes\OneDrive - Coast Guard Academy\Documents\Fall Classes 2023\CNS\boxes


Mode                 LastWriteTime         Length Name
----                 -------------         ------ ----
da---l         8/31/2023   1:52 PM                .vagrant
da---l         8/31/2023  10:20 PM                Files
da---l         8/31/2023  10:20 PM                router
da---l         8/31/2023  10:20 PM                volumes
-a---l         8/31/2023   2:29 PM           3014 docker-compose.yml
-a---l         9/11/2023   9:45 PM              0 foo
-a---l         9/11/2023   9:30 PM            110 runVagrant.ps1
-a---l         9/11/2023   9:28 PM              0 runVagrant.txt
-a---l         8/31/2023   1:52 PM           3476 Vagrantfile


PS C:\Users\Ryan Younes\OneDrive - Coast Guard Academy\Documents\Fall Classes 2023\CNS\boxes>
```