

OPS235: Lab 2

Virtual Machines – Part II



Lab 2 Topics - Part II

Topics

- Managing Virtual Machines
- Backing up Virtual Machines
- Backup of **Kickstart** Files (all machines)
- Updating all machines (**yum update**)
- Completing Lab2



Managing Virtual Machines

- There are two methods to start and stop virtual machines:
 1. Graphically (**virtual machine manager**)
 2. **virsh** shell (command prompt)
- Main **virsh** shell commands:
 - List status of VMs:
 - **virsh list, virsh list --all, virsh list --inactive**
 - Start / Shutdown Vms:
 - **virsh start vmname, virsh shutdown vmname**
 - Add / Remove VMs from virtual machine manger list:
 - **virsh define vmname, virsh undefine vmname**



Managing Virtual Machines

- What is the purpose of the **virsh** command?
- What are the methods to use **virsh** to:
 - List status of VMs
 - Start / Shutdown VMs
 - Define / Undefine VMs
- What is benefit of **virsh** as opposed to **virt-manager**?



Backing up VMs

- Two things you should consider when backing up VMs:
 1. **Backup images** (contained in `/var/lib/libvirt/images` directory). Images need to be compressed with **gzip** utility to save space. Note the correct way to compress image. Use the **gunzip** utility to correctly restore the VM.
 2. **Backup the xml configuration file.** Use the **virsh dumpxml vmname > vmname.xml** command. This command is very important in case you reconstruct the host (total wipe), but need to define (add) the VM into the virtual machine manager list.

NOTE: Failing to backup the compressed images into the `/var/lib/libvirt/images` directory (eg /home by mistake) can cause space issues and prevent the host machine from starting graphically!!!



Kickstart Files

- What is the purpose of a **Kickstart** file?
- Where are the kickstart file located after the installation of your centos host machine as well as virtual machines?
- List the steps using **scp** to backup your kickstart files to your host machine.
- What is the purpose of backing up the kickstart files?

NOTE: If you can't use scp, you can use e-mail to send to your Seneca e-mail the kickstart files. You can open a web-browser and use your graphical e-mail system for centos1 and centos2 Vms. For your centos3 VM, you can use the Linux command:

(best to copy kickstart file to your home directory first!)
mail -s "kickstart" your_email_address < ~/kickstart_file_pathname