

# Managing Virtual Machines

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# Exam Objectives



**Start, stop, modify the status of virtual machines**

**Configure systems to launch virtual machines at boot**

**Evaluate memory usage of virtual machines**

**Resize RAM or storage of VMs**

**Cloning and replication VMs using images or snapshots**



# Demo



- Building your test lab with customized installs
- Controlling virtual machine status
- Monitoring resource utilization of virtual machines
- Adding resources to virtual machines
- Cloning and virtual machine snapshots



# Building your Lab Environment

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# Controlling Machine Status

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# Monitoring Virtual Machines

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# Adding Resources

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# Cloning and Snapshots

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# virt-install

```
$ sudo virt-install --hvm --connect qemu:///system \  
  
--network=bridge:virbr0,mac=52:54:00:00:00:01 \  
  
--pxe --graphics spice \  
  
--name=bob --ram=728 --vcpus=1 \  
  
--os-type=linux --os-variant=rhel7 \  
  
--disk path=/var/lib/libvirt/images/bob.qcow2,size=9
```



```
virsh net-update default add ip-dhcp-host \  
“<host mac='52:54:00:00:00:01' name='bob' \  
ip='192.168.56.11' /> --live --config
```

## net-update

**We can add in reservations of IP Addresses for systems based on the MAC Address**



# VM Control

```
virsh dominfo alice  
virsh shutdown alice  
virsh reboot alice  
virsh start alice  
virsh destroy alice  
virsh undefine alice --remove-all-storage
```



```
yum install -y virt-top
```

# Monitoring



```
virsh setmaxmem alice 1500M --config
```

```
virsh setmem alice 728M --live
```

# Adding Resource



Next up: Migrating Virtual  
Machines

