# Welcome to Module 9

VM Management on vCenter

# Cloning VM

- A clone is a copy of an existing virtual machine. The existing virtual machine is called the parent of the clone.
- When the cloning operation is complete, the clone is a separate virtual machine

### Why Make a Clone?

- Installing a guest operating system and applications can be time consuming. With clones, you can make many copies of a virtual machine from a single installation and configuration process.
- Clones are useful when you must deploy many identical virtual machines to a group.

#### For example:

- An MIS department can clone a virtual machine for each employee, with a suite of preconfigured office applications.
- A virtual machine can be configured with a complete development environment and then cloned repeatedly as a baseline configuration for software testing.
- A teacher can clone a virtual machine for each student, with all the lessons and labs required for the term.

## VM Template

- A VMware template is a master copy of a virtual machine from which an administrator can clone, convert or deploy more virtual machines
- A template includes the guest OS, a set of applications, and a specific VM configuration
- Templates save time and avoid errors when configuring settings and other choices to create new Windows or Linux VMs
- A template cannot be powered on or edited once it is created

## Difference between template and clone

- Template acts as a baseline image for a Virtual Machine with the predefined configurations as per your organization's standards
- Cloning creates an exact duplicate copy of a Virtual Machine at that exact time

## VM Export as OVF

- OVF is a file format that supports exchange of virtual appliances across products and platforms. When you export a virtual machine as an OVF file, you create a directory that contains an OVF file and the virtual disk files. You might consider an OVF as an archive of all the files that belong to the OVF directory
- A VM should be powered off in order to be exported

**m**ware

Hypervisor

Convert into OVF

VirtualBox

Hypervisor

- The export includes:
  - .ovf
  - .vmdk
  - .iso
  - · .mf

## Difference Between OVF and OVA

- OVA stands for open virtual appliance
- It is a container that has all the VM export file (.ovf, .iso, .vmdk)
- It is a lot easier to use OVA file when transferring to another computer

#### .ova

- .ovf
- .vmdk
- .iso
- .mf

# Organizing VMs

- VMs can be organized in:
  - Folders
- VMs can be removed from inventory:
  - Remove
  - Register

# Other Menu Options for VMs

- Power
- Guest OS
- Fault Tolerance
- VM Policies
- Compatibility
- Edit Resource Settings
- Edit Settings
- Move to
- Rename
- Edit Notes.

## VM Fault Tolerance

- VMware vSphere Fault Tolerance (FT) provides continuous availability for applications (with up to four virtual CPUs) by creating a live shadow instance of a virtual machine that mirrors the primary virtual machine.
- If a hardware outage occurs, vSphere FT automatically triggers failover to eliminate downtime and prevent data loss.

## Simple to Set Up, Start and Stop:

- vSphere FT can safeguard any number of virtual machines in a cluster because it leverages existing vSphere HA clusters.
- Administrators can start or stop vSphere FT for specific virtual machines with a point-and-click action in the vSphere web client. Use vSphere FT for applications that require continuous protection during critical times, such as quarter-end processing.

# Accessing vCenter through HTML5

- Two way to access vCenter
  - Flash
  - HTML5