* Encrypted VMotion
  + Coss-vcenter vmotion
* Upgrade ESXi
  + Single reboot
  + Quick reboot
* Shell
  + And lockdown
    - Exception list
* vCenter HA
* Enhanced Linked Mode
* Virtual TPM 2.0
* Snapshot consolidation
* DCUI
  + Restart Management Agent
    - Releases and renews DHCP for management NIC
* Permissions
* Per-VM EVC
* HA
  + Isolation
  + Partition
* Vswitch vs VDS
  + VDS versions
* VMWare Cloud
  + vCenter Server Hybrid Linked Mode
* PSC and SSO parts
* Port mirroring
  + Distributed Port Mirroring
  + Remote Mirroring Destination
* Storage
  + UNMAP
  + VVol
    - Storage containers
  + Fiber channel
* Vcenter
  + Port numbers
* Counters
  + CPU
  + ESXTOP
* Proactive HA
* Host power management policies

# Section 1 – VMware vSphere Architectures and Technologies

## Objective 1.1 – Identify the pre-requisites and components for vSphere implementation

## Objective 1.2 – Identify vCenter high availability (HA) requirements

## Objective 1.3 – Describe storage types for vSphere

## Objective 1.4 – Differentiate between NIOC and SIOC

## Objective 1.5 – Manage vCenter inventory efficiently

## Objective 1.6 – Describe and differentiate among vSphere, HA, DRS, and SDRS functionality

## Objective 1.7 – Describe and identify resource pools and use cases

## Objective 1.8 – Differentiate between VDS and VSS

## Objective 1.9 – Describe the purpose of cluster and the features it provides

## Objective 1.10 – Describe virtual machine (VM) file structure

## Objective 1.11 – Describe vMotion and Storage vMotion technology

# Section 2 – VMware Products and Solutions

## Objective 2.1 – Describe vSphere integration with other VMware products

## Objective 2.2 – Describe HA solutions for vSphere

## Objective 2.3 – Describe the options for securing a vSphere environment

# Section 3 – There are no testable objectives for this section

# Section 4 – Installing, Configuring, and Setting Up a VMware vSphere Solution

## Objective 4.1 – Understand basic log output from vSphere products

## Objective 4.2 – Create and configure vSphere objects

## Objective. 4.3 – Set up a content library

## Objective 4.4 – Set up ESXi hosts. Objective 4.5 – Configure virtual networking

## Objective 4.6 – Deploy and configure VMware vCenter Server Appliance (VCSA)

## Objective 4.7 – Set up identity sources

## Objective 4.8 – Configure an SSO domain

# Section 5 – Performance-tuning and Optimizing a VMware vSphere Solution

## Objective 5.1 – Determine effective snapshot use cases

## Objective 5.2 – Monitor resources of VCSA in a vSphere environment

## Objective 5.3 – Identify impacts of VM configurations

# Section 6 – There are no testable objectives for this section

# Section 7 – Administrative and Operational Tasks in a VMware vSphere Solution

## Objective 7.1 – Manage virtual networking

## Objective 7.2 – Manage datastores

## Objective 7.3 – Configure a storage policy

## Objective 7.4 – Configure host security

## Objective 7.5 – Configure role-based user management

## Objective 7.6 – Configure and use vSphere Compute and Storage cluster options

## Objective 7.7 – Perform different types of migrations

## Objective 7.8 – Manage resources of a vSphere environment

## Objective 7.9 – Create and manage VMs using different methods

## Objective 7.10 – Create and manage templates

## Objective 7.11 – Manage different VMware vCenter Server objects

## Objective 7.12 – Setup permissions on datastores, clusters, vCenter, and hosts

## Objective 7.13 – Identify and interpret affinity/anti affinity rules

## Objective 7.14 – Understand use cases for alarms

## Objective 7.15 – Utilize VMware vSphere Update Manager (VUM

## Objective 7.16 - Configure and manage host profiles