

Enterprise Standards and Best Practices for IT Infrastructure

Lab Report

VMware vMotion

It12086894

Thilanaga W.P.R

Sri Lanka Institute of Information Technology

B.Sc. Special (Honors) Degree in Information Technology

Specialized in Information Technology

VMware vMotion

VMotion

VMotion is the live migration of a running virtual machine from one physical server to another physical server with zero downtime (no downtime) or without losing service.

Pre Requisites for vMotion

- The hosts must be running ESXi 5.1 or later.
- At least one vMotion interface
- Same naming for virtual port groups
- Destination host must have access to the destination storage.
- Sufficient resources on the target hosts
- All hosts should have access to the same datastores and networks.

Software Requirements for vMotion

- The hosts must be running ESXi 5.1 or later.
- VMware tools.

Hardware Requirements for vMotion

- CPU compatibility
- Processor compatibility
- GigaBit Ethernet network between hosts

Pros and Cons of vMotion

Pros

- no downtime
- Useful when performing maintenance on the ESXi host
- Maximum hardware utilization and availability.
- Continuous service

Cons

- Not allow migration with vMotion between Intel and AMD processors.

Steps of doing vMotion on VMware

1. Power on the ESXi hosts and connect using VMware vSphere client software.
2. Create a virtual machine on the host
3. Select the host and go to **‘Configuration’** tab.
4. Select > **‘Networking’** and click > **‘Add Networking’**.
5. Select > **‘VMkernel’** > ADD Network Wizard > on Next.
6. Select > **‘Create a vSphere standard switch’** > Select Next.
7. Give a network label
8. Give a name **‘Use this port group for vMotion’**.
9. Set IP settings and Finish.
10. select **‘Networking’** tab and select **‘Add Networking’**.
11. Click Next to Finish.

1. Right click on a virtual machine > click on Migrate.
2. Select 'Change host' > Next.
3. Select the server where to move the virtual machine> Next.
4. Click on Next from the 'Ready to Complete' tab.
5. Click on Finish to start the migration.