

SRI LANKA INSTITUTE OF INFORMATION TECHNOLOGY

[**Enterprise Standards and Best Practices for IT Infrastructure**](http://courseweb.sliit.lk/course/view.php?id=137)

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Practical Session: Tuesday - WE

Practical Number : Understanding vMotion in VMware virtualized environment.

Git Hub Link : https://github.com/haniroz/ESBII.git

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Evaluators Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**What is Vmotion.**

Vmotion is a technique that support with vmware virtualization to migrate live virtual machines from one physical server to another with zero downtime.

**Main requirements for Vmotion.**

* Vmotion compatible vshpere client software version. ( vSphere Essentials plus, Standard, Enterprise, Enterprise plus )
* VMkernel interface on both ESXi servers with vMotion enabled.
* Both ESXi servers in the same network domain.
* Compatible hardware on both ESXi servers.
* vCenter server installed and clustered both ESXi servers in to one domain.

**Hardware requirements for vCenter server 5.5.**

* Processor :  Intel or AMD x86 (64-bit if installing vCenter Server 4.1) processor with or

more logical cores each with speed of 2GHz.

* Memory : 3GB RAM
* Disk Storage : 3GB

**Implementing vMotion in a lab environment.**

Vmware vSphere is a platform that manages the services offered in the vmware virtualization. For simulate vMotion in a lab environment minimum two ESXi servers are needed. These servers should available in a same cluster.

To setup a server cluster,

* Minimum two ESXi servers.
* A shared storage.
* vCenter server to link ESXi cluster.
* Windows domain service.
* Install VMware workstation on Host PC. This PC need to cater the minimum required performance , to run two ESXi servers, vCenter server and domain controller server.
  + At least dual core processor with intel VT enabled to install 64bit operating systems.
  + 10 GB RAM minimum.
  + VMware workstation 7.x
  + Minimum 100 GB storage.
* Install two hypervisors (ESXi servers) on VMware workstation.
* To enable domain controller services, install windows server 2008 R2 or 2012.
* Register both ESXi servers under created domain name.
* A cluster can be created using vCenter server with an IP address.
* Using domain IP address of the vCenter, vSphere client can access both server in the cluster.
* Do the necessary configurations to enable the vMotion function.