

## Checklist on vMotion

### Requirements:

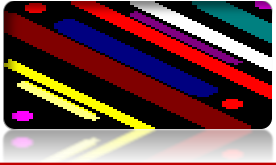
- Enough resources (memory/CPU)
- VM must not use physical devices like CDROM, Floppy
- Requires shared storage using a FC SAN or iSCSI SAN
- File system VMFS or shared NAS
- Disks using VMFS/RDM's must be available to source and target hosts.
- Gigabit Ethernet network or faster
- VMs on source and destination hosts must have access to the same subnets.
- The portgroup name on Source and Destination host must be identical.
- Should carry a minimum of Enterprise license.

### ESX 3.5 AND VC 2.5

	VM with vmdk	VM with RDM/Virtual Compatibility Mode	VM with RDM/Physical Compatibility Mode	VM with Snapshots
vMotion	YES	YES	YES	NO
Cold Migration	YES	YES	YES	YES
Cold Migration with Datastore	YES	YES	NO	NO
S(Storage)vMotion	YES	YES	NO	NO

### ESX 4 and vCenter4

	VM with vmdk	VM with RDM/Virtual Compatibility Mode	VM with RDM/Physical Compatibility Mode	VM with Snapshots
vMotion	YES	YES	YES	NO
Cold Migration	YES	YES	YES	YES
Cold Migration with Datastore	YES	YES	YES	NO
S(Storage)vMotion	YES	YES	YES	NO



**vMotion:** Migrating a running virtual machine between two physical hosts without any downtime or impact to VM.

**SvMotion:** Migrating a running virtual machine between two physical hosts without any downtime or impact to VM with vmdk's or RDM's attached to it.

**Cold migration:** Migrating a powered off virtual machine between two physical hosts without any impact to VM.

#### Key Points:

1. When performing a cold migration of a virtual machine with RDMs attached to it, the contents of the raw LUN mapped by the RDM are copied into a new .vmdk file at the destination, effectively converting or cloning a raw LUN into a virtual disk. This also applies when the virtual machine is not moving between ESX hosts. In this process, your original raw LUN is left intact. However, the virtual machine no longer reads or writes to it. Instead, the newly-created virtual disk is used.
2. If you wish to cold migrate a virtual machine without cloning or converting its RDMs, remove them from the configuration of the virtual machine before migrating. You can delete the RDM from the disk when removing it (the raw LUN contents are not changed). Re-add them to the configuration when completed.
3. Ensure that snapshots are committed before performing storage migrations, especially if you are removing mappings or disks from your virtual machine configuration and later re-adding them. During re-addition of the respective disk, the VMware Infrastructure or vSphere Client does not allow you to re-select a specific (the previous) snapshot level or .vmdk file to add back to the virtual machine configuration.
4. This document doesn't state anything on EVC baselines (Please refer <http://kb.vmware.com/kb/1003212>) for a complete checklist on EVC.
5. vMotion will not work between two different CPU vendors (Ex: Intel and AMD).