Moving VMs from VirtualBox to VMware ESXi

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Over the last few days I've been working on a workflow to move virtual machines from our development and testing environment which runs headless virtualbox to our production VMWare ESXi 5.1 environment.

Here is the process that has worked for me.

Environment

1. Virtualbox server, `vboxserver.example.com`. One of the VM's is called `myvm`.

2. ESXi server, `esxiserver.example.com`. We use the free license running standalone servers without any virtual center.

3. Management workstation.

Tools

1. `VBoxManage`, VirtualBoxes command line management tool.

2. `ovftool`, VMWare's OVF tool. It is free but you need to register and log in to get it.

Process

Export the virtualbox vm to a Open Virtualization Archive (OVA). Run the following

command on the virtualbox server:

```
`VBoxManage export myvm -o myvm.ova`
```

On a host with `ovftool` installed convert the `ova` to an `ovf`.

```
`ovftool  --lax ../myvm.ova myvm.ovf`
```

Edit the `myvm.ovf` configuration file and change some virtualhox config to vmware config.

In the ovf file change the System Type from `virtualbox-2.2` to `vmx-07`.

```
<vssd:VirtualSystemType>virtualbox-2.2</vssd:VirtualSystemType>
```

```
<vssd:VirtualSystemType>vmx-07</vssd:VirtualSystemType>
```

Change the SATA controller to a SCSI controller.

```
<Item>
<rasd:Address>0</rasd:Address>
<rasd:Caption>sataController0</rasd:Caption>
<rasd:Description>SATA Controller</rasd:Description>
<rasd:ElementName>sataController0</rasd:ElementName>
<rasd:InstanceID>5</rasd:InstanceID>
<rasd:ResourceSubType>AHCI</rasd:ResourceSubType>
<rasd:ResourceType>20</rasd:ResourceType>
</Item>
```

to:

```
<Item>
<rasd:Address>0</rasd:Address>
<rasd:Caption>SCSIController</rasd:Caption>
<rasd:Description>SCSI Controller</rasd:Description>
<rasd:ElementName>SCSIController</rasd:ElementName>
<rasd:InstanceID>5</rasd:InstanceID>
<rasd:ResourceSubType>lsilogic</rasd:ResourceSubType>
<rasd:ResourceType>6</rasd:ResourceType>
</Item>
```

Since we changed `myvm.ovf` the checksum will fail. Delete the myvm.mf will stop this being checked.

Push ovf file (and it's associated disk image) to ESXi server using VMWare's `ovftool`.

```
ovftool --net:"NAT=VM Network" -ds=datastore2 myvm.ovf
vi://root@esxiserver.example.com
```

```
Opening OVF source: myvm.ovf
Enter login information for target vi://esxiserver.example.com/
Username: root
Password: ********
Opening VI target: vi://root@esxiserver.example.com:443/
Deploying to VI: vi://root@esxiserver.example.com:443/
Transfer Completed
Warning:
 - No manifest file found.
 - No manifest entry found for: 'myvm-disk1.vmdk'.
Completed successfully
```

Log into the VMWare server and start the VM.

If you are lucky everything will work :)

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