

How to downgrade VMware ESXi 5.1 virtual machine hardware to version 7 (from 8)

<http://adriank.org/downgrade-vmware-esxi-5-1-virtual-machine-hardware-version-7/>

So here we are, lovely Thursday morning at work and requirement for new VM comes up – I'm thinking not a big deal since I have deployed thousands of VMs before but there is a catch this time (there always is!) All of my Windows Server templates are virtual machine HW version 8 and I need to deploy one server to ESXi 4.1 host – great! ESXi 4.1 uses HW version 7 at the most so HW version 8 will not work – if you attempt to add HW version 8 to the inventory on ESXi 4.1 host you will be met by the following outcome:

VM adds fine and without any errors but its grayed out and with invalid status. Not much you can do here apart from removing it from the inventory.



To actually downgrade the HW version you can do one of the following:

1. Unregister the template VM from inventory, download the **.vmx** file from the datastore and manually adjust the **config.version** setting:

Default setting for ESXi 5.1 – **VM HW version 8:**

```
HW Version 8.vmx
1 .encoding = "UTF-8"
2 config.version = "8"
3 virtualHW.version = "8"
4 pciBridge0.present = "true"
5 pciBridge4.present = "true"
6 pciBridge4.virtualDev = "pcieRootPort"
7 pciBridge4.functions = "8"
8 pciBridge5.present = "true"
9 pciBridge5.virtualDev = "pcieRootPort"
```

config.version setting changed to downgrade to **HW version 7** for ESXi 4.1:

```
HW Version 8.vmx
1 .encoding = "UTF-8"
2 config.version = "8"
3 virtualHW.version = "7"
4 pciBridge0.present = "true"
5 pciBridge4.present = "true"
6 pciBridge4.virtualDev = "pcieRootPort"
7 pciBridge4.functions = "8"
8 pciBridge5.present = "true"
9 pciBridge5.virtualDev = "pcieRootPort"
```

then upload the updated **.vmx** file to the datastore and register the VM on vCenter.

2. Unregister the template VM from inventory, SSH to your host and browse (cd) to the following path:

```
cd /vmfs/volumes/Datastore_Name/VM_Name/
```

Backup the existing **.vmx**:

```
cp VM_Name.vmx VM_Name_Backup.vmx
```

then edit using **vi**:

```
vi VM_Name.vmx
```

and change the config.version from 8 to 7, save and re-register the VM on vCenter.
Job done – either solution will just fine so pick whichever you're comfortable with!
I have done this for HW version 10 downgrades to 9 or 8 and it worked too.
Comments, concerns, compliments or complaints? Leave them below!