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configuring hypervisor information in emc unisphere
revision 0.1

synopsis

The following is a simple document with screenshots providing step-by-step instructions for configuring virtual server information in Unisphere.

It is recommended that you familiarise yourself with the August 2010 version of EMC's whitepaper – "EMC CLARiiON Integration with VMware ESX Server – Applied Technology". This document can be found at <http://www.emc.com/collateral/hardware/white-papers/h1416-emc-clariion-intgtn-vmware-wp.pdf>. Of particular note are pages 51 – 56, which discuss Unisphere's VM-aware features.

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introduction

Configuring hypervisor information in EMC's Unisphere can be achieved in a small number of easy to follow steps. The purpose of this document is to provide visual guidance on the process.

process

In Unisphere, under Hosts, click on the Hypervisor Information Configuration Wizard.

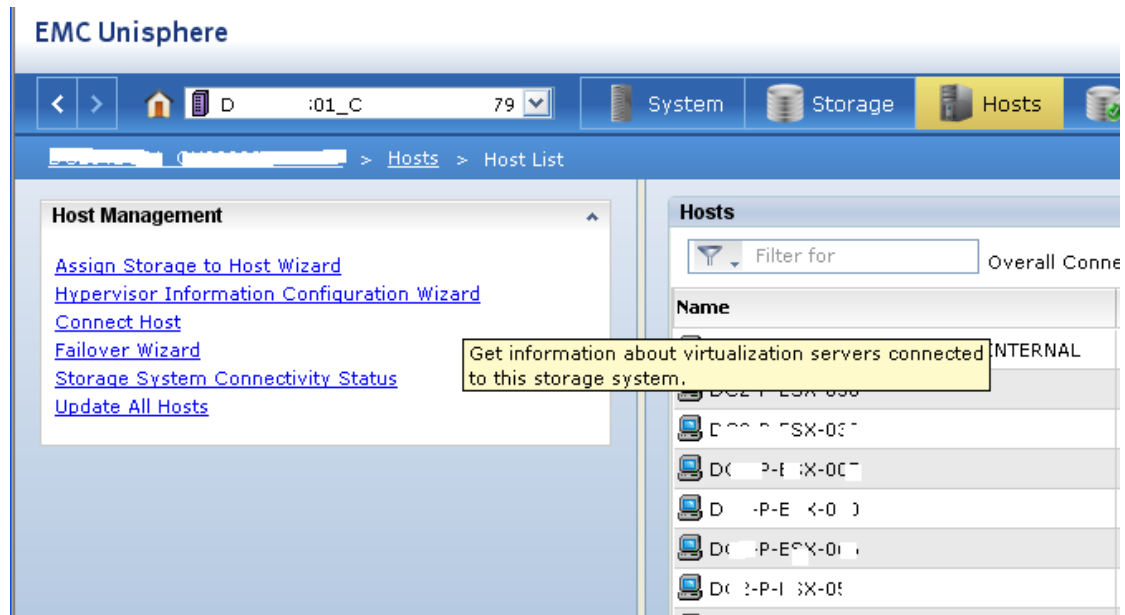


Figure 1 – Hosts – Hypervisor Information Configuration Wizard

The first step in the wizard is, obviously, to tell you a little bit about what this particular wizard can do for you.

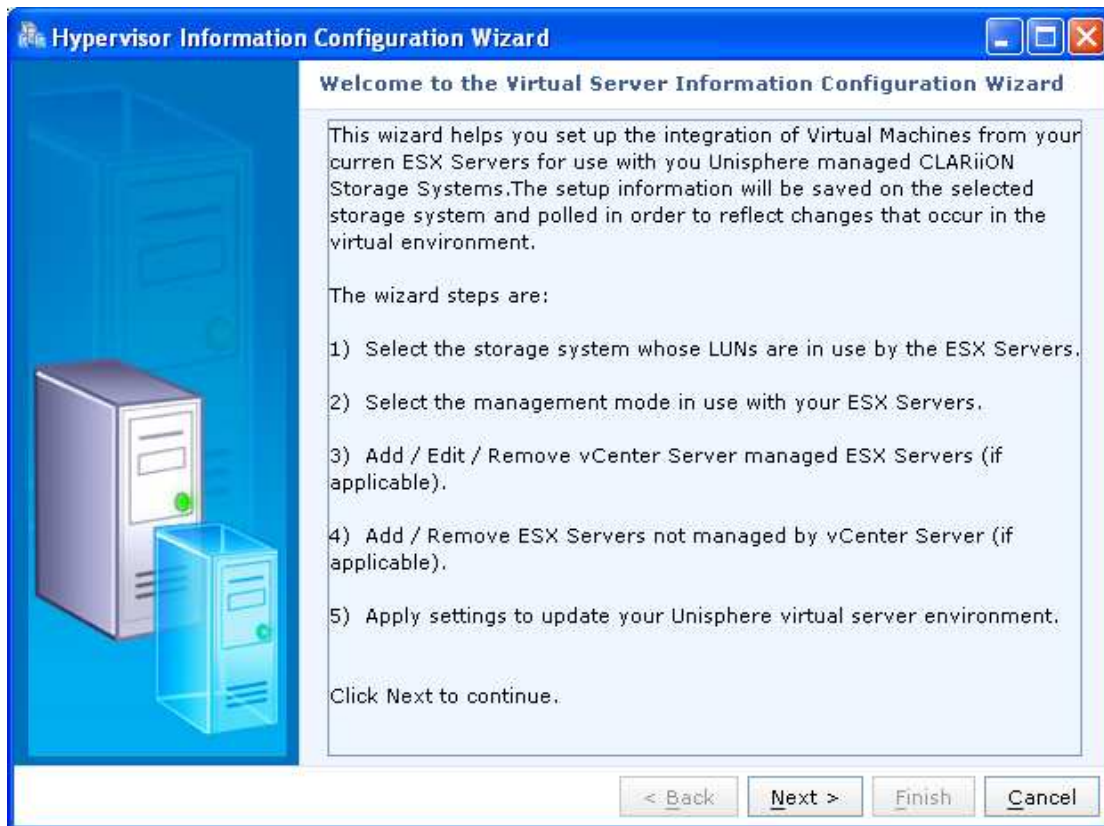


Figure 2 – Wizard - Steps

You'll now be presented with the option to select the storage system you wish to import virtual server information into. You'll see in this screenshot that two CX4-960s are available, but the CX3-20s and CX700 are not because – that's right – they don't run FLARE 29 or later.

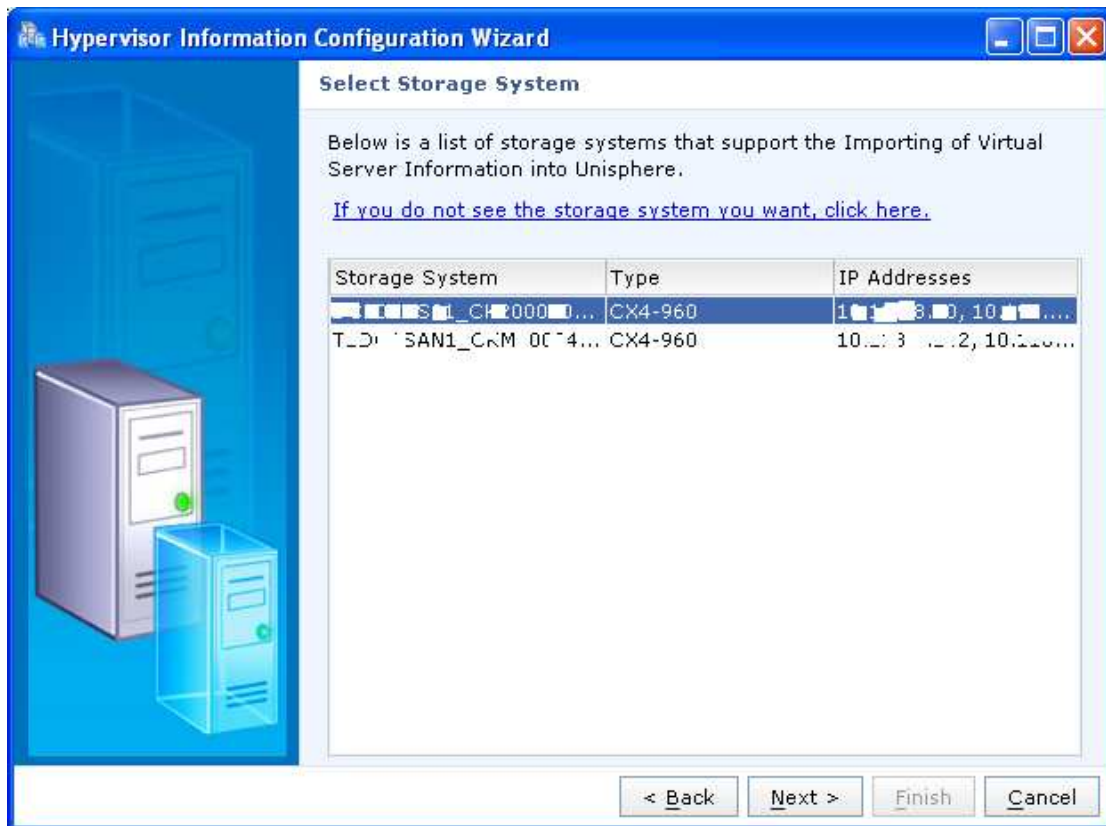


Figure 3 – Select Storage System

Once you have selected the storage, you can choose to get information from ESX hosts managed by vCenter, not managed by vCenter, or a combination of the two.

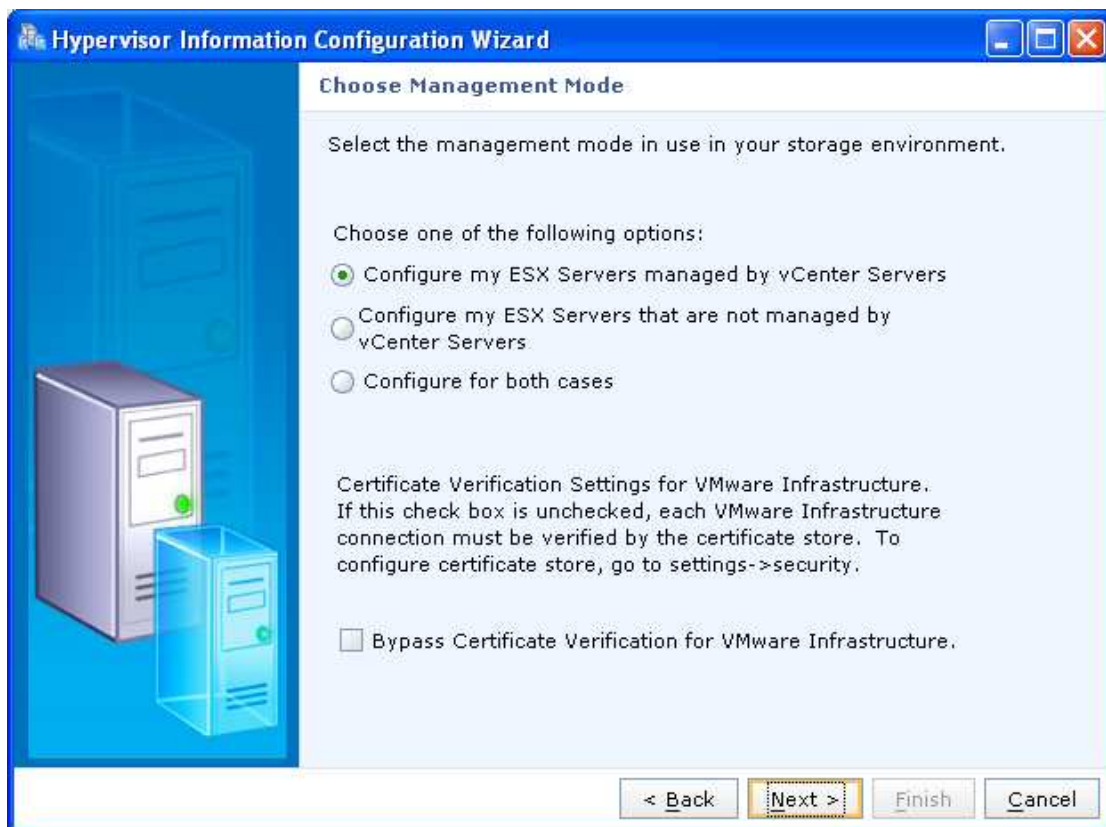


Figure 4 – Choose Management Mode

For the purposes of this document, I'm working with ESX hosts that are managed by vCenter. Click on Add to add vCenters.

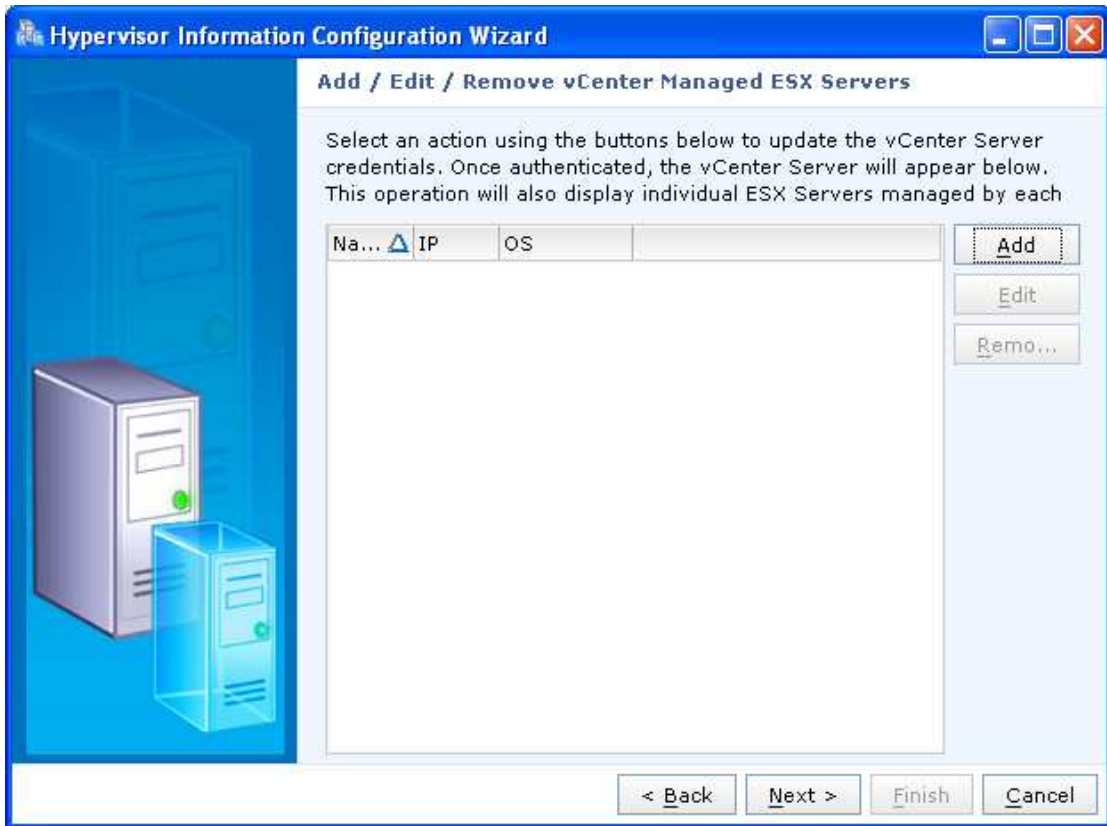


Figure 5 – Add / Edit / Remove vCenter Managed ESX Servers

You'll need to provide the IP address of your vCenter, a username and a password. You can also add a description of the vCenter you're adding. At this time you can also add the certificate of the vCenter server.

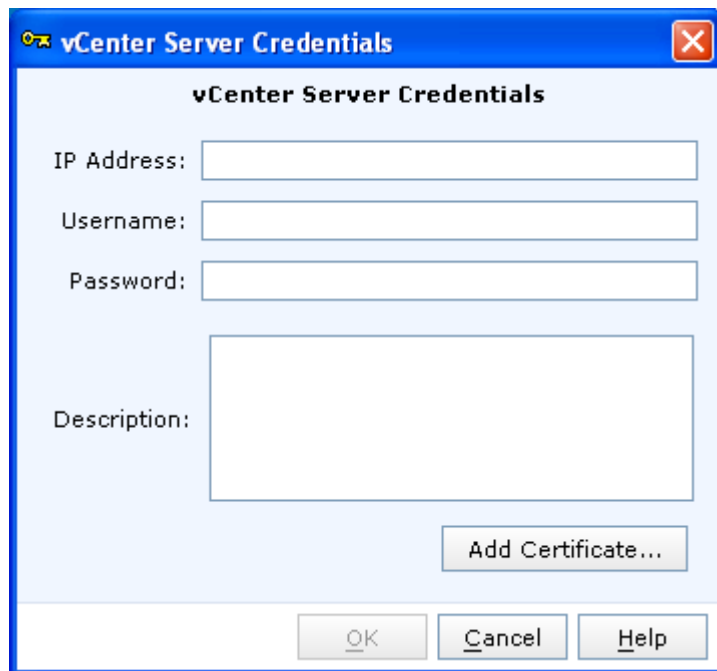


Figure 6 – vCenter Server Credentials

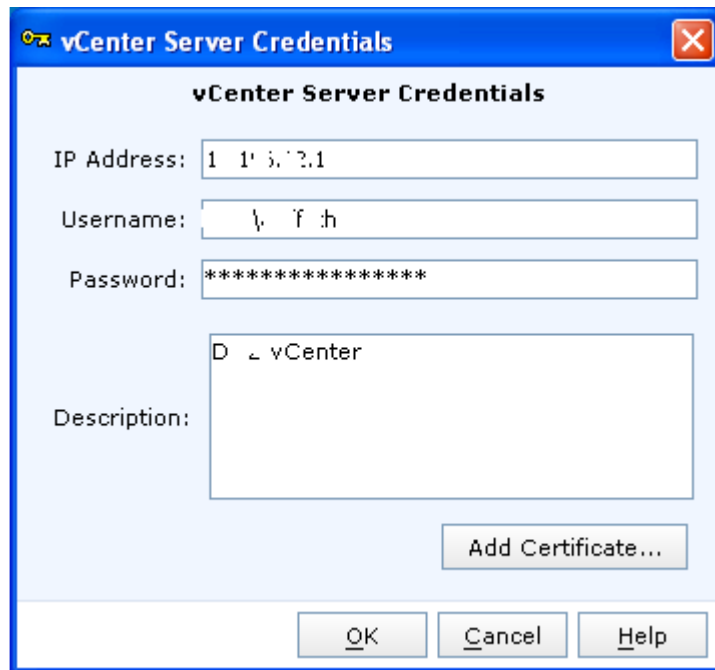


Figure 7 – vCenter Server Credentials

Remember how Unisphere loves certificates and secure communication in general? Well, if you don't, or your PKI is generally not up to scratch, Unisphere won't love you.



Figure 8 – Connectivity Error

You can choose to ignore this error. But you'll soon realise that ignorance isn't really bliss. You can add further vCenter hosts at this point, or click on Next to continue.

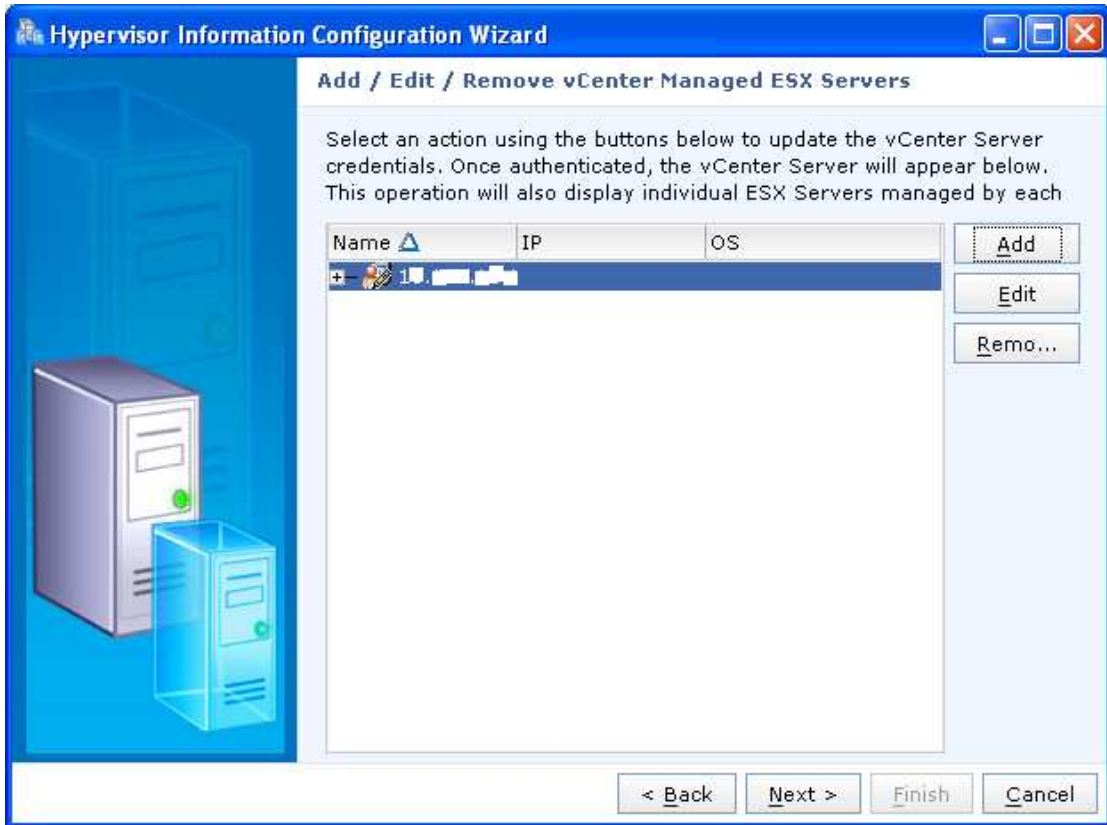


Figure 9 - Add / Edit / Remove vCenter Managed ESX Servers

Click on Finish to finish the Wizard.

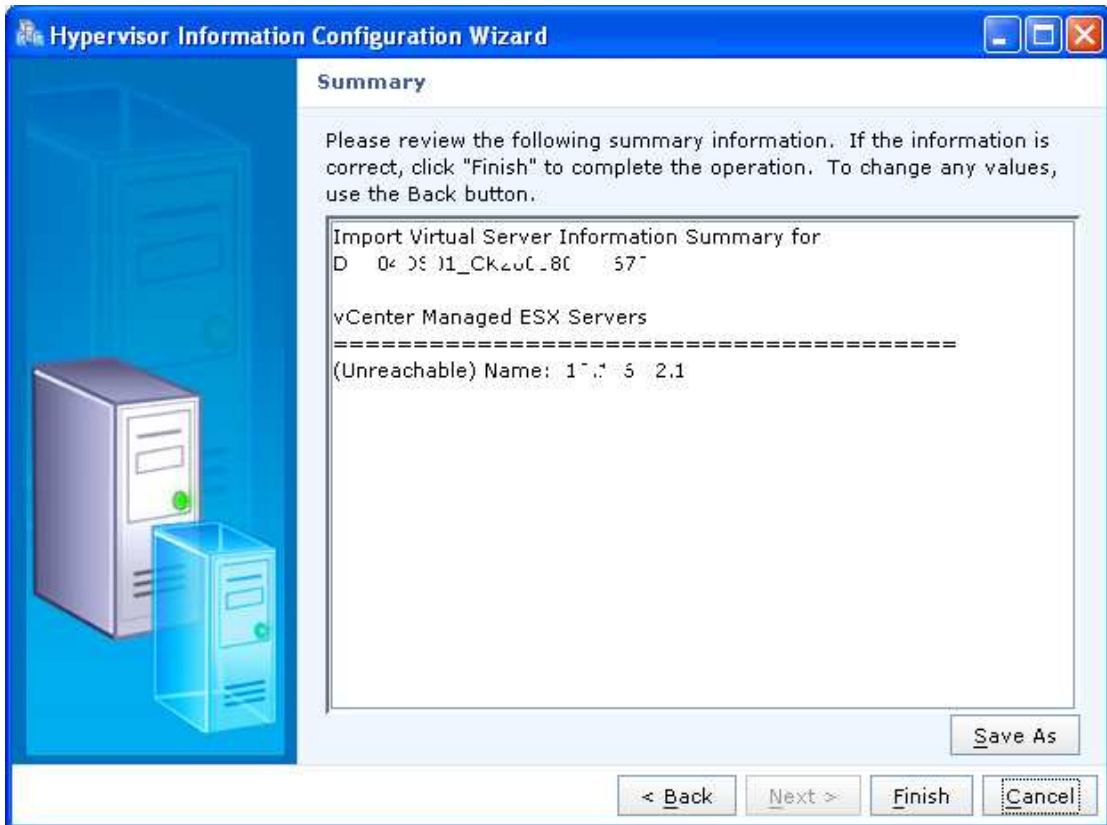


Figure 10 - Summary

Unisphere will, at this point, report overall success with the operation. But without proper certs, you'll see that there wasn't a lot of point.



Figure 11 - Results

So what you really want to do, if you can't be bothered with that whole "security" thing, is bypass certificate verification. It'll warn you though – as would I.

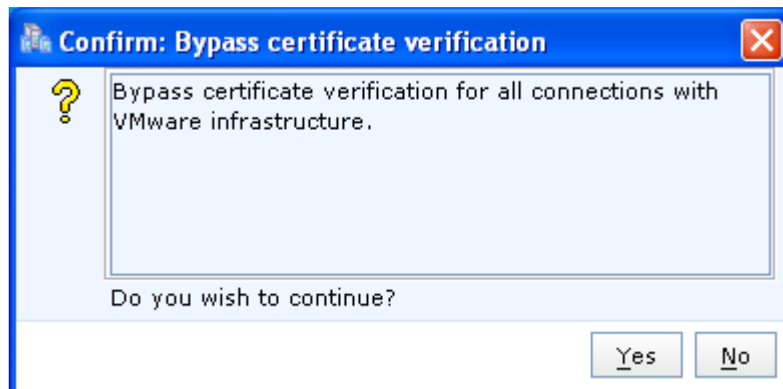


Figure 12 – Bypass Certificate Verification

But you'll then have a much better experience and see a lot more point to actually importing the virtual server information into Unisphere.

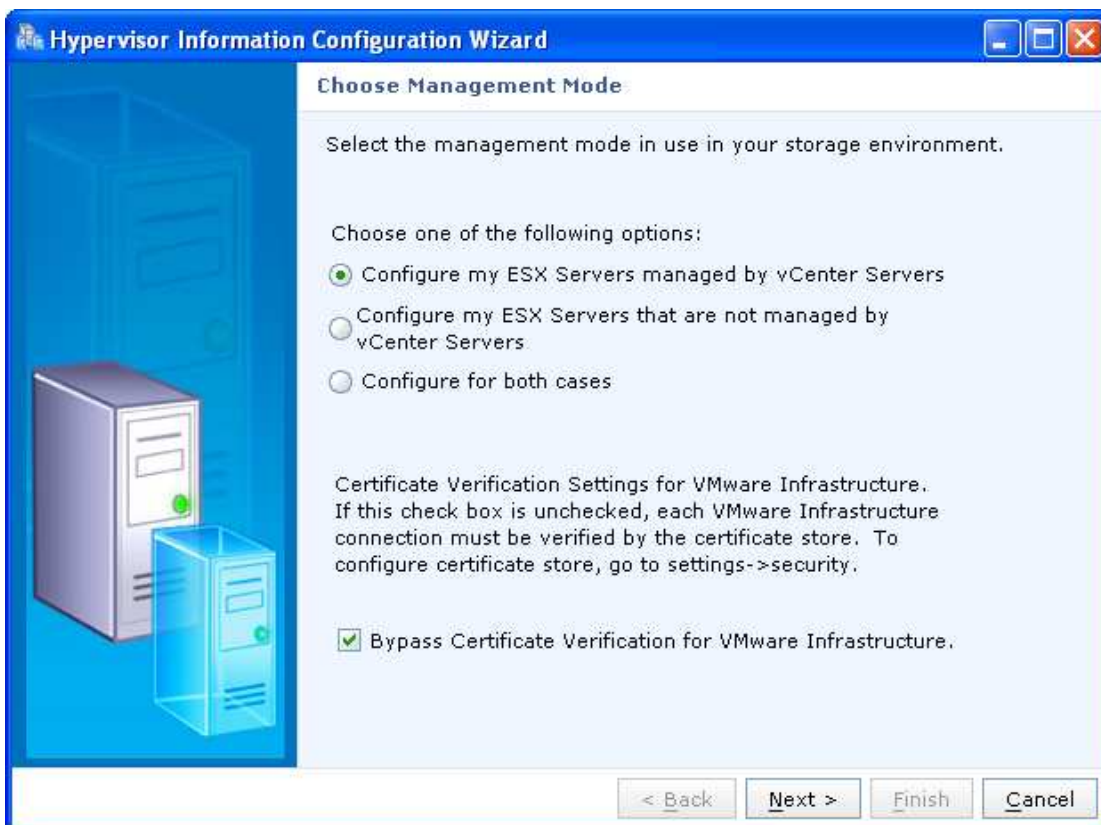


Figure 13 – Choose Management Mode (Bypass Certificate Verification)

Notice that when certificate verification is bypassed (or when you actually have valid certificates), you'll see information about the ESX hosts managed by vCenter.

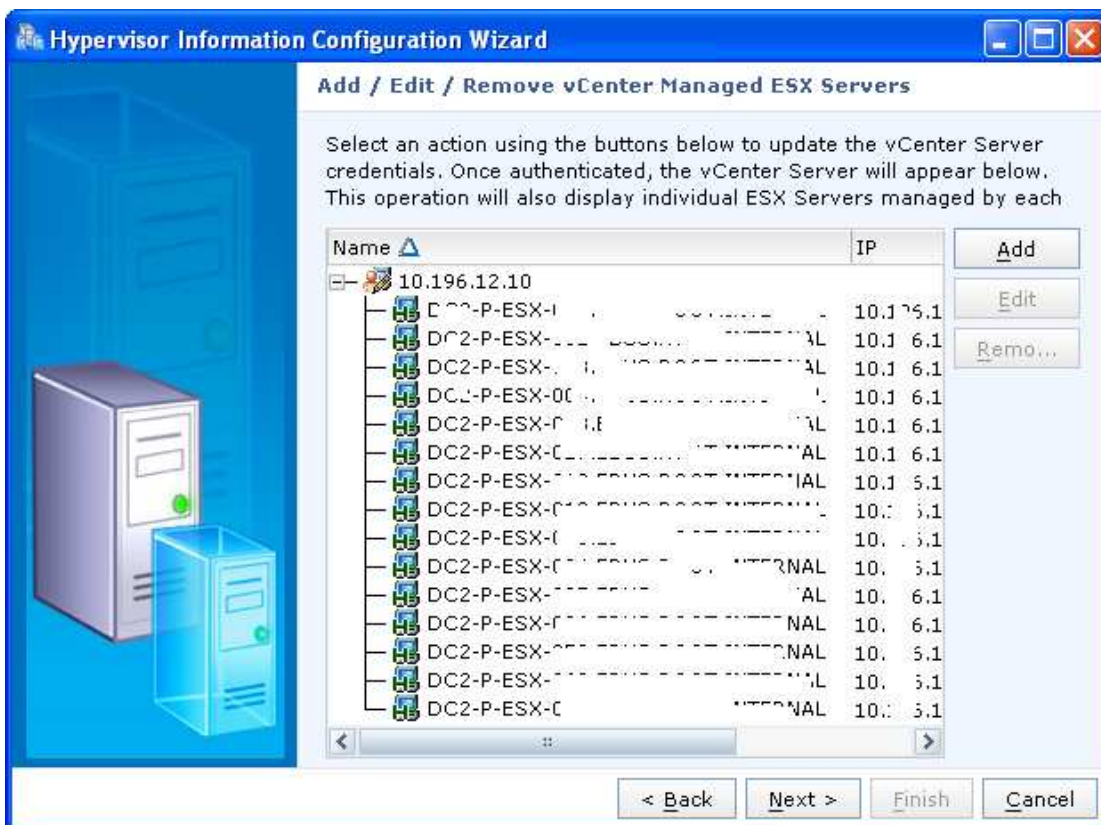


Figure 14 - Add / Edit / Remove vCenter Managed ESX Servers

Confirm that this is the vCenter you are looking for, and click Finish to complete the Wizard.

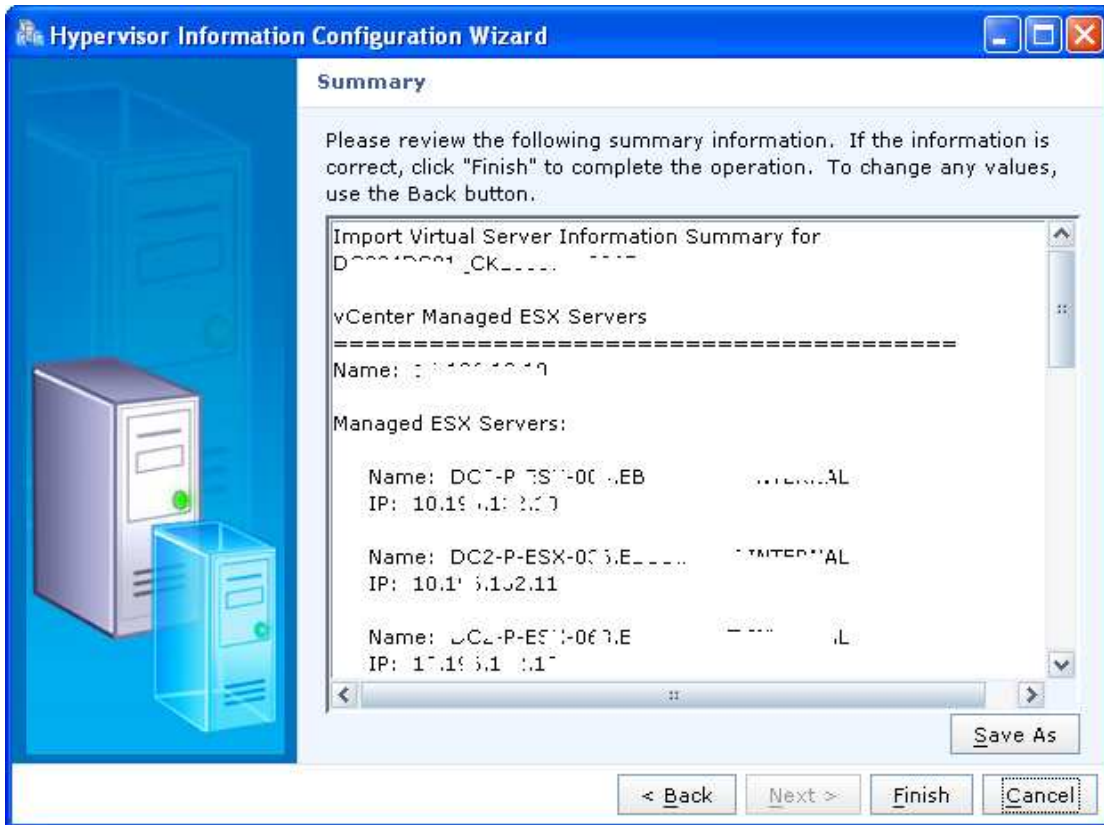


Figure 15 - Summary

Clicking on Hosts and then Virtualization you'll see the vCenter that you added previously. You can then expand the vCenter to get information about the ESX hosts and the virtual machines stored on these hosts.

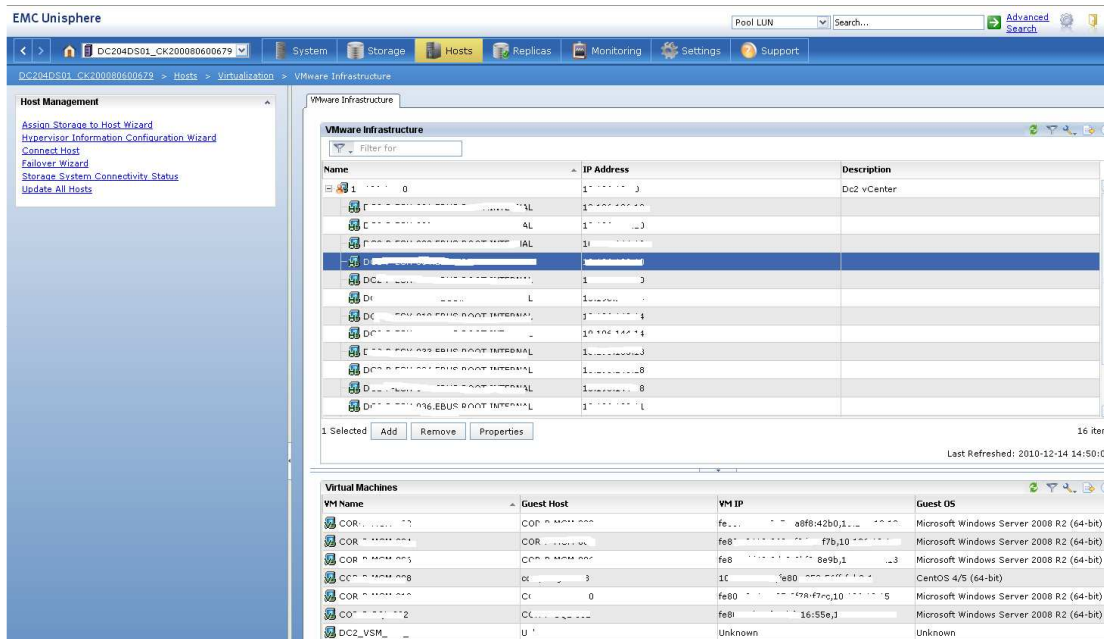


Figure 16 – Hosts - Virtualization

Right-click on one of the virtual machines and click on Properties.



Figure 17 – Virtual Machines - Properties

You can get information about the virtual machine name, the guest's hostname, its IP address and MAC, the guest operating system and the storage system that the virtual machine lives on.

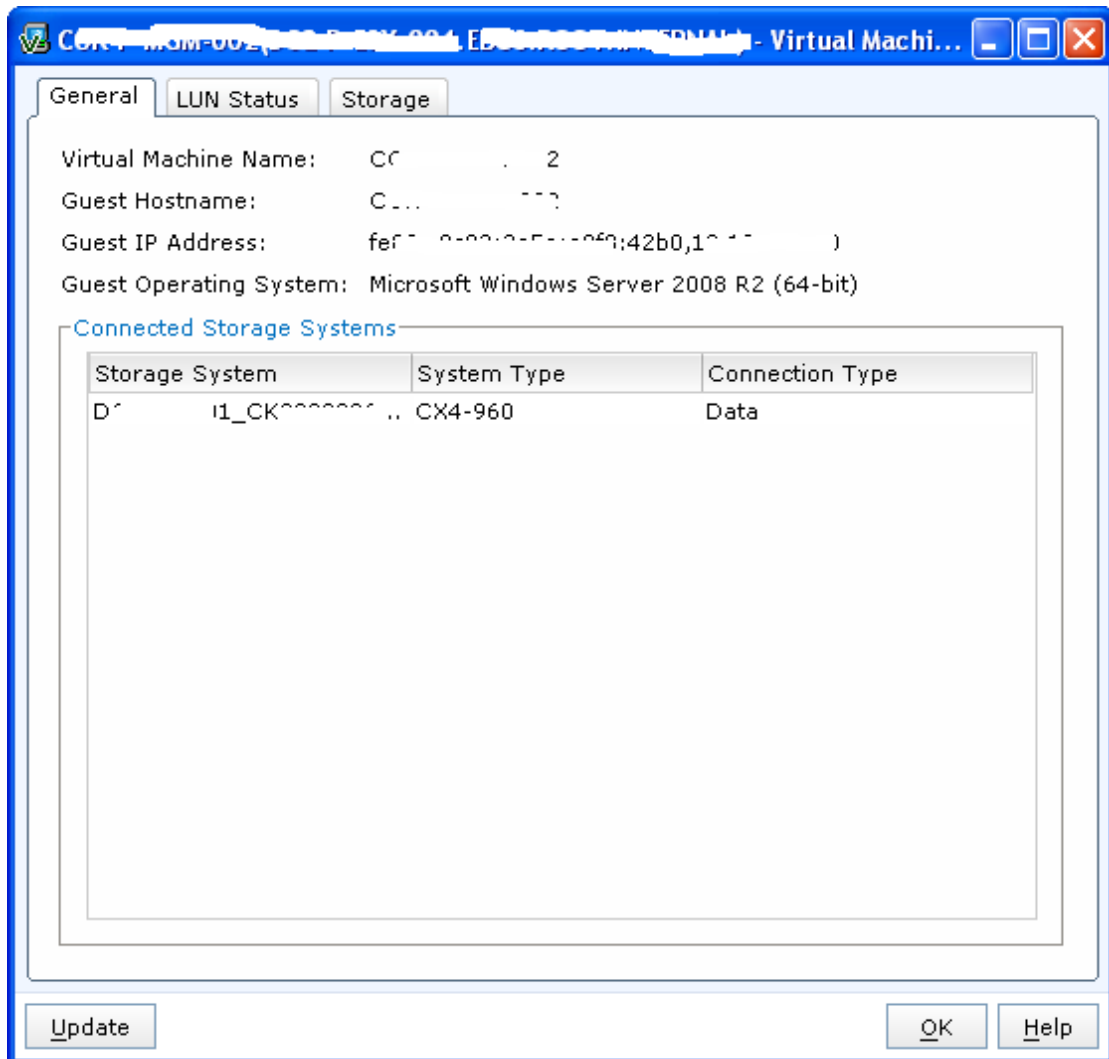


Figure 18 – General Tab

You can click on the LUN Status to see which VMFS datastore the virtual machine is hosted on.

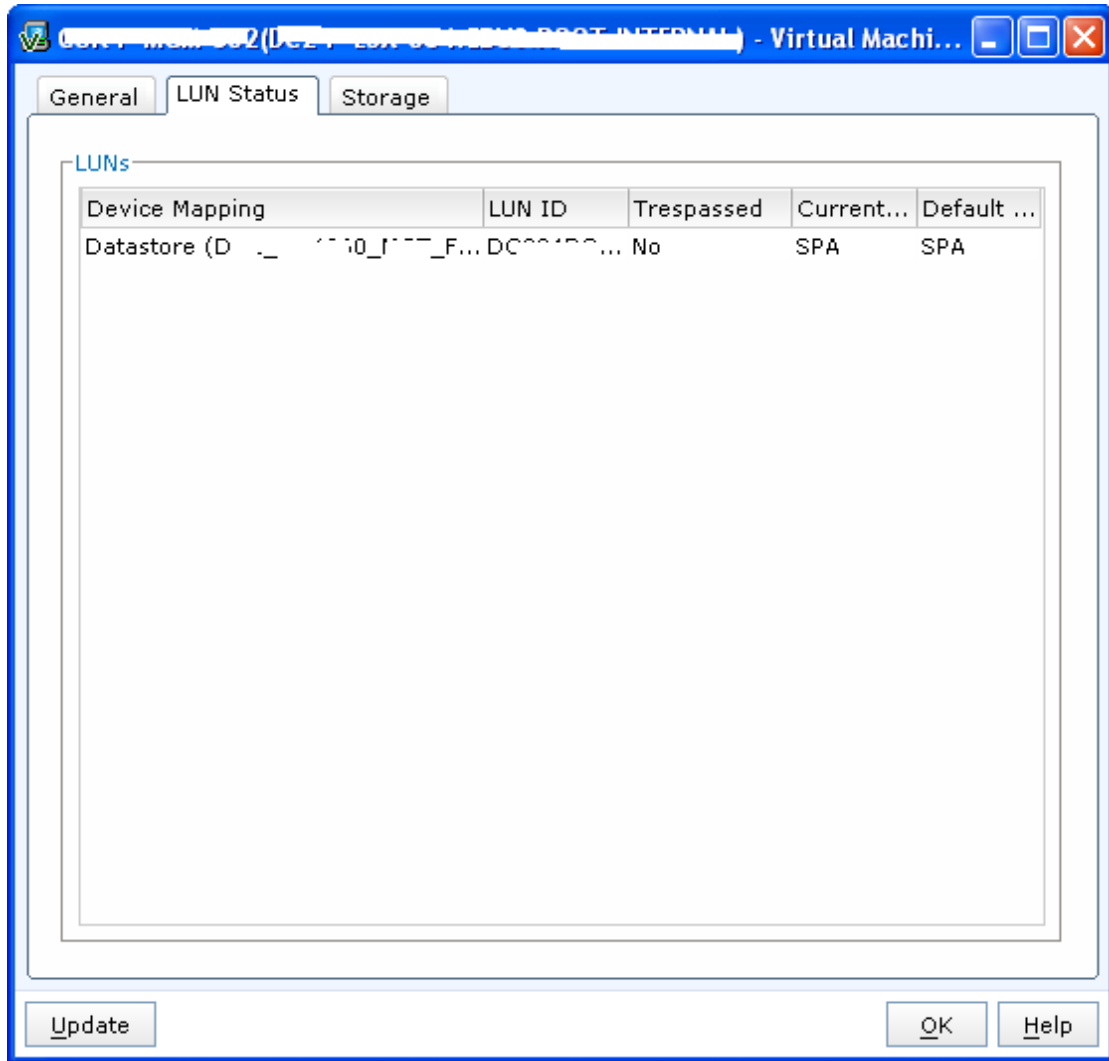


Figure 19 – LUN Status Tab

Clicking on the Storage tab provides information about the virtual machine's configuration file, and virtual disks. For those of you who remember the days of ESX 2.x and trying to locate virtual machines and the LUNs they used to live in – this small bit of information is really awesome.

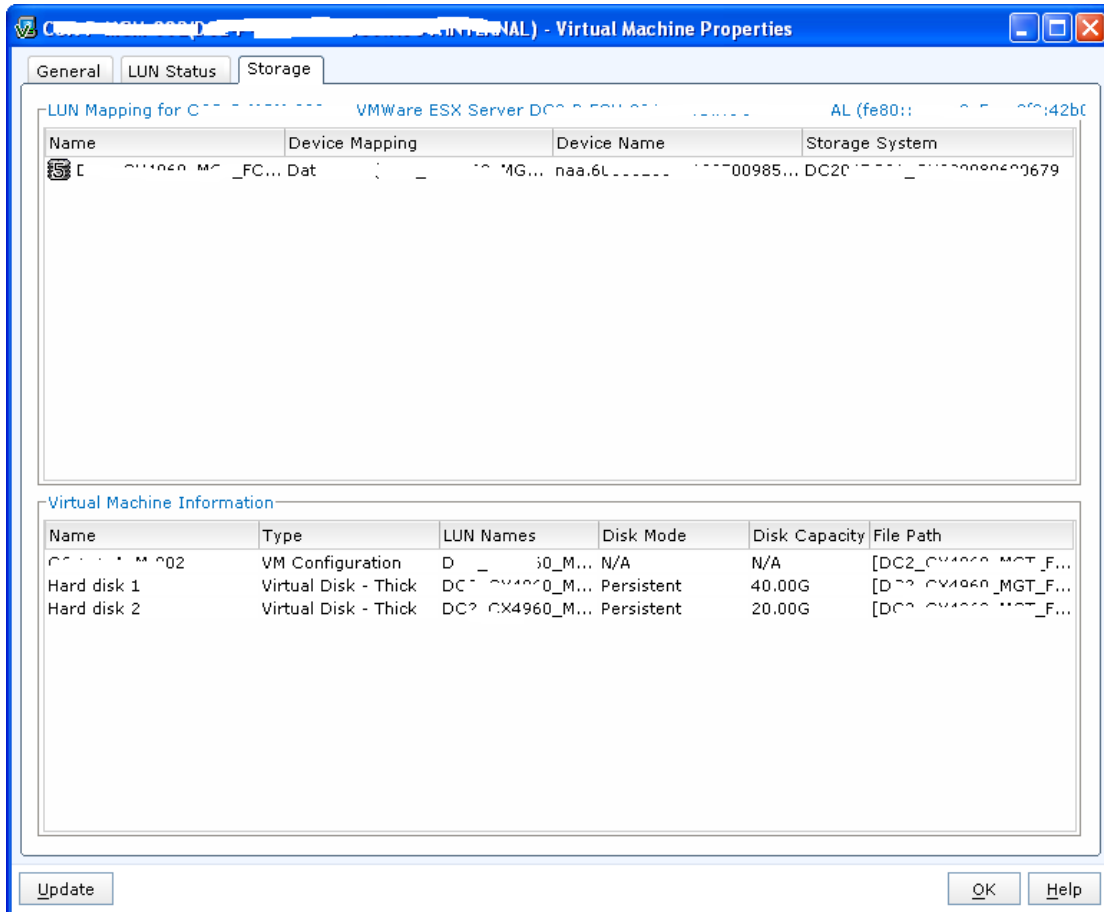


Figure 20 – Storage Tab