Lab 9: Creating Host Objects

Introduction

      Now that backend storage has been created, you must now configure access to the storage. This is accomplished by creating host objects and mapping the backend storage to the host. A host object represents a host in the SAN which can own storage. You map the Vdisk to the host server so that users that are connected to the host server can see and access the storage on the Vdisk.

      SAN attached hosts usually are connected to the SAN with two or more FC adapters for redundancy. This implies that they have multiple paths to access storage. The SVC will learn all World Wide Names (WWNs) to access a host.

      Please note: The SDD (Subsystem Device Driver) must be set up on the host prior to performing this step.

      In this lab you learn how to create a host and map the Vdisk to the new host.

Instructions

The first task is to create a host object.

1. Click 'Work with Virtual Disks' from the menu on the left.
2. Click 'Hosts' from the Work with Virtual Disks submenu.

Since you are going to create a host, there is no need to use the filter.

3. Click the 'Bypass Filter' button.

Since no hosts have been created yet, there are none to list. Create a host is the default action, so click Go to proceed.

4. Click the 'Go' button.

This page shows you all WWNs visible to the SVC, which have not already been defined to a host. Begin by selecting a name and both available WWNs (ports) for the new host. Normally, there would be more than two ports listed on this screen. Thus, you must know the port information for each host you are adding prior to this step.

5. In the Host Name field, type 'W2k1'.
6. Since the first port is already selected, click the 'Add' button to add the port to the new host.
7. Click the last available port and click the 'Add' button.
8. Click the 'OK' button.

You can now see the new host listed. To view the details of the host, click on the W2k1 link.

9. Click on the underlined 'W2k1' link.

You can now see the details of the W2k1 host you created.

10. Click the 'Cancel' button.

The next step is to map the backend storage to the new host.

11. Click the 'Virtual Disks' link from the Work with Virtual Disks submenu.

Since you want to see all available virtual disks, there is no need to use the filter.

12. Click the 'Bypass Filter' button.

Since there is only one virtual disk listed, it is already selected.

13. Click the drop down menu and choose 'Map a Vdisk to a host'.
14. Click the 'Go' button.

This screen allows you to choose the host to which you want to map the VDisk.

15. Click 'W2k1' from the Target Host column.
16. Click the 'OK' button.

At this point, you have finished the work necessary to map the host using the computer running the SAN Volume Controller application. You must now move to the host server for the next portion of the lab.

From the host server, you must scan for the Vdisk you mapped to the host and then write a signature and create a partition on the new Vdisk.

17. Right-click on 'My Computer'.
18. Click on 'Manage'.

Begin by rescanning for disks.

19. Click 'Disk Management' under Storage on the left side of the window.
20. Click 'Action' from the menu bar.
21. Click 'Rescan Disks'.

The server has found the new disk (Disk 3). To create usable partitions on a disk, Windows must write a signature on the disk.

22. Right Click on the 'Disk 3' box.
23. Click on 'Write Signature'.
24. Click the 'OK' button.

Now that a signature has been written, a partition can be created making the disk accessible.

25. Right Click on the white box for 'Disk 3'.
26. Click on 'Create Partition...'.

The Create Partition Wizard will guide you through the steps to create the partition.

27. Click the 'Next' button on the wizard.

We want a primary partition, so leave the default.

28. Click the 'Next' button on the wizard.

We want the maximum disk space, so once again leave the default.

29. Click the 'Next' button on the wizard.

Next assign a drive letter.

30. Click the drive letter drop down and choose 'G:'.
31. Click the 'Next' button on the wizard.

Choose the partition format settings.

32. Click the checkbox next to 'Perform a Quick Format'.
33. Click the 'Next' button.

Click Finish to complete the partition.

34. Click the 'Finish' button.

You can see Disk 3 has been partitioned and assigned the drive letter of G. You now want to copy some data onto the new drive. But first take a look at the G: drive and see that it is empty.

35. Double click 'My Computer'.
36. Double click 'New Volume (G:)'.

You have now successfully placed data on the new drive. Congratulations! You have completed this lab.