Windows Deployment Services

Pre-Requisites

The server should be a DHCP server with a working DHCP scope (This is so it can service PXE requests from client computers.

You will also need either a Windows Vista install DVD or a Server 2008 Install DVD.

You will need a client PC (XP or Vista) that had been sysprepped as a "Reference PC" to create the image with, also there needs to enough room on the hard drive of the reference machine to store a copy of the image.

Phase 1 - Set up WDS Server

- 1. Start > Run > appwiz.cpl > Add Remove windows components.
- Add the "Windows Deployment Services Component" Note on Pre R2 SP2 Servers you might not see it on the list, if this is the case, install RIS - Remote Installation Services then install Window Deployment Services from the WAIK (Windows Automated Installation Kit) available for download from Microsoft.
- 3. When done the Server will ask for a reboot let it do so.
- 4. After the reboot > Start > Administrative tools > Windows Deployment Services.
- 5. Expand Servers > Select the Server name > Action > Configure Server.
- 6. Click Next > Select a folder where you want to store images > Next > If its on the C: Drive you will get a warning > Yes.
- 7. Tick BOTH box's (Do Not listen on port 67 and configure DHCP option 60) > Next.
- 8. Select "Respond to all (Known and Unknown) > Finish.
- 9. Windows then configures WDS.
- 10. When it's done un-tick the option to Add Images to the WDS Server Click Finish
- 11. Put in your Vista/2008 DVD and navigate to the "Sources" directory and select the "boot.wim" file > Next.
- 12. Change the default of "Microsoft Windows Longhorn Setup (x86) to something sensible like "Install and Image" > Next > Next
- 13. The boot image will be added > Finish.
- 14. You will see it appear in the Boot Images Folder, you now need to use that image to create a "Capture Image" Right click the Image you just added and select "Create Capture Boot Image".
- 15. Give it a name, description and location> Next
- 16. WDS Will create the image > Finish.
- 17. While you're still in the WDS Manager Select Install Images > Right Click > Add Image Group> Give the image group a name > OK
- Right Click Boot Images > Add Boot Image > Navigate to the Capture Image you created in step 15 > Next > Give it a name (Use something sensible like "Capture an Image") > Next > Next.
- 19. The Image will be added > Finish.

Phase 2 – Create an Image.

- Boot your sysprepped PC and ensure that it can "Network Boot" on modern PC's this is usually done by pressing F12 then the machine is turned on, though you may need to move the PXE or Network boot option up the boot order list (this will need to be done in the BIOS). Note: if you are in a Virtual server test environment you can access the virtual PC's BIOS by pressing delete as soon as you turn it on.
- 2. From the Windows Boot Manager Select "Capture an Image" > Enter.
- 3. Files will be loaded into memory.
- 4. At the welcome screen click > Next.
- 5. Select the volume to be imaged, Note if there is nothing there one of two things is wrong,
 - a. Windows PE does not have the drivers for your Drive, Press Shift and F10 and see if you can see the C: Drive if not then PE needs the drivers.
 - b. Most common cause is, the machine has not been sysprepped properly, no sysprep = no image.
- 6. Give the image a name and description > Next.
- 7. Tick "Upload to WDS" > Enter the name or IP of the WDS Server > Connect > Enter log on details in the domain\username password format > OK > Select the Images Folder you created in step 18 > Enter a name and location of the reference PC to store the image.
- 8. Finish > the image is captured > Then it uploads the Image to the WDS Server.
- 9. When it's finished the Button changes from cancel to close > Click It > the client will reboot.
- 10. In the WDS Manager Expand Server > Install Images > your Image folder > Right Click > Add Install Image > Locate the image you have just created (if you can find it there a copy on the client pc don't forget > Next > The Image is Added > Finish.
- 11. You should now see the image listed on the right hand pane.

Phase 3 – Install the image on a Target PC

- 1. The same as when you booted to "Capture" The Image this time Select PXE or Network boot but this time choose the other option We called it "Install an Image", but if you forgot to rename it it's called "Microsoft Longhorn (x86)".
- 2. Windows will load files into RAM
- 3. You will be asked to set your Input Locale and Keyboard settings (don't panic that it looks very Vista like XP images look the same) > Next.
- You may need to enter the username and password of a domain user in the domain\username and password format > OK
- 5. Select the Image you created in step 6 above > Next.
- 6. Select the drive to install it on > Next.
- 7. Files are copied over then installed.
- 8. When done the client will reboot and XP Setup will start.