

2 INTRODUCTION:

The items in this document are referred to in other documents at the relevant sections but will usually be brief. They are collected and detailed here as a convenient source reference. It should be used to ensure that any proposed changes to the HOST do not impinge on the workings of the Virtual Machine environment on the Training Room PCs and in case the HOST needs to be rebuilt. It is expected that people using this document have suitable knowledge, skills and permissions to implement changes to the HOST settings.

2 OPERATING SYSTEM:

The Operating System on the HOST is Windows XP Pro with all Service Packs and updates to April 2009.

2 IP ADDRESS & NETWORK:

The Internet Protocol has the task of routing data between networks and an IP address specifies the locations of the source and destination. Each machine therefore needs a unique IP address. In the TR we use static IPs rather than allowing the server to allocate an IP dynamically. Windows XP and earlier use the IPv4 format (a 32 bit address) and Vista uses the IPv6 format (a 128 bit address). The Training Room IPs are:

TRAIN01	TRAIN02	TRAIN03	TRAIN04	TRAIN05	TRAIN06
192.168.0.231	192.168.0.232	192.168.0.233	192.168.0.234	192.168.0.235	192.168.0.236

TRAIN07	TRAIN08	TRAIN09	TRAIN10	TRAIN11	TRAIN12
192.168.0.237	192.168.0.238	192.168.0.239	192.168.0.240	192.168.0.241	192.168.0.242

To change the IP for a HOST after imaging go to Control Panel/ Network Connections/Local Area Connection. Right click and select Properties. Select Internet Connection (TCP/IP) and click Properties. Then change the last number in the IP Address field ONLY. Click OK, close all the windows and re-boot.

2 NEWSID:

Images of the HOST drives have been created at different levels of build to facilitate duplication and distribution around the Training Room. It follows that the images have details specific to the hardware and software from where they were created. After deploying an image to another machine it needs to have the identity changed to reflect the new hardware and to distinguish the software from similar software connected to the network. The Security IDentity or SID is generated by the Operating System during installation an example of s SID is S-1-5-21-3506794056-1763722346-503720222. The tool used on an image to change this is NewSID which is available on every image at C:\Programn\Files\NewSID. NewSID also has a facility to change the computer name at the same time. The computers in the Training Room are names Train01 to Train12.

Machines should be disconnected from the network until NewSID is completed otherwise it may cause errors of duplicate IPs and Names on the network.

No attempt should be made to change the SID in any other way and once you start the NewSID process it must not be interrupted. When the process is complete the machine will re-boot. The network cable can then be re-connected and the network tested.

2 DOMAIN:

To correctly obtain services from our Centre-Server-1 the PCs must be joined to our Domain – PCUG.com. As we have given the PC a new identity we need to pass this information to the Domain. First we need to unjoin it from the Domain so that it discards the old details about this computer name and then we need to re-join it to the Domain. To un-join the PC we join it to the Workgroup, re-boot and then join it to the Domain.

To **UNJOIN** it from the Domain right click My Computer and select properties. In the Computer Name tab click Change then click the Workgroup button. Ensure **WORKGROUP** is entered in the field for the Workgroup name and click OK. Follow the instructions to re-boot. When the machine re-boots return to this space.

To **JOIN** it to the Domain, click on the Domain button and type in the Domain name **PCUG** and click OK. Again you will need to re-boot for the action to complete.

You need the Administrator password to complete the action.

2 TIME CLOCK:

The Time Clock is maintained by the clock on the Centre-Server-1 as part of the Domain. As some activities are dependent on the Time Clock it is essential that it is synchronised and that the Server clock is accurate. A periodic check is recommended.

2 SYSTEM VARIABLES:

The following System Environment Variables are added to simplify the scripts used to manage VMs.

MyVirtualMachines = E:\PCUG Virtual Machines
VIRTUALPC = E:\Program Files\Microsoft Virtual PC\Virtual PC.exe
No = 01 to 12 as appropriate for the HOST machine name

System Variables can be accessed from the Advanced tab in the System Properties of My Computer but an easier way to make these changes is to run a file which automatically makes the changes in the Registry at Q:\vmResource\Registry\vmEnvVar.reg.

2 REGISTRY:

Other Registry changes are made by running the following files:

Q:\vmHOSTconfig\Registry**DisablePagingExecutive.reg**

This speeds up the process between the HOST and VMs.

Q:\vmHOSTconfig\Registry**WinLogonPermits.reg**

This allows vmMENU to load the MEMBER and TRAINER logon windows

Q:\vmHOSTconfig\Registry**DisableSataRemoveNotice.reg**

Disables the listing of SATA drives in the Removable Devices Notification

2 GROUP POLICY :

This change to Group Policy allows vmMENU to properly shutdown the system when selected by a user. As vmMENU is not a Windows application it is seen as being Remote. Go to Start / Run and type GPEDIT.MSC.

When the Group Policy Editor loads select the policy:

Computer Configuration\Windows Settings\Security Settings\Local Policies\User Rights Assignment

Double click on "**Force shutdown from a remote system**"

Add the Users group to the list. Type in **trainXX\Users** where XX = the machine Number.

≈ APPLICATIONS:

It is not intended that the HOST be used other than to launch and manage VMs. It is neither necessary nor desirable to install applications on the HOST other than these essential ones:

Motherboard Drivers: Express Install of all drivers is run from the Motherboard CD.

AVG Anti-virus This protects the HOST and the VMs (which are files) from virus invasion. We hold a license. AVG is set to Automatic Update.

Acrobat Reader This is Freeware and is needed on the HOST to enable Trainers to read the Training Documents and any other PDF files they want to view on the Internet.

CCleaner This Freeware tool is used to clean out any unnecessary files and optimise the free space on the drives. This is done before running the defragmenter and before imaging.

Acronis v8 The free version 8 of Acronis TrueImage is installed on each HOST to facilitate imaging.

CanoScan Software and driver for the CanonScan Lide30 USB scanner. Saves any scanned documents in C:\Host Shared Folders. Scanner can be used on any HOST in the Training Room.

VHD Resizer May be useful in reducing the size of Vista VM hard drives.

PowerToys These are useful tools

The installation files for these applications are kept in Q:\vmMEDIA\FreewareHOST but it is advisable to obtain the latest versions if systems are being re-built or re-imaged.

≈ UTILITIES:

The following utilities are used in various scripts and are stored in C:\Windows\System32

Robocopy.exe MS Robust copy used in deployment and refresh scripts

Robocopy.doc Documentation on Robocopy

Robocopy Commands.doc List of Commands used by Robocopy

Choice.exe Used in Menus – from Windows NT

L.com File lister

X.cmd Single letter Exit from the Command Console

Desktop Backgrounds Various stored in C:\Windows\Web\Wallpaper

≈ INTERNET EXPLORER:

Internet Explorer has the following settings.

Do not save passwords Do not save history Do not use proxy Disable phishing

The PCUG Web site is the starting page and Google Toolbar is installed.
