



Installing a Managed Desktop Project Machine

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Instructions highlighted in red will hopefully not be needed in the future. They are steps needed at the moment to work around the last remaining issues with the MDP/PIE installation process.

A. BEFORE INSTALLATION

- Before you can do an MDP installation you will need to have
 - an EUCS A/D account and password with suitable authorization - all of the support-team and windows-team members should have one, contact Tim to get one if not.
 - a Metropolis Portal account - all of the support-team should have one.
 - a PIE installation CD (v1.2 with XP SP2 image) - you can download an [ISO Image](#) from EUCS or get a copy from Tim. To download the image you will need to know the EUCS Download username and password (contact Tim to get this).
 - an official UUN for the intended user(s) of the machine
- Obtain the MAC of each machine to be installed. If there is a version of Windows pre-installed you can choose the Run option from the Start menu and enter cmd to run a command console and at the command console prompt enter the command ipconfig /all which will return the network details including the MAC. Alternatively, boot from a DICE install CD as this tells you the MAC when it first makes DHCP requests.
- Contact Tim with the Hostname, IP and MAC of each machine to be installed so that he can add them to the Informatics subtree on the domain controller. If Tim is not around you can also contact [Desktop Services](#) to do this. In the future you should be able to do this yourself once we have access to the EdLAN Registration Database.
- Make a DNS entry for each machine to be installed. Machines should be put on a suitable managed wire at the site where they are being installed.
- Make an LCFG entry for each machine to be installed. Here is what it should look like (substituting HOSTNAME and setting all the resource values appropriately):

```
/* HOSTNAME */

#include <lcfg/hwbase/dell_optiplex_gx270.h>
#include <inf/mdp.h>

dhclient.mac          00:0D:56:F8:BC:C5
dhclient.cluster     dhcp/FH
dhclient.hostname    HOSTNAME.inf.ed.ac.uk

inv.sno              CWSS51J
inv.allocated       windows-team
inv.location         FH-B21
inv.owner            inf

/* End of file */
```

- Edit lcfghdr/ipfilter_export.h and at the end of this file add the hostname of each machine to be installed to the list of hostnames in the notOffSiteTrusted resource. If you don't do this the firewalls will block all the traffic.
- Use the Metropolis Portal to set the users home directory folder. After sign-in choose Accounts Home from the Automation Home and then choose Staff. From the top menu bar choose User Profiles. Enter the users reference number (personnel number for staff and matriculation number for students) and their UUN and click on the Select User button. Enter the HomePath as \\smb.inf.ed.ac.uk\homes and leave the ProfilePath well alone. Then click on Update and then on Confirm Update.
- Check with the user that there is nothing on the local drive of the machine which they need to keep. If there is then copy it onto their network drive. Carefully check their browser profile has not been accidentally stored on the local drive (this might include copies of mail).

B. INSTALLATION

- Boot from the PIE CD. On the Dell machines you will probably have to press F12 at the BIOS startup to get the boot menu.
- PIE will now start. Hit Return when the boot: prompt appears.
- The machine should then pick up network details via DHCP. If it does not (and prompts for manual configuration) then something is wrong. To start off with check that the DHCP server has updated properly with the information for the machine. Do not attempt to proceed by entering network details manually as you will hit problems later on if DHCP configuration is not working.
- Installation proceeds and you will get some progress messages and then the full screen Pre-Installation Environment Main Menu.
- From the Pre-Installation Environment Main Menu choose option (1) - Image build XP for service.
- Now you should get the XP Image Build Methods menu.
- From the XP Image Build Methods menu choose option (2) - Image build XP from CD.
- Installation proceeds and you will get some progress messages. If this is an initial installation you will then get a warning message about repartitioning/formatting the disk, the default is No, select Yes and then hit Return to allow this to go ahead. You will then get a partition layout message and after partitioning and formatting the disk the installation will continue automatically.
- Now you will be prompted that you must supply a workstation name. Hit Return and on the next dialog enter the NetBIOS hostname without the domain (ie. no .inf.ed.ac.uk). Hit Return again to continue. The NetBIOS hostname is the local hostname with inf-pre-pended.
- Now you will be prompted that you must supply a workstation OU. Hit Return and on the next dialog hit Return again to accept the default OU (which is dc=ed,dc=ac,dc=uk).
- Installation proceeds and you will get a progress bar message indicating the transfer of the winxp-pro image from the CD onto the disk. Then you will get messages about stretching the filesystem. After this there will be multiple messages about downloading drivers. These will be followed by messages about recreating DLL cache and creating Cmdlines.txt.
- Now you will be prompted to remove the PIE CD. Do so and hit Return and the machine will reboot.

13. From the EUCS/PIE boot menu select the first option (WindowsXP) which is also the default.
 14. WindowsXP will boot. You will get a basic Windows XP Setup splash screen and there will be intermittent disk activity for a while. Then Windows XP proper will start. You will get a message about installing network components.
 15. Now you will get a dialog titled `Workgroup or computer domain` menu. There may be a considerable delay and then the installation should continue automatically. If it does not and you get an error message and are prompted to enter information or to proceed manually then you may have got the NetBIOS hostname wrong or the machine may have been incorrectly registered. You will need to fix the problem and start the installation again.
 16. Installation proceeds with a message about performing final tasks and the machine should reboot.
 17. You will get messages about the disk drive being checked and the drive being converted to NTFS (this may involve another automatic restart). After converting the filesystem the machine will reboot again. Allow it to reboot back into WindowsXP.
 18. Before completing the WindowsXP startup you should get multiple messages about managed software being installed. If you don't and it goes straight to the `Ctrl-Alt-Del` prompt instead then wait for the disk activity to stop (a few minutes) and restart the machine. Next time around at this same point you should then see the messages about managed software being installed. Wait for the managed software to be installed, this will be about ten minutes or so. The machine will then reboot again. Allow it to reboot back into WindowsXP.
 19. Now you should get a normal `Ctrl+Alt+Del` WindowsXP prompt. Press `Ctrl-Alt-Del` and you should then be able to login with your Active Directory account. Check that your network home directory is available under `My Documents` (this will only be automatically mounted correctly if your Active Directory account password is the same as your DICE account password, see D-1 if not). Do a cursory check that all the managed software has been installed (eg. Office, Adobe and Exceed are there) - if not logout and reboot again and probably more software will be installed. Repeat until it looks okay. The MDP installation stage is now complete. Logout.
- e) From the driver lists choose the appropriate manufacturer and printer model (if you don't know which use the `printers` command on a DICE machine to get the manufacturer and model). Make sure to select the PS (Postscript) version of the model if there is a choice. If there is not an exact model match download a driver set for the printer from the web and start this procedure again.
 - f) After selecting the printer model click on the `Okay` button to install the driver (this can take a while).
 - g) Back on the Wizard dialog click on the `Next` button to continue (at this stage you can also choose whether the printer should be the default printer or not). Then click on the `Finish` button.
 - h) Right click on the icon of the printer just added and choose the `Printing Preferences` option. Click on the `Advanced` button and expand the `Postscript Options` item in the list and click on `Optimize for Speed` and change to `Optimize for Portability` and click on `Okay`.
 - i) Right click on the icon of the printer again and this time choose `Properties` and then click on the `Device Settings` tab.
 - j) Under the `Form To Tray Assignment` entry make sure all trays are set to A4 (or as appropriate to the particular printer).
 - k) Under the `Installable Options` entry, set the `Total Printer Memory` entry to a suitable value for the particular printer (this can be established via the menus on the printer itself or by printing a diagnostic page from the printer) and also set any other printer specific parameters (such as whether the printer has a `Duplex Unit` installed).
 - l) Click on `Okay` to save the changes.
- Each printer can be setup using the same procedure above. This same procedure can also be followed at any other time as `Administrator` to add new printers.

3. Using Internet Explorer goto www.mozilla.org and download and install the most recent release of Mozilla. Next install the Calendar application:
 - a) Start Mozilla and goto <http://www.mozilla.org/projects/calendar/download.html>.
 - b) Find the `Calendar for Mozilla Application Suite` table and click on the `Install` link under `Windows and 1.7.x`.
 - c) You should get a prompt with an `Install` button. If you do click on it. If you don't and get a `Save it to disk` prompt click on the `OK` button and click on the `Save` button to put the calendar package file in the default `My Documents` directory. Then on Mozilla choose the `File-->Open File` menu option and open the file. You should then get the prompt with the `Install` button.
 - d) Once installed restart Mozilla and the `Window-->Calendar` menu option should be available.
4. Log off as `Administrator`.
5. Restart the machine and enter the BIOS. Set a BIOS password and configure the boot sequence so that the machine will only boot from the hard disk.
6. Time to move it onto the users desk - you need a spare port on the appropriate wire. Final setup must be done with the user present.

C. AFTER INSTALLATION

1. Logon as `Administrator`. After pressing `Ctrl+Alt+Del` to get the login screen choose the `Options` menu and then select `this computer` from the `Log on to options`. Enter `Administrator` as the `User name` and enter the old managed DICE client root password and hit `Return` to login.
2. Configure network printers that would be suitable to make available based on where the machine will eventually be physically located:
 - a) Under the `Start` menu choose `Printers and Faxes` and under the `Printer Tasks` list click on the `Add a printer` option.
 - b) On the Wizard click `Next` and then set the `A network printer, ...` toggle and click `Next`.
 - c) Set the first `Connect to this printer ...` toggle and enter the network printer path `Name`, for example `\\smb.inf.ed.ac.uk\fh2`. You will be prompted for a `user name` and `password` to make the connection. Enter a valid DICE username and password (your own) but make sure to unset the `Remember my password` toggle before clicking on the `Okay` button.
 - d) On the driver installation prompt click the `Okay` button to choose and install the driver for the printer. There may be quite a long delay (with disk activity) at this point while the driver database loads.

D. AFTER INSTALLATION WITH END-USER PRESENT

If the user has already been setup to use an MDP machine then they will already have a roaming profile and the only configuration step that needs to be carried out (if this is a temporary, new or re-installed machine for example) is to setup the Mozilla profile, steps 6a to 6i below. If this is a new user for MDP

however then follow all the steps below.

1. After pressing `Ctrl+Alt+Del` to get the login screen choose the `Options` menu and then select `ED` from the `Log on to options`. Login as the user using their official UUN and password. The users default password is retrievable via the Metropolis Portal if they have not changed it. If they have changed their password then get them to enter it themselves or reset their central password. Use `Ctrl-Alt-Del` so that the user can set their Windows/AD password (must be set to the same as the password they use on their DICE account).
 2. Logoff and get the user to login using their DICE password.
 3. Check that the users network home directory is available under `My Documents`. If it is not or you are prompted for a username and password then the users SMB password needs to be reset first. To do this use the SSH client (from the `Start` menu, choose `All Programs`, `SSH Secure Shell` then `Secure Shell Client`) and connect to `smb.inf.ed.ac.uk` (use the `Quick Connect` button and enter the hostname and username and you will be prompted for the password, click `No` on the remember keys dialog). Run the command `smbpasswd USERNAME` as root and get the user to enter the same password as they used for the Windows login (ie. their DICE account). If this is a completely new user then you will need to run the command `smbpasswd -a USERNAME` instead.
 4. Map any additional shares required (such as common administration areas). Right click on `My Computer` (from the `Start` menu) and select the `Map Network Drive` option. Choose the drive for the share and as the `Folder` enter the share path (`\\smb.inf.ed.ac.uk\SHARE-NAME`). Make sure the `Reconnect at logon` toggle is enabled and click on the `Finish` button. This same procedure can also be followed at any other time as the user to add new shares.
 5. Set the users default printer. From the `Start` menu choose the `Printers and Faxes` option. Right click on the icon of the printer the users wants as their default and from the menu select `Set as Default Printer`. Close the window.
 6. Configure Mozilla with the appropriate settings so that the users profile is on their network home directory. If the user already has a profile make sure it is in `M:\USER` (or `/home/USER/USER` on Linux), moving it to this location if necessary. Below the `USER` directory should be a directory named with a random string and a `.slt` extension if this is a valid Mozilla profile. For example, if the `USER` is `jbloggs` the following path should be valid on the Windows machine: `M:\jbloggs\RANDOM.slt`
(`/home/jbloggs/jbloggs/RANDOM.slt` on Linux).
 - a) From the `Start` menu choose `All Programs`, then `Mozilla` and then `Profile Manager`.
 - b) Click on the `Delete Profile` button (the `Default` profile should be highlighted).
 - c) Click on the `Don't Delete Files` button (just in case).
 - d) Click on the `Create Profile` button and then click on the `Next` button.
 - e) Replace `Default User` with the users username and then click on the `Choose Folder` button. Expand the `My Computer` entry and click on and highlight the `homes on Informatics Samba Server` entry.
 - f) Click on the `OK` button to accept. The path should read `M:\USERNAME` as where user settings, bookmarks and mail will be stored.
 - g) Click on the `Finish` button.
 - h) Set the `Don't ask at Startup` toggle and double click on the `USERNAME` entry in the list to start Mozilla with this profile and preserve the profile manager settings.
 - i) Exit Mozilla immediately using the `File-->Exit` menu option.
- If this is a new user profile or there is a problem transferring the existing profile and it needs to be recreated then the profile should be configured with the standard settings for accessing mail and publishing web pages:
- a) Configuring Mozilla for the Informatics mail server:
 - i) Start Mozilla.
 - ii) Install the University certificate. Goto the following location:
`http://www.ucs.ed.ac.uk/fmd/unix/docs/certificates/eduni.der`. A dialogue box should pop up. You are about to register a new Certificate Authority; this means that mozilla will trust all SSL certificates signed by this authority. Select the three tickboxes and click on the `OK` button.
 - iii) Open the `Mail` window using the `Window-->Mail & Newsgroups` menu option. Click on the `Cancel` button on the new account Wizard and then click on the `Exit` button to confirm.
 - iv) Choose the `Edit-->Mail & Newsgroup Account Settings` menu option.
 - v) Click on the `Add Account` button which will start the new account Wizard again. This time click on the `Next` button to setup an Email account.
 - vi) Enter the users full name and email address and click on the `Next` button to continue.
 - vii) Select `IMAP` and enter the incoming mail server as `mail.inf.ed.ac.uk` and the outgoing mail server as `postbox.inf.ed.ac.uk` and click on the `Next` button to continue.
 - viii) The incoming and outgoing username should both be set to the users username by default so click on the `Next` button to continue.
 - ix) The account name should be left as the email address so just click on the `Next` button to continue.
 - x) Check the settings and click on the `Finish` button to create the account.
 - xi) Now click on `Server Settings` in the list of options on the left of the dialog and set the `Use secure connection (SSL)` toggle (the port should change to 993).
 - xii) Click on the `OK` button.
 - xiii) Back on the main window click on the mail account just created on the left panel (it will be the `USERNAME@inf.ed.ac.uk`) entry and then click on `Read Messages`. You should then be prompted for a password and the user should enter their normal DICE password and their `Inbox` should then be accessible.
 - xiv) Choose `File-->Close` from the menu to exit. For further details see the Mozilla section in the [Mail Setup Guide](#).
 - b) Configuring Mozilla for publishing on the Informatics web server:
 - i) Start Mozilla.
 - ii) Open the `Composer` window using the `Window-->Composer` menu option.
 - iii) Choose the `Edit-->Preferences` menu option.
 - iv) Click on the `Composer` in the list on the left (should be highlighted anyway).
 - v) Set the `Retain original source formatting` toggle and unset the `Save images and other associated files when saving pages` toggle. Set the `Always show Publish dialog when publishing pages` and click on the `OK` button.
 - vi) Choose the `Edit-->Publishing Site Settings` menu option.
 - vii) Enter the site name as `www.inf.ed.ac.uk`

(http), the publishing address as `http://publish.inf.ed.ac.uk/`, the HTTP address as `http://www.inf.ed.ac.uk/` and the users username (but leave the password blank). Click on the OK button to save the setup.

- viii) Now do the same again but create an SSL publishing account. Choose the Edit-->Publishing Site Settings menu option. Enter the site name as `www.inf.ed.ac.uk` (https), the publishing address as `https://publish.inf.ed.ac.uk/`, the HTTP address as `https://www.inf.ed.ac.uk/` and the users username (but leave the password blank). Click on the OK button to save the setup.
- ix) Choose the File-->Close menu option to exit Composer.

See also the [Web Publishing Guide](#).

7. Configure access for the School Database. This step is only necessary if the user the machine is for actually uses the database. This procedure can however be followed at any time as the user to setup access. First configure Exceed to start automatically when the user logs in and then create a startup icon for the database:

- a) Configure Exceed to start automatically when the user logs in:
- From the Start menu choose My Computer and then double click on Local Disk, Documents and Settings, the users USERNAME entry, Start Menu, Programs, Startup.
 - Next open another directory window. From the Start menu choose My Computer and then double click on Local Disk then Program Files and then click on Show the contents of this folder if program files are not already listed. Now double click on Hummingbird, Connectivity, 10.00 and Exceed.
 - Right click on the exceed program icon, drag it to the window opened previously, release the mouse button and select Create Shortcuts Here from the menu.
 - Close both windows.
- b) Create a database startup icon on the desktop:
- From the Start menu choose My Computer and then double click on Local Disk then Program Files. Click on Show the contents of this folder if program files are not already listed. Then double click on SSH Communications Security and SSH Secure Shell.
 - Right click on the ssh2 program icon, drag it onto the desktop, release the mouse button and select Create Shortcuts Here from the menu.
 - Close the directory window.
 - Right click on the desktop icon just created and select Properties.
 - In the Target field append to the end of the line (after the double quote with a space) `dblogin.inf.ed.ac.uk tecdat`. You might use `itodb` instead of `tecdat` if the user is in the ITO.
 - Next click on the Change Icon button, click the OK button to pass the warning message, and select a suitable icon, the one 11 across and 3 down for example (a computer monitor on top of a folder). Click on the icon and then click on the OK button.
 - Now click on the General tab and replace Shortcut to ssh2 with School Database (or ITO Database).
 - Click on the OK button to finish.

- c) Check it works by first starting Exceed (from the Start menu click on All Programs, Hummingbird Connectivity 10, Exceed then Exceed). Then double click on the startup icon. This should bring up a terminal window which will pause for a while and then prompt for the users DICE password. Get the user to enter their password. The database interface should then be started automatically. Note that the user must first click on the database login window box to enter their database password otherwise the password will appear in the terminal window by default.

You can also create a startup icon for a Unix command shell in exactly the same way but by missing out the `tecdat` or `itodb` command in the Target and also perhaps using a different host from `dblogin`.

8. Logoff and get the user to login themselves again and check it all works.

: [Groups](#) : [User_support](#) : [Windows](#)



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