Unit II Assignment II: Building Computer Systems

By Nathan Windisch

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# PV – Setting Up Standalone Systems

The first part of this assignment required me and my group to set up a system that allowed us to fully understand how the operating system known as Windows works and how to set up a workspace environment with different parameters in different scenarios. To elaborate what we were doing, I shall use the aid of images that we took when we set up the system.

|  |  |
| --- | --- |
| This is an image of us naming the device and creating the first user. We called the device “Computer” for obvious reasons, and we called the user “Steve” because that’s a name. | /windows/preload options/naming |
| Here we are selecting the language that we will use when installing Windows. We chose English as we are all fluent in it. | /windows/preload options/install language |
| In this image we selected the time and currency culture. Again, we selected English (UK) because it is what we are most used to. | /windows/preload options/time and currency formats |
| Here we are accepting the terms and conditions. This is important as it allows for us to understand the agreement that explains what we can and can’t do with the software. We read though and understood all that was written in the document. | /windows/preload options/terms |
| Here we have changed the date and time as we got it wrong the first time around. | /windows/preload options/time |
| Here we are installing Windows. This is the second part of the second stage, where Windows is expanding its files. | /windows/windows installing/install messages/2.2 |
| Here, Windows is installing updates. | /windows/windows installing/install messages/4 |
| Finally, the Windows installation is complete. | /windows/windows installing/install messages/5 |
| Windows is finalizing the settings we chose. | /windows/windows installing/finalise and install/finalise |
| Windows is starting up for the first time. | /windows/windows installing/loading up new messages/2 |
| Here are a series of images where Windows was issuing the final steps. | /windows/windows installing/final steps/ALL |

# PVI – Configuring the System

The second part of this assignment was to configure the system we had just set up. The following table is a list of things we did, with proof.

|  |  |
| --- | --- |
| Here are two images of us changing the mouse, the first being before and the second being after. | /windows/postload options/mouse type/old&new |
| The following are two images of us changing the system font, the first being before and the second being after. | /windows/postload options/font/old&new |
| This is the screen that let us select what colour the system background was going to be. | /windows/postload options/system colour |
| We also decided to change the resolution of the screen, as a test. | /windows/postload options/resolution |
| We changed the image that the desktop was going to use. | /windows/postload options/background |
| In these images we changed the way the system uses power. | /windows/postload options/system power |
| In this image we selected the default keyboard layout, including the language that the input will take. | /windows/postload options/language |

# PVII – Testing the System

The following is a table of all of the tests that we did on the machine, with both before, after and an explanation of what is happening. Some images from previous sections may be used.

|  |  |  |
| --- | --- | --- |
| Before | After | Explanation |
| /windows/postload options/background/old | /windows/postload options/background/new | Here we changed the background from a plain green background to a vibrant, colourful background. |
| /windows/postload options/font/old | /windows/postload options/font/new | Here we changed the font size from the default size (100%) to the ‘larger’ size (150%) for easier reading of the screen. |
| /windows/postload options/language/old | /windows/postload options/new | In these images we changed the keyboard layout and spellcheck options from English US to English UK. |
| /windows/postload options/mouse type/old | /windows/postload options/mouse type/new | Here we are changing the mouse style for easier accessibility to edit the systems properties. |
| /windows/postload options/power options/old | /windows/postload options/power options/new | We edited the power usage to save energy and increase productivity. |
| /windows/postload options/resolution/old | /windows/postload options/resolution/new | We increased the resolution for added screen space and more productive work. |

# PVIII – Routine Maintenance

The first thing we did for the routine maintenance was we defragmented the main disk drive. This took approximately 15 minutes and freed up 2% of the C drive. The following is a screenshot of it taking place.

After that we decided to perform a Cinebench check and the system had a CPU score of 326. Sadly we did not take an screenshot of this score.

We also used CCleaner to remove all the junk from the computer. Given that it was a clean install, there was not much to remove.

While waiting for CCleaner to finish we ran Windows Defender, a program built into the OS that is used to remove viruses. It was slow at first but one CCleaner was finished it ran much faster. CCleaner removed nothing, and the time it took was just used to analyse the system. Windows Defender didn’t find anything either, for the same reason as above. Finally, we ran Malwarebytes which, again, didn’t find any viruses at all.

Finally, we updated the core drivers that the system used. We found 3 updates and it took 12 minutes to install them all. When we rebooted and ran another Cinebench check the computer’s score was 332, 14 points higher than the last test.