

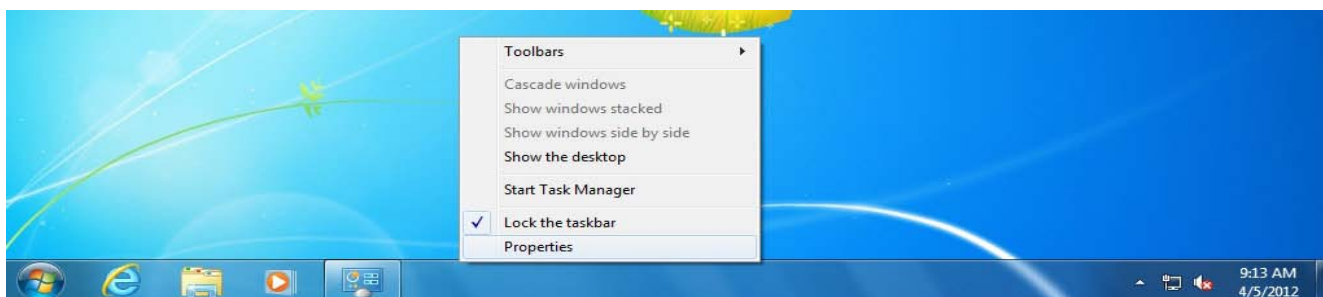
This document will explain how to configure Windows 7 so that the CNC11 software will function correctly.

Required Materials

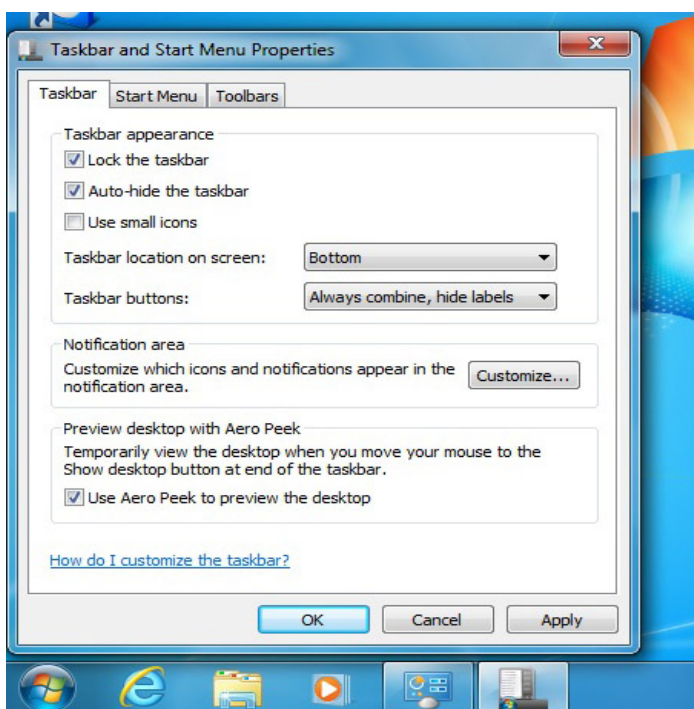
- OCZ Vertex Series 30Gb SATA II SSD
- USB or SATA DVD player
- USB mouse
- copy of Windows 7 Home Premium 64-bit
- copy of the latest version of CNC11 software

Instructions for Configuring Windows 7

- 1.) Install SSD and DVD player into servo PC/console. Make sure to plug the SATA cable from the SSD into SATA0 on the motherboard. Software **MUST** be loaded on the system that you are working on. It **CANNOT** be loaded onto an SSD remotely and then installed onto the control. Windows does not allow that.
- 2.) Connect a **SHIELDED** CAT5/CAT6 Ethernet cable to the on-board Ethernet port and the MPU11.
- 3.) Power on the MPU11 and servo PC/console.
- 4.) Insert the Windows 7 DVD and install the Windows software.
- 5.) Using the mouse, right click on the task bar, which is located on the bottom of the screen, and select “Properties”.



- 6.) Check the “Auto Hide” option.



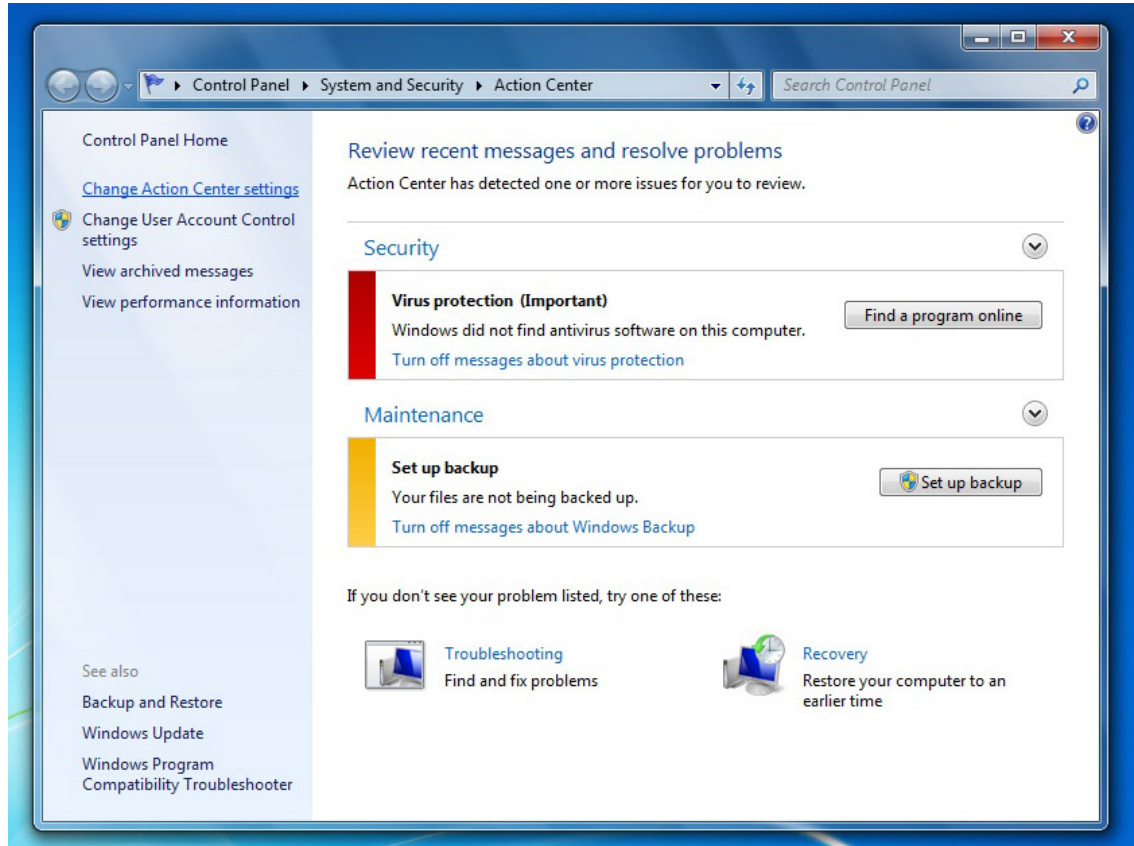
7.) Right click on the “Action Center” icon, which is the green flag that is located on the right side on the task bar.



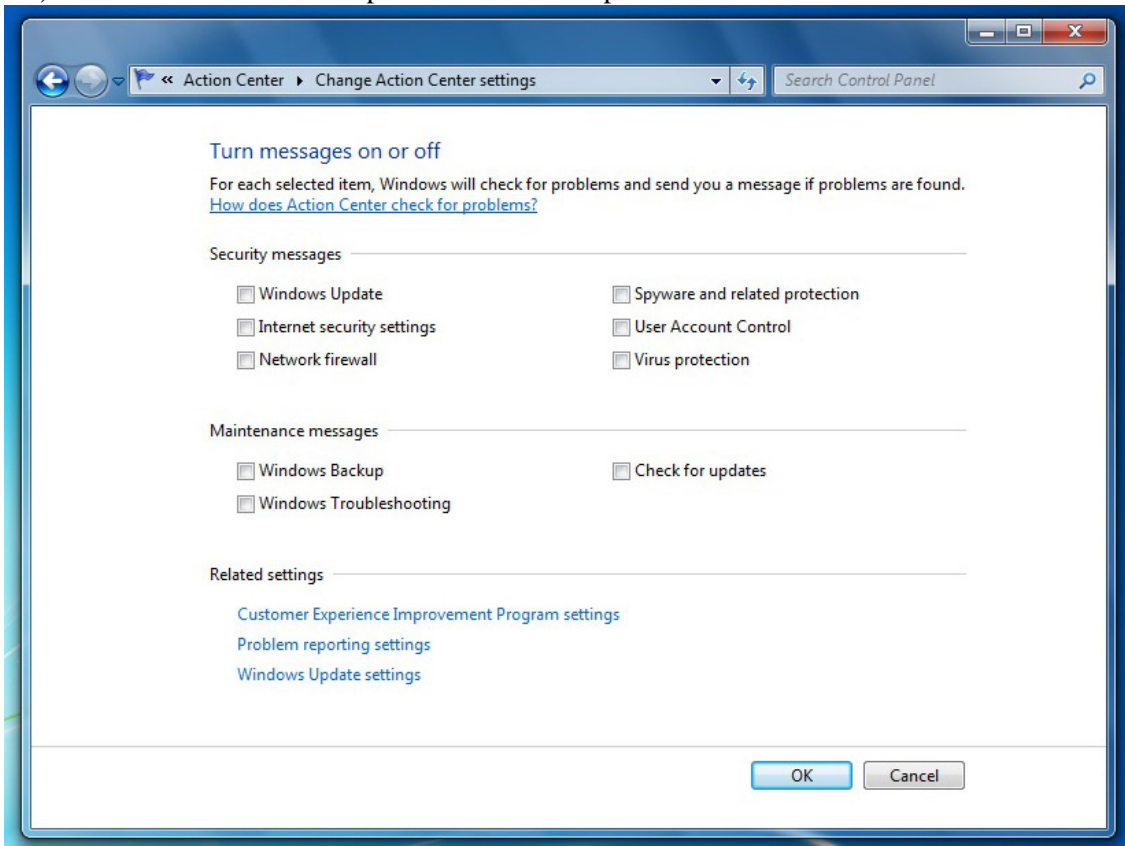
8.) Select “Open Action Center”.



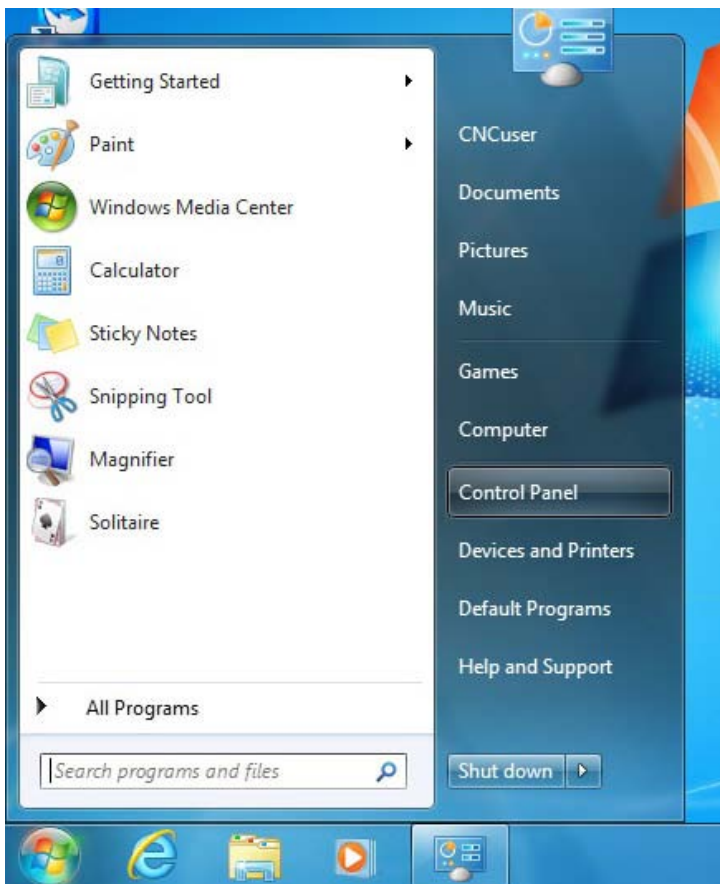
9.) Click on “Change Settings”.



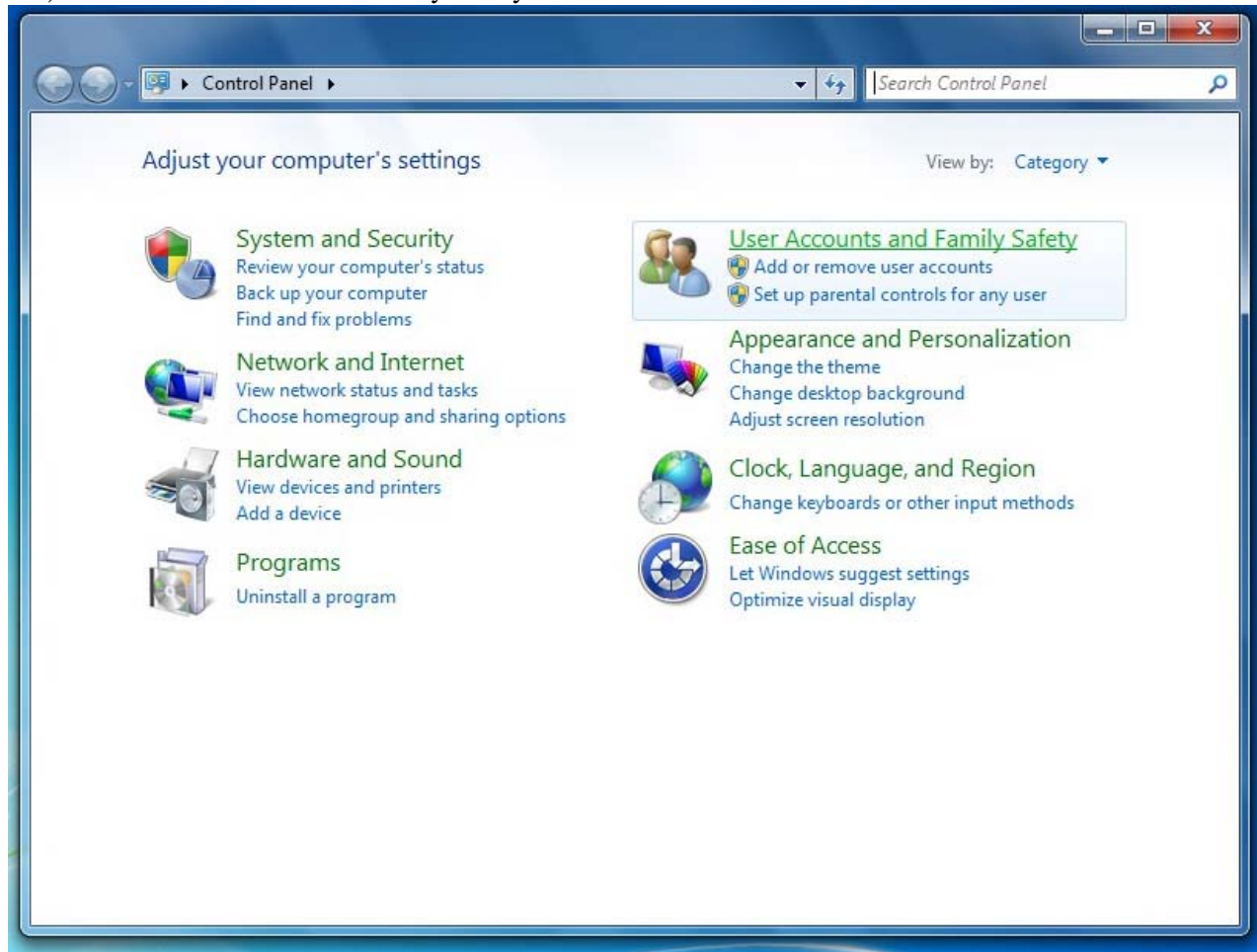
10.) Make sure that all of the options have their respected boxes unchecked.



11.) Click on the "Start" button and select "Control Panel".



12.) Select “User Accounts & Family Safety”.



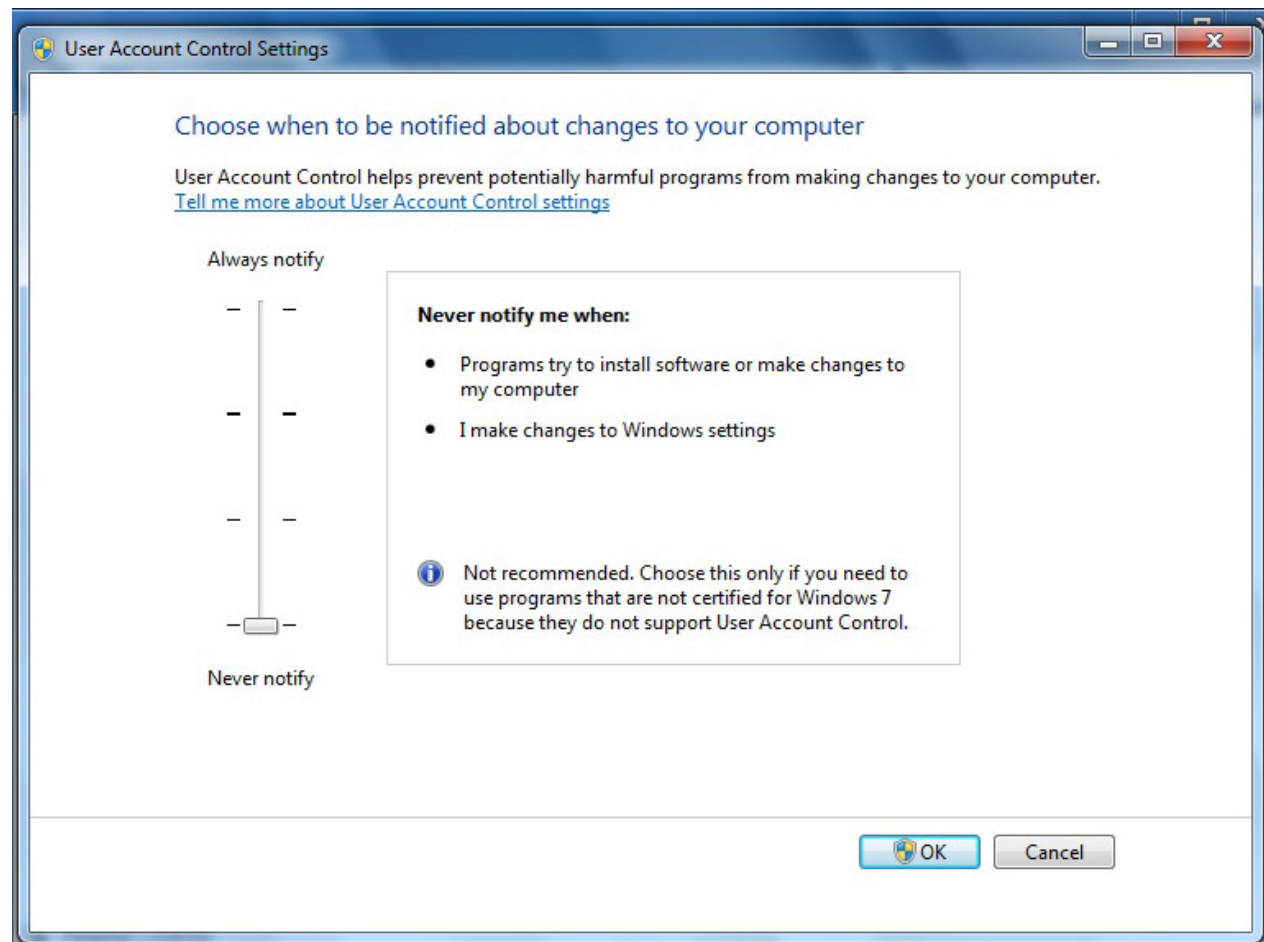
13.) Click on “User Accounts”



14.) Create an administrative account with the name **CNCuser**.



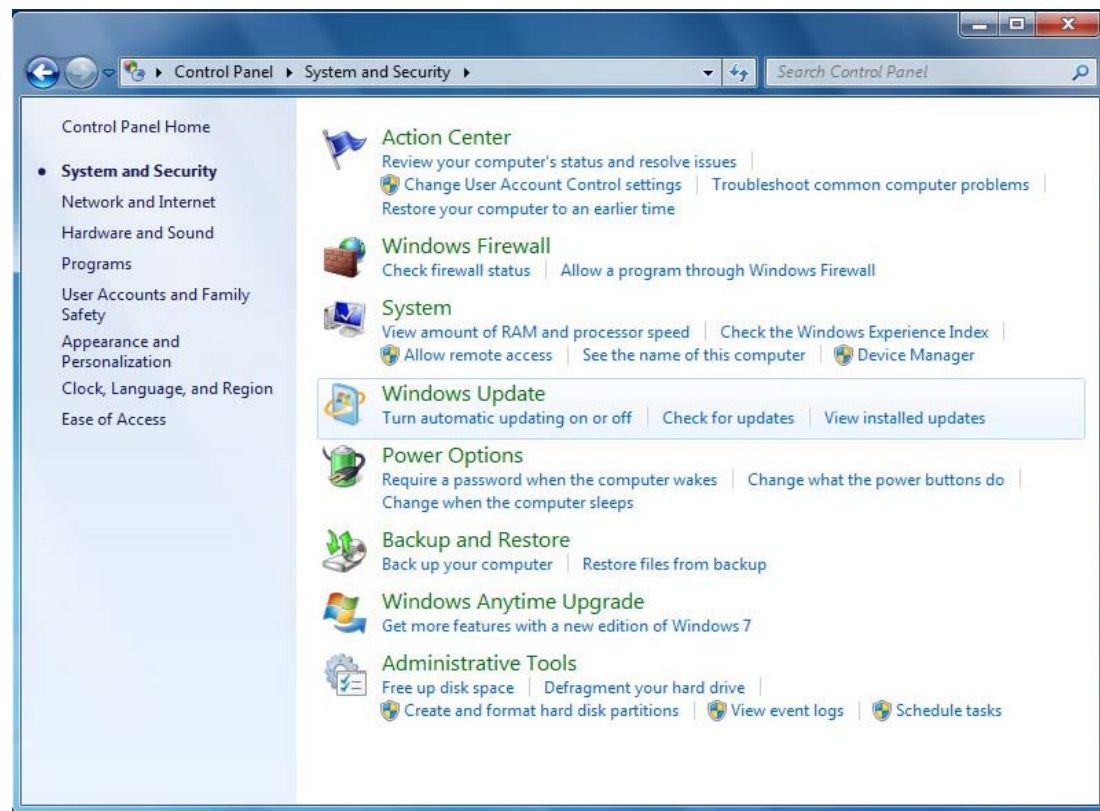
15.) Select "Change User Account" and lower the slider bar to "Never Notify".



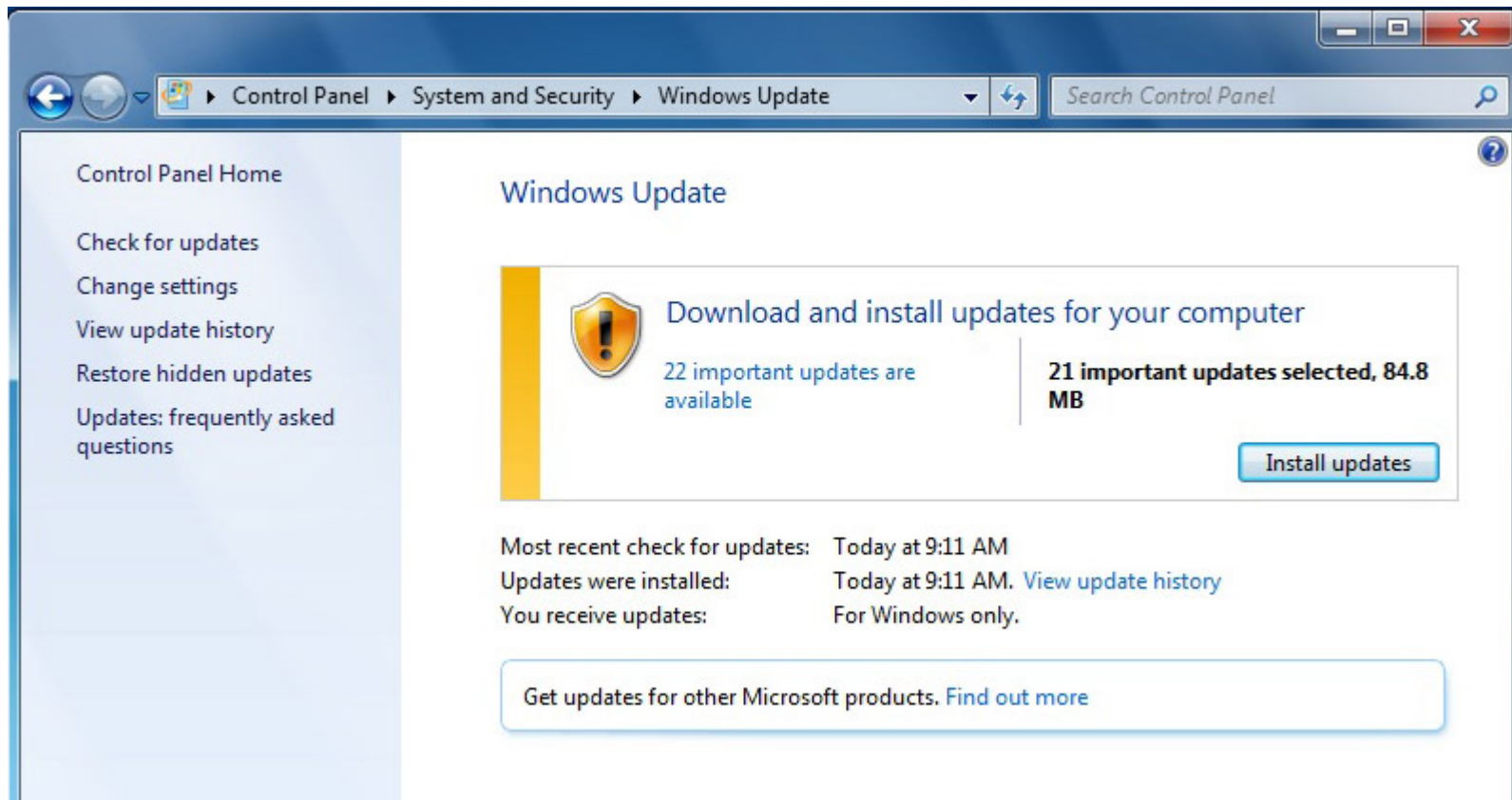
16.) Go back to "Control Panel" and select "System & Security".



17.) Select "Windows Update"



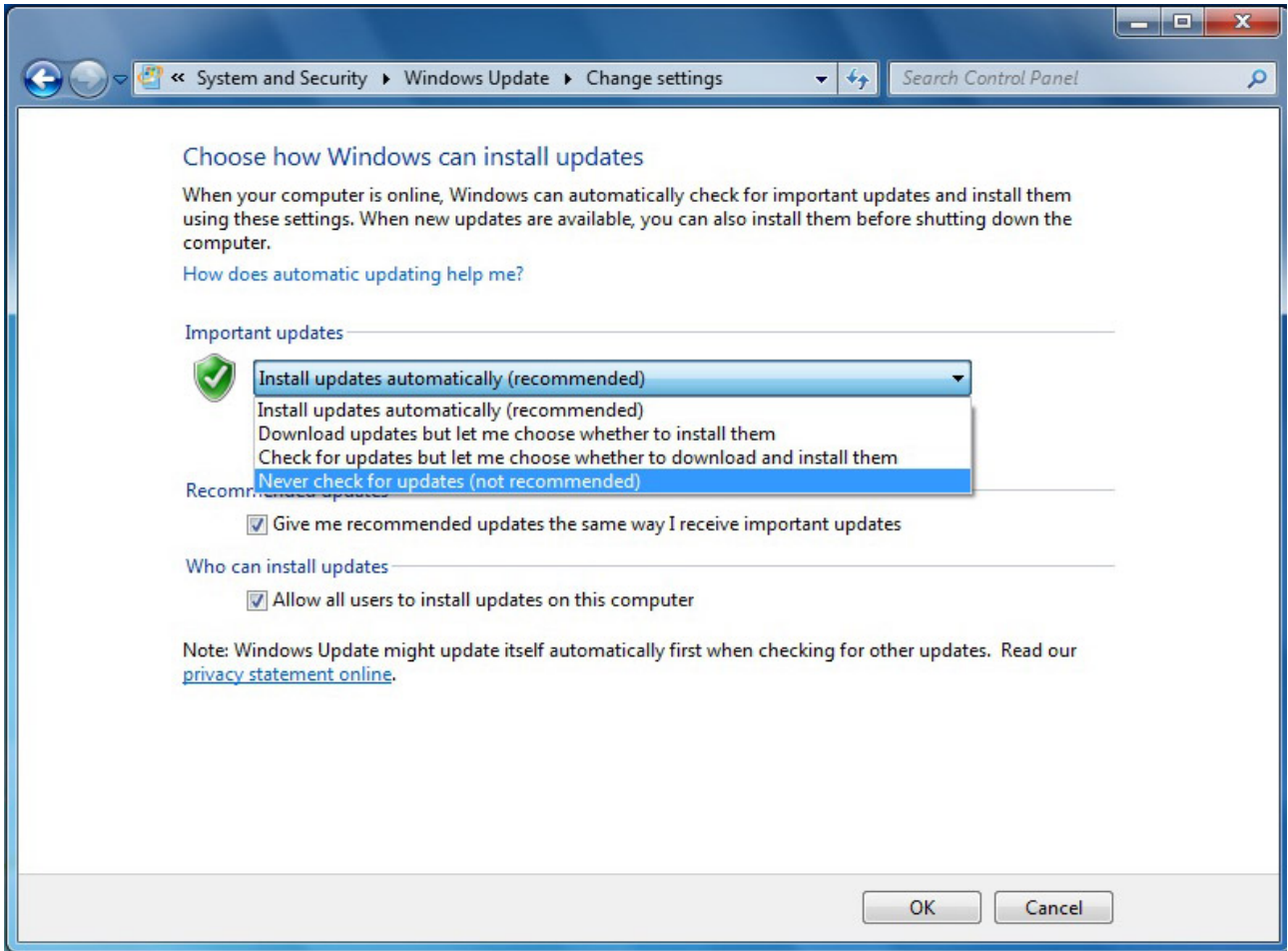
18.) Click on “Install Updates”.



19.) The computer may need to be restarted after the updates are done installing. Go back to the above screen and keep clicking “Install Updates” until you see the screen below. Next click on “Change Settings” on the left hand tab.



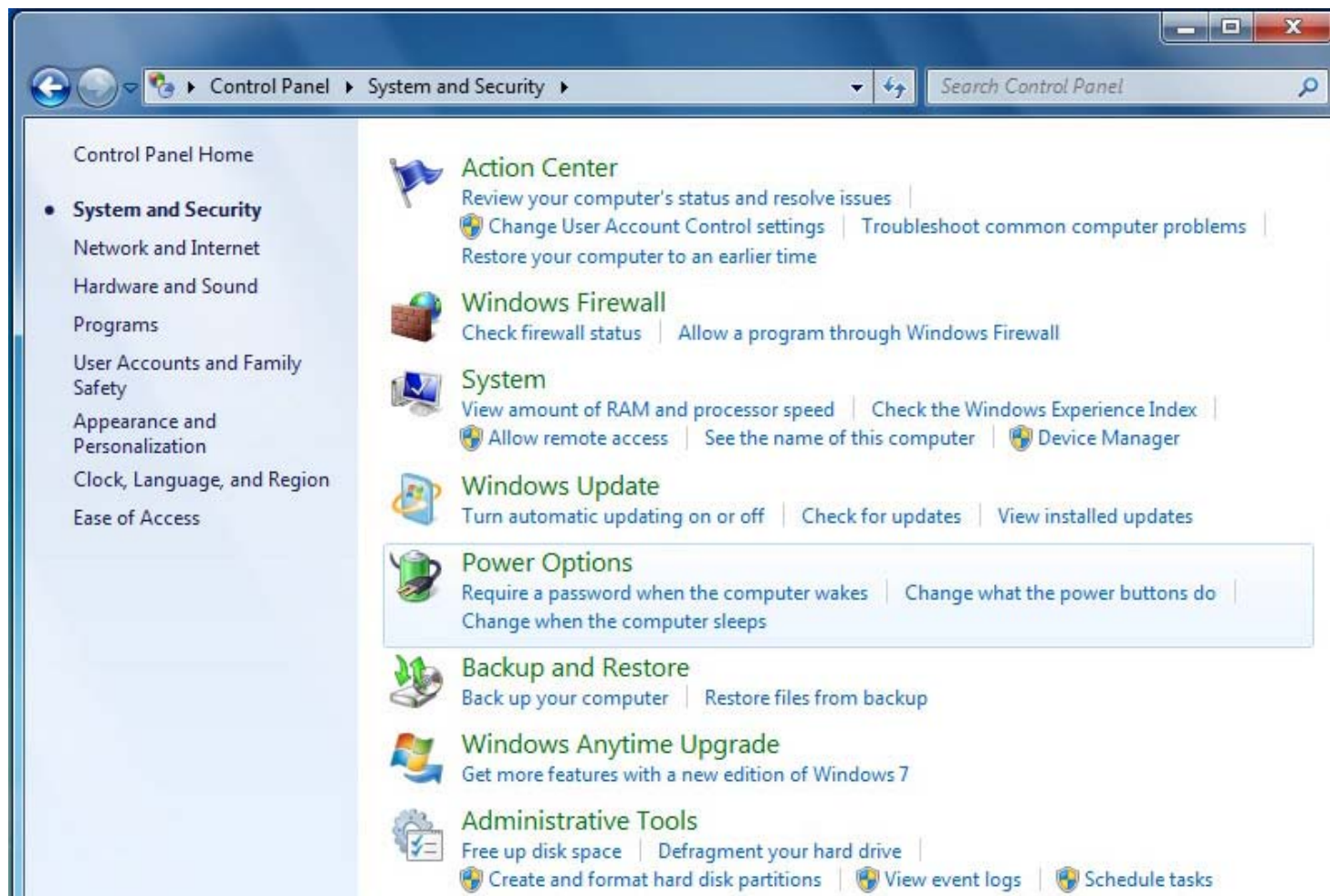
20.) Select "Important Updates" and then select "Never Check for Updates".



21.) Go back to "Control Panel", "System and Securities".



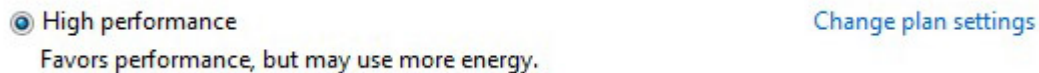
22.) Select “Power Options”.



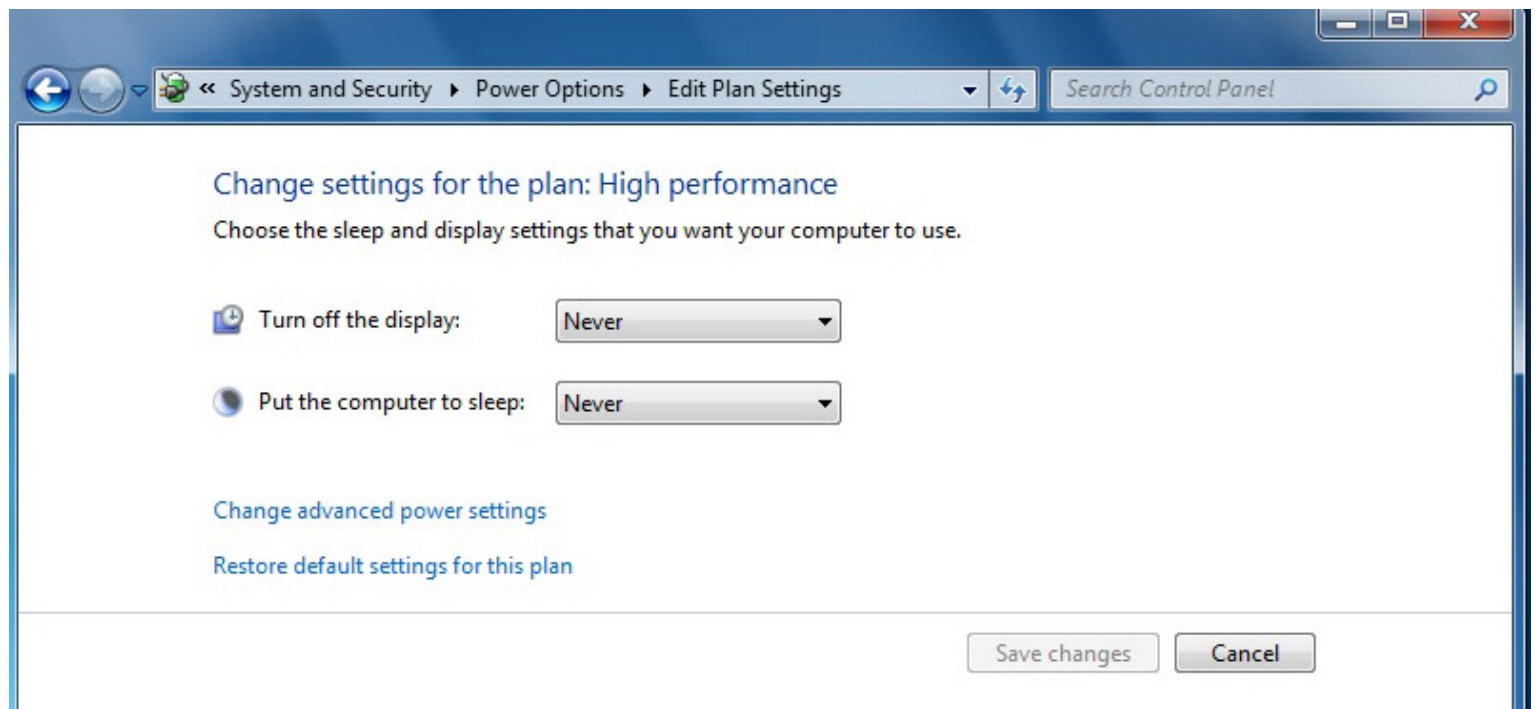
23.) Click on the down tab next to “Show additional plan”.



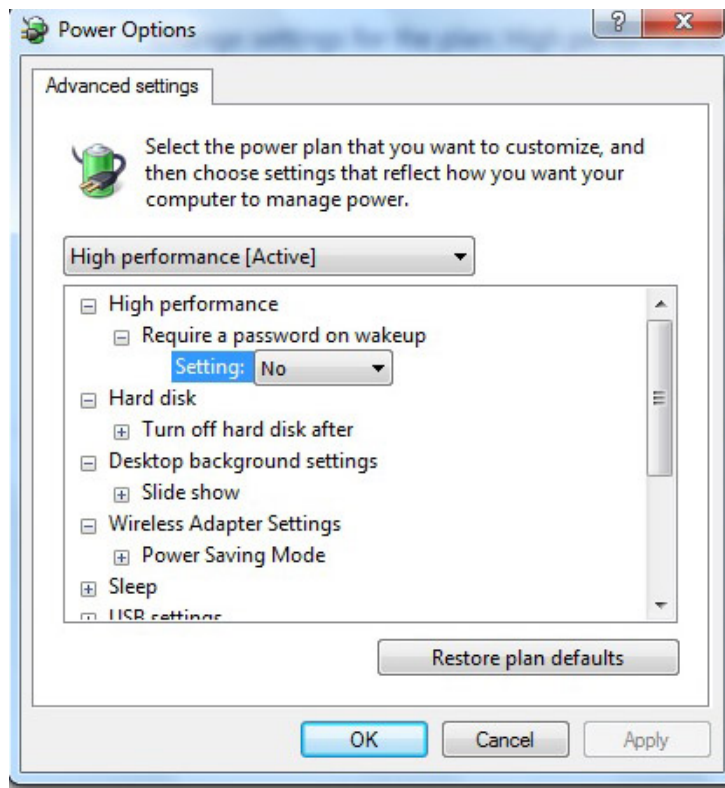
24.) Next select “High performance” then select “Change Plan Settings”.



25.) Then select “Change Advanced Power Settings”.



26.) You should now be at the Power Options screen.



27.) Make sure that the settings are as described below:

- High Performance
 - required password → NO
- HDD
 - Turn off HDD → Never
- Desktop Background
 - Slide Show → Available
- Wireless Adapter Setting
 - Power Saving mode → Maximum performance

Sleep

- Sleep after → Never
- Allow hybrid sleep → ON
- Hibernate after → Never
- Allow wake times → Enable

USB Settings

- USB selective suspend → Disable

Power Buttons

- Power button action → Shut down
- Sleep button → Sleep

PCI Express

- Link state power manage → OFF

Processor Power Management

- Minimum processor state → 100%
- System cooling policy → Active
- Maximum processor state → 100%

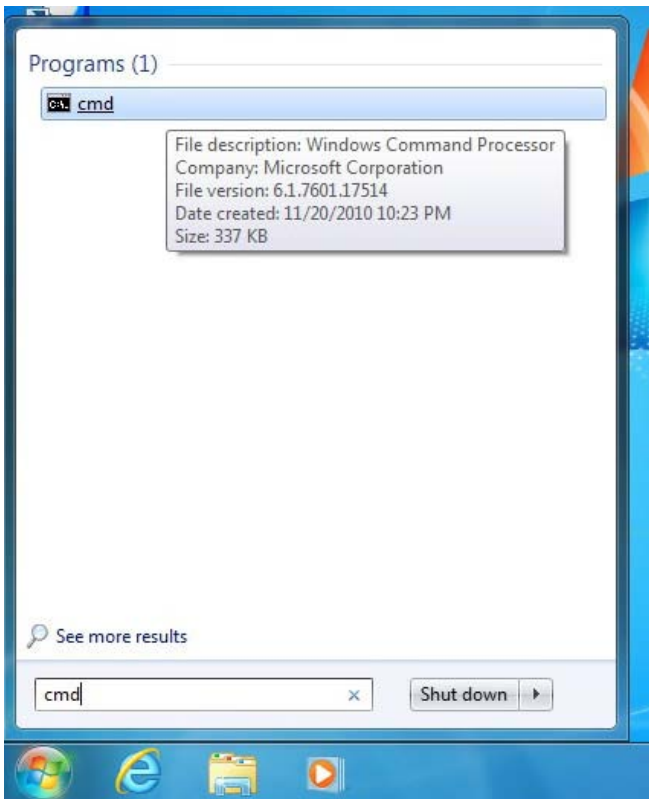
Display

- Turn off display after → Never

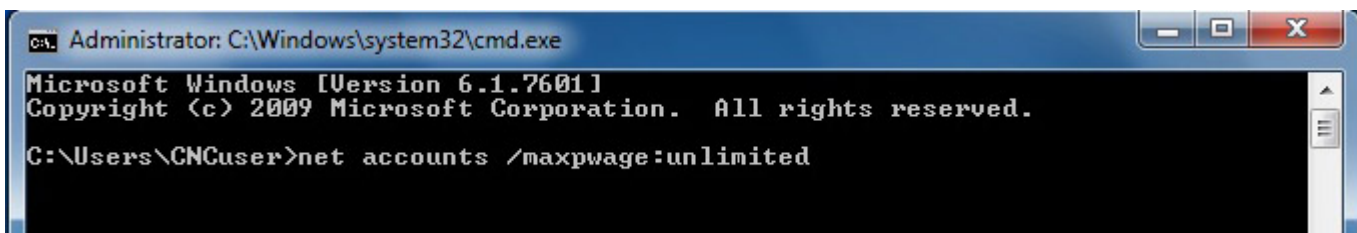
Multimedia Settings

- When sharing media → Prevent idling to sleep
- When playing video → Optimize video quality

28.) Next the user password expiration needs turned off. Click the Windows icon, then type: cmd to bring up the command prompt.



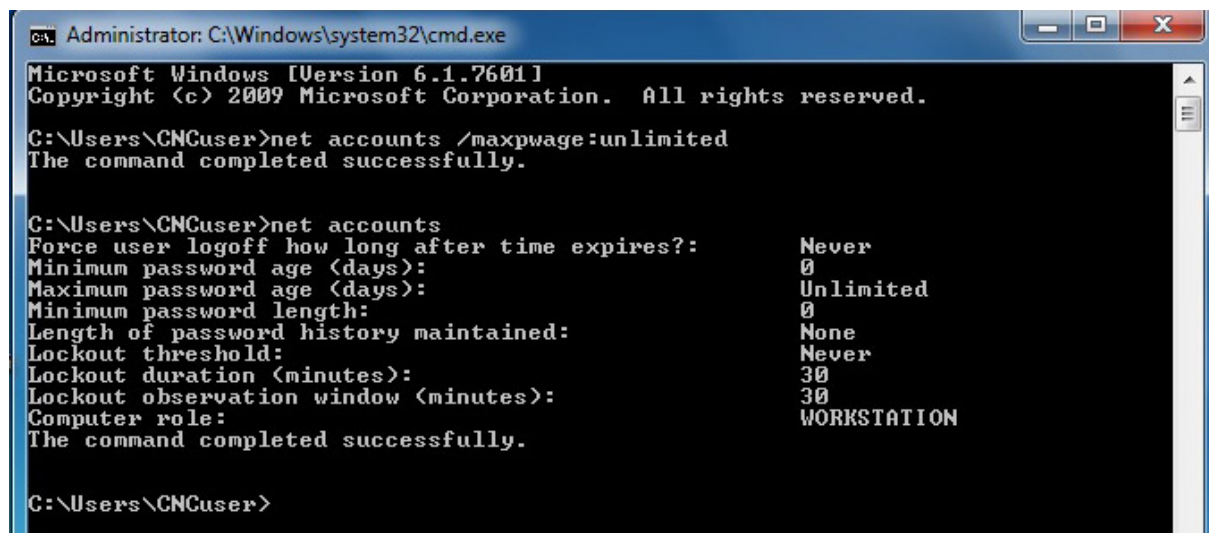
29.) Make sure the title bar reads "Administrator: C:\Windows\system32\cmd.exe", then type: **net accounts** (press enter). Third line down will read "Maximum password age (days): 42", confirm and then type: **net accounts /maxpwage:unlimited** (press enter).



```
Administrator: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\CNCUser>net accounts /maxpwage:unlimited
```

30.) Type: **net accounts** again to verify that it says "unlimited" beside the "Maximum password age". If it does type: **exit** (press enter) to close the command prompt window.



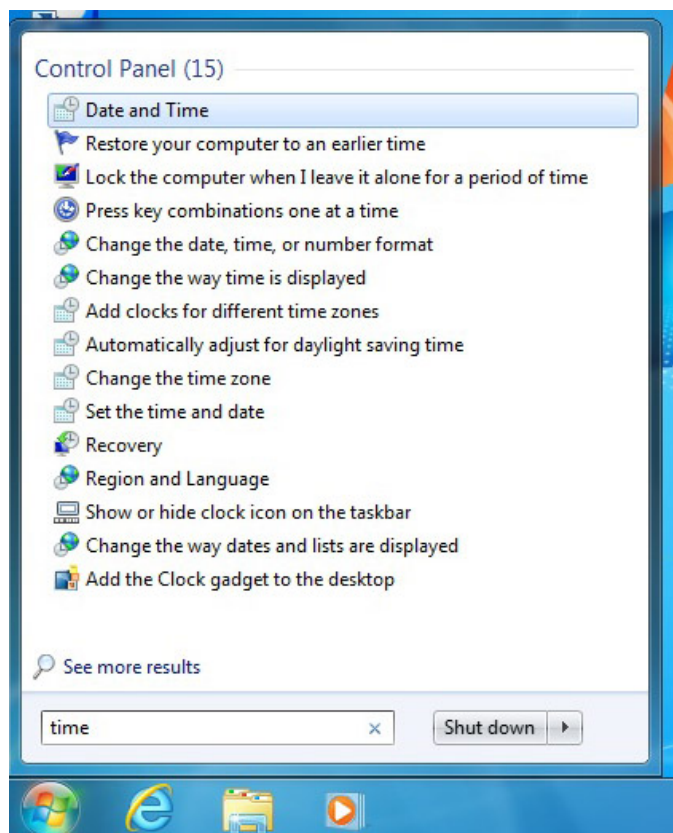
```
Administrator: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\CNCUser>net accounts /maxpwage:unlimited
The command completed successfully.

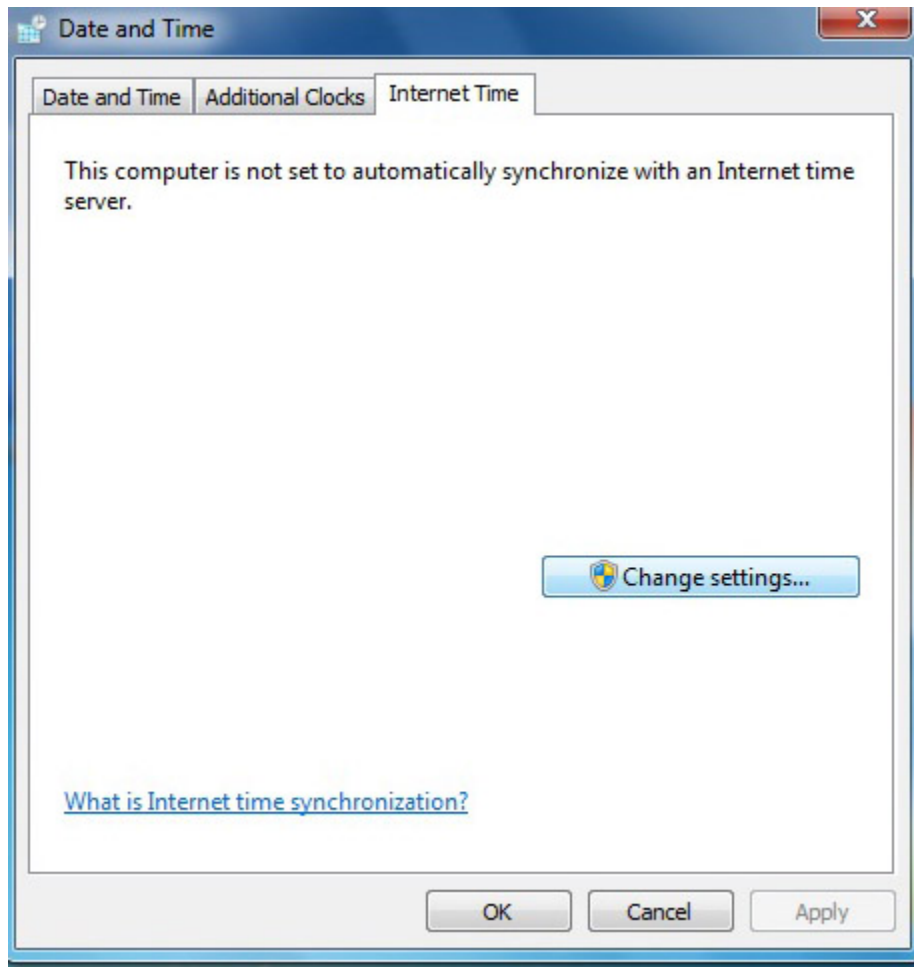
C:\Users\CNCUser>net accounts
Force user logoff how long after time expires?:      Never
Minimum password age (days):                        0
Maximum password age (days):                       Unlimited
Minimum password length:                            0
Length of password history maintained:               None
Lockout threshold:                                  Never
Lockout duration (minutes):                         30
Lockout observation window (minutes):               30
Computer role:                                       WORKSTATION
The command completed successfully.

C:\Users\CNCUser>
```

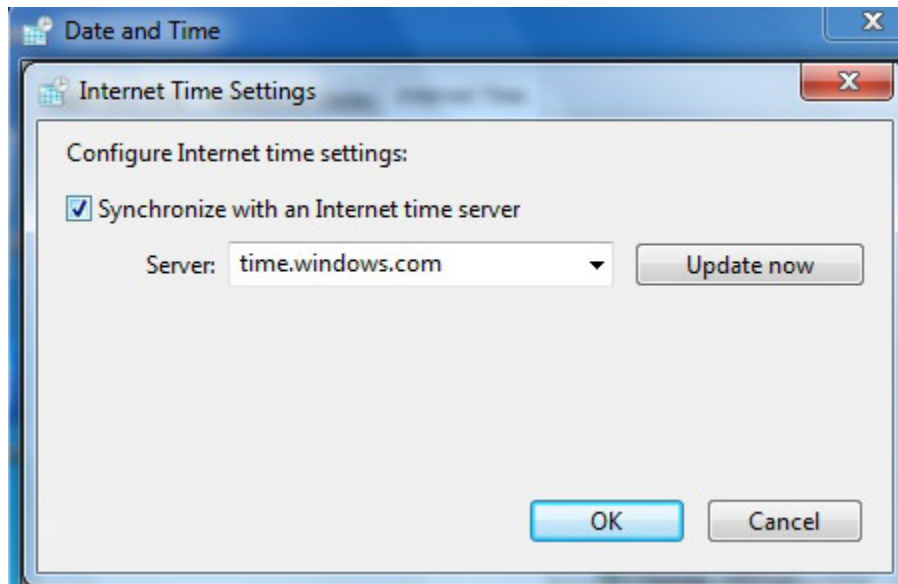
31.) The "Internet Time" synchronization also needs turned off. To do this click on the Windows button and type: **time**, then click on "Date and Time" in the list.



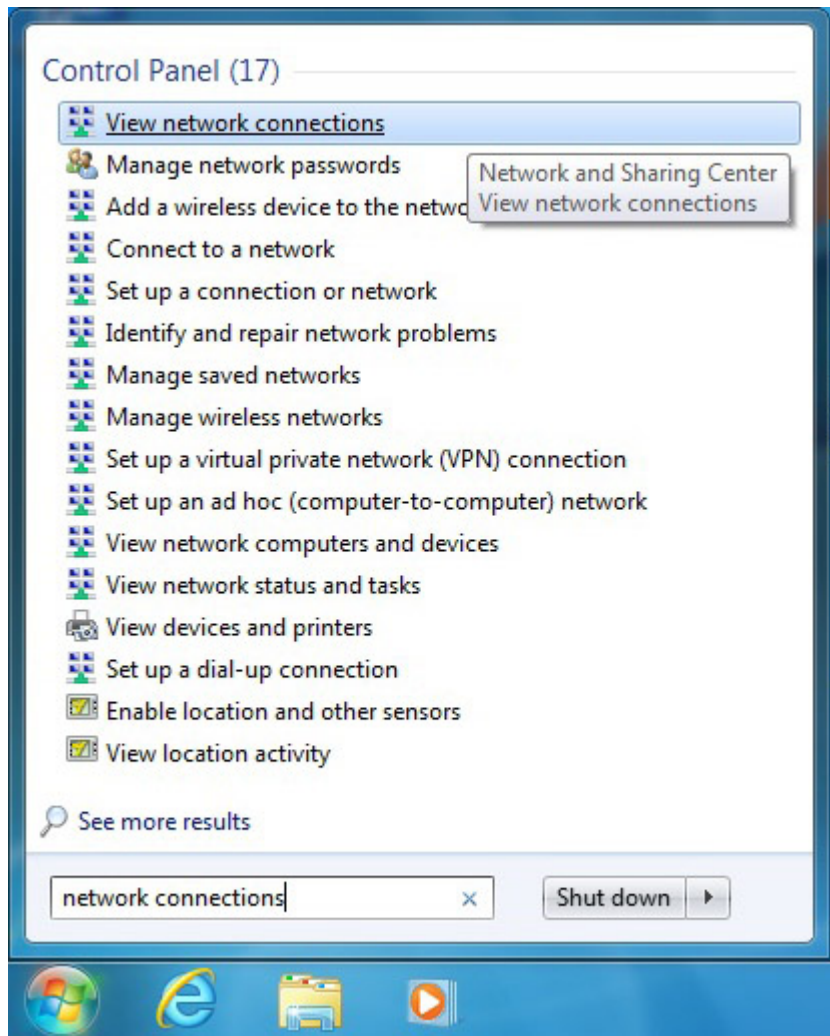
32.) Click on the "Internet Time" tab and then click the "Change Settings" button.



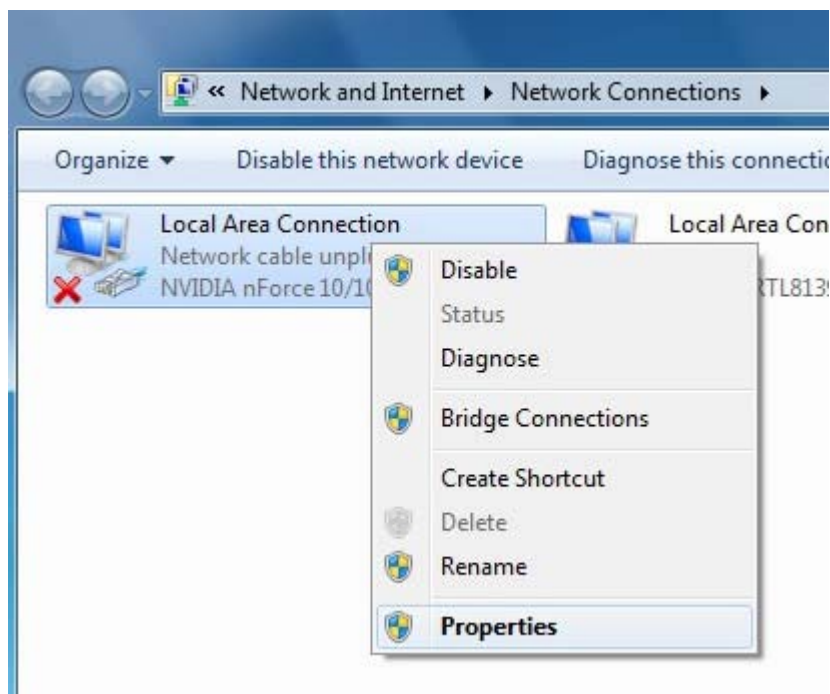
33.) Uncheck the box for "Synchronize with an Internet time server", then click "OK" to close that window and click "OK" again to close the "Date and Time" window.



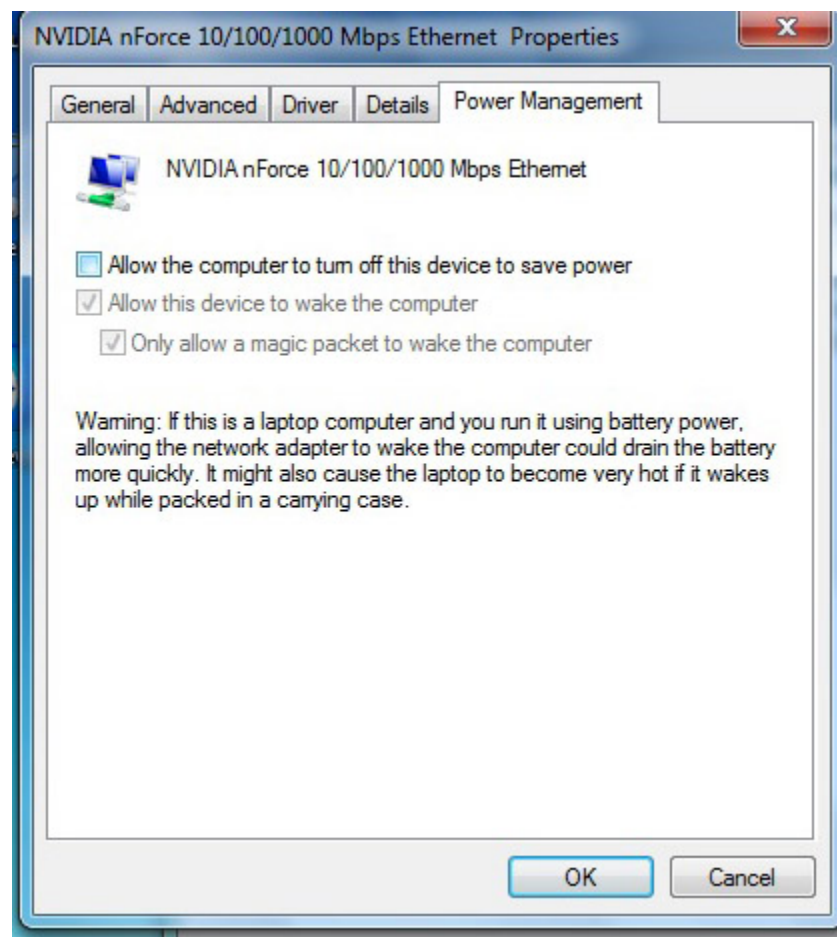
34.) Click on the "Start Button" and type: **network connection** in the search window. Click on "View Network".



35.) Right click on the network card. Click on "Properties".



36.) Click "Configure". Click on the "Power Management" tab and make sure that the "Allow the computer to turn off this device to save power" box is unchecked.



37.) After Windows 7 is configured the last thing you will need to do is activate Windows7, which can be done via the Internet or phone.

38.) Open "Windows Activation" by clicking the "Start" button, then right click "Computer", then click "Properties", and then click "Activate Windows now".

Note: If you are installing a new SSD in which Centroid has installed the Windows7 operating system, you will NEED to change the product key before attempting to activate Windows7 by clicking on the "Start" button, then click on "Control Panel", then click on "System & Security", then click on "System", scroll all the way to the bottom and click on "Change product key".

Windows activation

Windows is activated

Product ID: 00359-OEM-8704027-70607

[Change product key](#)

39.) If using the Internet and Windows7 detects an Internet connection, click on "Activate Windows online now", type in the Windows7 product key when prompted, then click "Next" and follow the remaining instructions.

40.) If activating Windows7 via the phone, click on "Show me other ways to activate", type in the Windows7 product key when prompted, then click "Next", then click "Use the automated phone system", then click on the location nearest you from the drop-down list, then click "Next".

41.) Call one of the phone numbers listed and an automated system will guide you through the activation process.

42.) When prompted, enter the installation ID that's listed on the screen into the phone's keypad.

43.) Type the confirmation ID that the phone system gives you into the space provided under Step 3, then click "Next", and then follow the remaining instructions.

Instructions for Installing CNC11 Software

- 1.) Install CNC11 software. Make sure you configure the network adapter and install the appropriate PLC program if needed. Also, if you want the PLC Detective software, you will need to install WinPcap.
 - 2.) Once the CNC11 software installation is complete, right click on the CNC11 icon located on the desktop and select "Properties". Select the "Shortcut" tab, then select "Advanced". Check the box for "Run as Admin". Select "OK", then "Apply", and then "OK".
 - 3.) Go into "Control Panel", select "System and Security", and then "Windows Firewall". On the upper left side of the window click on "Allow a program or feature through Windows Firewall", find cncm or cnc1 in the list and check both boxes for private and public, then click Ok.
 - 4.) If want to eliminate the scan & fix pop up and autoplay pop up when you plug in your USB stick, you will need to do the following. To suppress the scan & fix click on the Windows icon type: **msconfig** and click on the "Services Tab" then scroll down and uncheck "Shell Hardware Detection". Click "Apply" then "Ok" and then you will need to power cycle the PC. To suppress the autoplay click on Windows icon and type: **autoplay** then uncheck "use AutoPlay for all media and devices" and click "Save".
 - 5.) You are now ready to run CNC11 software on your Windows 7 PC/console.
 - 6.) If you clicked on the CNC11 icon to start the software and you are getting 64180 MPU11 not responding errors. You most likely didn't have the MPU11 connected to the PC when you installed the software. Check your Ethernet card to make sure it is configured properly.
 - 7.) Go to "Control Panel", select " Network and Internet", and then "Network and Sharing Center". Click on "change adapter settings" on the upper left corner of the window, right click on the network icon, select "Properties". Highlight "Internet Protocol Version 4 (TCP/IPv4)", then click "Properties" again.
 - 8.) Select "Use the following IP address" then set the IP address and Subnet mask to:
IP address: 10.168. 41.1
Subnet mask: 255.255.255.0
- Click Ok and then try to start the CNC11 software again.