Introduction – Using a Windows 7 machine for the Host computer requires a somewhat different approach than an XP machine. The purpose of this note is to describe a procedure for setting up PileUpNet to use a Windows 7 machine as the Host computer. It is assumed that the appropriate PileUpNet software modules (Host, Players, Scoreboard, Manual Logger) have been installed on each of the machines as described in the Pile Up Net User Guide so those steps will not be covered here. The focus here will be on setting up the underlying network. Steps 1-5 should only be required one time. Steps 2-3 are optional but are helpful in that they avoid having to remember the password associated with the network. Of course if a new machine is to join the network then steps 3-5 should be repeated for that machine.

I've found the following two references useful in developing these notes.

1. Step by Step – Network Your Computers & Devices pp 95-117, C. A. Rusen, Microsoft Press
2. www.trainsignal.com/blog/windows-7-ad-hoc-network-configuration

Step 1: On the Host machine set up an Ad Hoc Network.

1.1 Open the Network and Sharing Center and click on Set Up a Connection or Network
1.2 Select Set up a wireless ad hoc (computer-to-computer) network and then click Next
1.3 Read the resulting screen for information and then click Next
1.4 The next dialog will be for entering a network name, selecting a security type, and defining a security key/password. Be sure to check the Save this Network box. Once the items have been specified click on Next.
1.5 You should receive a final notification that the network is ready to use. Click Close
1.6 Note that at this point it is not possible for the Host to connect to the network. If you go to the Network and Sharing Center you will see that you have no active networks and if you use the link labeled Connect to a Network you will see the network you created and it will show a status of Waiting for Users but there will be no button for connecting to the network. This is ok because once you connect another machine to the network the Host machine will be automatically connected.

Step 2: Export the Network Settings to a Memory Stick

2.1 Open the Network and Sharing Center and click on Manage Wireless Networks
2.2 Double click on the network you wish to export on the screen listing of the networks.
2.3 Click on the link labeled Copy this network profile to a USB flash drive
2.4 Insert a USB drive and click on Next once the drive is detected and the Next button enabled.
2.5 Once the export operation is complete click Close
2.6 To see what has been written to the drive look on the drive for a folder named SMRTNTKY and the executable setupSNK.exe

You are now ready to import the wireless network settings into each of the client machines.

Step 3: Import the Network Settings from a Memory Stick

3.1 After plugging in the memory stick on a client machine run the setupSNK.exe file
3.2 Answer Yes to the dialog asking whether you want to add this computer to the network.
3.3 You should receive a message dialog indicating success. Click Ok and the import is complete.
3.4 Repeat Step 3 for each of the client machines

Step 4: Set the network location to Home Network.

4.1 Open the Network and Sharing Center on the Host machine
4.2 You should see that the Host is now connected to the network and is a Public network.
4.3 Click on the link displaying the name of the current network location (Public network)
4.4 In the Set Network Location dialog click on Home network.
4.5 Click Close on the resulting dialog displaying the new location

That should complete the network setup if all machines are running Windows 7. You should be able to run ipconfig on each of the machines and see that they have been assigned an IPv4 address. However, if some are running XP then the following step should be performed to insure that all of the computers on the network are in the same Workgroup.

Step 5: Additional step if some machines are running XP

5.1 Choose Control Panel | System and Security | System on the Host machine
5.2 On the resulting dialog note the Workgroup name
5.3 On each of the client machines you should make sure the assigned Workgroup is the same as that found in step 5.2. If not then perform the following steps to change the workgroup name on the client.
5.4 On the dialog in step 5.2 on the client machine click Change settings.
5.5 On the resulting dialog (System Properties Window) click the Change button next to the item labeled "To rename this computer or change its domain or workgroup ..."
5.6 In the Workgroup field enter the name of the workgroup found in step 5.2 on the Host
5.7 You will be notified that in order for the name change to take effect a restart is required.
5.8 Following a restart you should verify that the Workgroup name has been changed.

Step 6: Once all of the machines have been successfully connected to the network it is time to startup the PileUpNet system. Do this by starting up the Host by right clicking on the Host icon and selecting Run As Administrator. Once the Host starts up use the menu item Pile Up Control | Start Network to obtain the IP Address and to set the port number to be used. My testing reveals that a port number of 777 works on my system. Previously with the Host running on an XP machine I was able to use Port 49152 but that does not seem to work with the Host running on Windows 7.

Step 7: Now have the other machines (Players, Scoreboard, Manual Logger) connect to the Host using the steps outlined in the user guide being sure to select Run As Administrator on each.

Note: If your XP machine does not support the security option chosen for the network you will need to change the security option.