PC^2 CONTEST ADMINISTRATION - Setup Instructions – by John Owen

FIVE STEPS TO ACCOMPLISH BEFORE THE DAY OF THE CONTEST

- 1. Prepare your network using a wireless router or switch. I trust that you have the knowledge and expertise to do this, and will not include instructions for this part of the process.
- 2. Prepare your PC by customizing settings based on your own system
 - Copy the provided pc2-9.2.4-2837 folder to your PC desktop, or wherever you want it on your PC.
 - Set the environment variables on each machine that is to be used as an admin or judge.
 - This step is <u>CRUCIAL</u>. The <u>PATH</u> must be edited in the settings for your PC. This <u>PATH</u> open "doorways" on your computer to enable PC^2 to find what it needs in order to run. If you don't do this, you are dead in the water.

• PATH

- The PATH needs to have two things added: the pathway to where PC^2 "lives" on your PC, and the pathway to where the JDK bin folder "lives".
 - Here is what I added to the PATH on my PC:

; C:\Users\John\Desktop\pc2-9.2.4-2837

; C:\Program Files\Java\jdk1.8.0 45\bin

- You will need to customize these two parts for your own PC based on the location of these two folders on your computer.
- Be sure to include a semicolon separating each pathway.
- Note: **Do not change the other pathways in the PATH**. These are needed for all the other functions on your computer.
- Note: Formerly, the CLASSPATH also needed to be edited, but that is no longer the case with the latest version of PC².

3. Customize the **pc2v9.ini** file

- Open the <u>pc2v9.ini</u> file, found in the <u>pc2-9.2.4-2837\bin</u> folder and change the IP address in this file to match the IP address for the PC server machine you are using to administer the contest.
 - An example of an IP address for the server is: **server=10.10.10.2:50002**.
 - ONLY CHANGE THE IP ADDRESS; DO NOT CHANGE ANYTHING ELSE. The :50002 is the port number and is very important in order for the PC^2 network to function properly.
- Save the changes and place a copy of this <u>pc2v9.ini</u> file in the student/team folder.

- 4. Prepare flash drives for distribution of Team Files
 - Copy the entire student folder <u>pc2-9.2.4_Team</u> to a flash drive (or several) and have each team copy the entire folder onto their PC as soon as they arrive on site.
 - This folder contains all the files that the team needs to run PC^2, including the sample data files for the contest.
- 5. Do a trial run by running a contest simulation yourself
 - Start your PC^2 system by activating your network, and launching the **server**, **admin**, **judge**, and **scoreboard** clients.
 - Turn on your router and connect to it with your PC. If you are using a switch with no DHCP function, you will need to manually assign IP addresses to each team.
 - Launch PC^2 by executing the <u>pc2server.bat</u> file found in <u>pc2-9.2.4-2837\bin</u> folder.
 - Use <u>site1</u> and <u>site1</u> as the <u>login name</u> and <u>password</u>, then <u>contest</u> as the <u>contest</u> password.
 - Execute the pc2admin.bat file, using root and captain as the login name and password.
 - Note: Each PC^2 window has a black DOS window behind it. Minimize this
 window to get it out of the way, but DO NOT CLOSE IT!.
 - Execute the <u>pc2judge.bat</u> file, using <u>judge1</u> and <u>judge1</u> as the login name and password. For additional judge clients, use <u>judge2</u> and <u>judge2</u>, <u>judge3</u> and <u>judge3</u>, and so on.
 - Execute the <u>pc2board.bat</u>, using <u>scoreboard1</u> and <u>scoreboard1</u> as the login name and password.
 - Launch the <u>pc2team.bat</u> file and pick <u>team20</u> as your admin team. Avoid using the teams that will actually be participating, otherwise you will need to delete any runs you do to test the system.
 - Test the system by running your own contest simulation. <u>I do this every time!</u>
 - Start the contest timer (**Admin** client, **Configure Contest** tab, **Times** tab, **Start** button.
 - Submit a problem. Provided solutions are in the **JudgeData** folder.
 - Go to the judge client and judge it.
 - If the validator says "YES", the solution is correct. Always trust a
 "YES".
 - If the validator says "NO", judge it manually and decide for yourself.
 NEVER trust a "NO"!
 - Check the scoreboard to see if it registered.
 - Now go into the html folder and execute the
 <u>UIL_PC2_ScoreBoard_42115_OWEN.jar</u> file. It creates two HTML files called
 <u>UILScoreCardV9.html</u> and <u>UILTeamScoreCardV9.html</u>
 - Open either html file to see the results.
 - Repeat this process for all of the problems, checking the scoreboard each time, and refreshing the UIL jar file and html scoreboard file each time.

THE DAY OF THE CONTEST

- 1. Launch your network and server according to the instructions above.
- 2. Start the contest timer so that teams can submit the Dry Run problem (<u>Admin</u> client, <u>Configure</u> Contest tab, <u>Times</u> tab, <u>Start</u> button.
- 3. As teams arrive on site, get each one connected to the network and have them submit the Dry Run to test the system.
 - Have each team copy the files from the prepared flash drive onto their PC.
 - Assign team numbers to each team according to the setup provided (see the Admin client, Accounts tab).
 - Login names and passwords are simple: <u>team1</u> and <u>team1</u>, <u>team2</u> and <u>team2</u>, etc. You can change this if you want greater security, but I have never had an issue with this aspect of the contest.
 - Each team needs to connect to the PC² network, either through your wireless router, or using an Ethernet cable connected to your switch and manually changing their IP address.
 - Once connected to the network, each team needs to execute the <u>pc2team.bat</u> found in the <u>pc2-9.2.4-2837\bin</u> folder.
 - The login name and password for Team 1 is <u>team1</u> and <u>team1</u>, all lower case, no spaces, and likewise for Team 2, Team 3, and so on.
 - Ask each team to submit their solution to the Dry Run problem.
- 4. Judge each submission and let teams know of any issues that arise, such as file and class name mismatch, sending the wrong file, including a path in their file linking statement, having a package statement in their code, etc.
- 5. Refresh the scoreboard each time to see which teams have been successful
- 6. **Note:** DO NOT WAIT too long to start the contest. If a team just can't get the Dry Run, or is having network connectivity issues, have them submit their solutions on flash drive, and open a team client on the judging PC and submit the solution from there.
- 7. Start the contest on time.
 - Reset the contest timer to 2:00:00. You have to do this manually from the Admin client.
 - Distribute the student packets, giving them all the required instructions and UIL rules.
 - Make sure all teams have legal setups (one PC, one keyboard, one monitor, one mouse, no more than two published references, no previously defined java files on their system, etc.)
 - Start the contest timer and tell the teams to begin.
 - Sit back and wait for submissions, and run the contest.
 - Refresh the scoreboard periodically, and print out a halfway score sheet if you want.
- 8. At the end of the contest
 - Print out the final score sheet
 - Have teams submit verification sheets and check this against your scoreboard.
 - Resolve any issues during the verification period
- 9. After verification is over, submit the final score sheet to HQ for results entry.
- 10. And you're done! Pack up and go home. :D