

ACM ICPC Mid-Atlantic Region

Site Procedures

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The purpose of this document is to define the procedures that each site must comply with in order for the ACM ICPC Mid-Atlantic regional contest to operate fairly and smoothly in the area of computer systems and information technology.

Any questions about this document or the requirements listed here should be directed to Joe Gleason (fireduck@gmail.com).

These procedures should only be deviated from based on instructions from the RCD, Head Judge or RSTL.

Definitions:

PC² – The PC² contest control software, available from <http://www.ecs.csus.edu/pc2/>

Site – A university where teams will come to compete in the competition.

Site Admin – The person or people at each site responsible for actions related to PC² during the contest or practice sessions.

Workstation – A computer which will run PC² for use during the contest by a team, a judge or a site admin.

RCD – Regional Contest Director (Maung Htay)

Head Judge – Steve Zeil

RSTL – Regional Systems Team Leader (Joe Gleason)

Setup:

Before any test sessions or the contest itself, always check <http://midatl.fireduck.com/systems/> for updates to this document or to the PC² Configuration files.

Every PC² client must have the site specific pc2v9.ini file.

We do not anticipate having to make changes to the PC² configuration files posted, however, please check regardless.

The team numbers will be assigned based on the data we get from the ICPC system. The lists will be maintained and updated at:
<http://midatl.fireduck.com/systems/pc2config/>

Day of contest procedures:

Pre-practice:

- 1) The RSTL will start the pc2server processes to activate all site servers. The RSTL will also create all the team accounts and import the ICPC team data into PC^2. The RSTL will inform the site admins when this is done so that they may proceed to step 2.
- 2) Each site admin will then run pc2admin and login to their corresponding site servers. Username: administrator1, password administrator1.
- 3) Each site admin then checks the following things in pc2admin and reports any problems to the RSTL:
 - a) That they are logged into the correct site server. The pc2admin window title should be "PC^2 Administrator - root (*Site*)" where 'Site' is the number of their site.
 - b) Under the sites tab, all sites are listed and marked active.

The current version of PC^2 seems to hate showing the site names and instead shows the numbers. For reference here is the site list:

Site 1 - Radford
Site 2 - Duke
Site 3 - CNU
Site 4 - Washcoll
Site 5 - Wilkes
Site 6 - JHU
Site 7 - Shippensburg
Site 8 - GeorgeWashington
Site 9 - Howard
Site 10 - UNC

- 4) Each site admin will then set the password to the 'administrator1' account using pc2admin to a password of their choice.
- 5) Each site admin will set the notification options for their site using pc2admin (creating a scoreboard account as needed).
- 6) Check/Create PC^2 accounts.
 - The team accounts should already have been created the RSTL and the display names set. Check that this is ok and matches the team numbers you have or will issue to the teams.
 - The passwords for the teams will not have been set. You can set them to match the passwords used by the teams to login to their workstations or other passwords.
 - Create scoreboard accounts as needed.
 - Other than Radford site, create no judge accounts.

Radford site admin only:

- Create judge accounts as directed by the Head Judge. Either set their passwords or have the judges do it as directed by the Head Judge.
- Input language specs:
 - Language: Java

```
Java
javac {:mainfile}
{:basename}.class
java -cp . {:basename}
```

```
Language: GNU C++
GNU C++
g++ -o {:basename} {:mainfile}
{:basename}
./{:basename}
```

```
Language: GNU C
GNU C (gcc)
gcc -o {:basename} {:mainfile}
{:basename}
./{:basename}
```

- Input practice problem(s).
- Setup scoreboard (see Bruce Deel)

Practice Session:

7) When appropriate (see schedule), have the teams login at their stations. Start the contest time for your site only using the 'Start Contest Time' button under the 'Time/Reset' tab. Things to check:

- a) Use the "Team Status" tab in pc2admin (under 'Run Contest') to make sure every team logs in and submits.

8) When practice is over, press the 'Stop Contest Time' button.

Post-Practice Session:

THIS OPTION DOES NOT SEEM TO EXIST ANY LONGER. THIS STEP MAY BE REPLACED WITH SOMETHING HORRIBLE. BE PREPARED TO FIGHT DRAGONS.

9) In pc2admin, under the 'Time/Reset' tab, press 'Reset Site' button. Leave 'Remove Problem Definitions' and 'Remove Language Definitions' **unchecked**.

Radford site only: check 'Remove Problem Definitions' (only after all sites have finished practice)

10) Make sure contest time is set to 5:00:00 (5 hours).

11) Clear any files created by the teams during the practice session. This should include their home directory, and any system-wide writable directories (like /tmp).

12) Radford site only: add contest problem as directed by the Head Judge.

Contest:

13) When ready to start press the 'Start' button for your site only when directed to do so by the site director. Click 'Edit' and Check the 'Stop Clock at end of contest' box.

Note: each site director and site admin should define their own procedure that works with their lab space and environment to ensure that the contest start is fair. Goals for said procedure:

- Each team should not be able to read the problem statement until the second the PC² clock starts.
- Each site PC² clock is independent and run times are based on the local site clock, so it is ok if sites start at slightly different times. However, if a site starts more than a few minutes late it has an advantage in that teams there can look at the scoreboard and see what problems are being solved.
- When the clock starts, the teams should already be logged into the computer and into PC².
- Before the clock starts, the teams should have no time on the computer to configure the environment or write library code.

Suggested procedure for this:

- a) After files from the practice round were cleared (see step 11), runners or contest staff should login to each machine as the team, and login to PC² for them. The pc2team window should be left open and visible on the screen.
- b) The problem sets should be distributed to the tables face down.
- c) The teams should sit down at their stations and be instructed to only touch the computer or the problem sets when the PC² client switches from displaying in red "STOPPED – CONTEST IS NOT RUNNING" to the contest time in black (example: "4 hours 59min")
- d) Once they are seated and ready, the Start Contest Time button should be pressed once the RCD sends the start signal.

14) When the contest time has elapsed, PC² will automatically stop accepting submissions. Teams should be allowed to work until the PC² client shows that the time is up. PC² is the only time piece that matters. There is no need to rush the teams out of the labs or make them stop using the computer after the time is up. Some teams may wish to take a few minutes to check the scoreboard, wait for judge responses that might come in or print programs that they were working on. They should be allowed to do so, within reason.

Post contest:

15) When judging the validation are complete, the RSTL will stop the pc2servers and archive the pc2 site server data.

Things to never do (unless explicitly directed otherwise):

- Never hit **start all** or **stop all**. Individual sites should only be started or stopped on the orders of the site director.
- Never edit a run (problem submission) unless directed to do so by the head judge.
- The local judge should not log into PC². The only judges logged into PC² should be at the Radford site.