

PCAnywhere Installation and Usage Notes

PCAnywhere Installation and Usage Notes (based on PC Anywhere 11.0)

December 20th, 2005

I. Program Installation:

- 1) The program auto installs so just follow the prompts!
- 2) Note: The term “host” refers to the diffractometer computer (e.g., at YSU) and “remote” refers to the computer at the remote site at another institution (e.g., Muskingum College).

II. Setting up PCAnywhere on a remote computer to connect to the YSU Host site

- 1) Open PCAnywhere.
- 2) Click on the “Remotes” icon on the toolbar along the top of the program window.
- 3) Click on the “Add Remote” icon that appeared.
- 4) In the window that pops up first (“Connection Info”) specify the connection type as TCP/IP (this should be the default setting).
- 5) Click on the “Settings” tab then type in the IP address for the diffractometer PC at the host site (e.g., YSU, login and password will be provided as needed). Under the “Login information” section click on the box that says “Automatically login to host upon connection” then type in your Login name and Password. These will be set up at the host site ahead of time (e.g., at YSU by Matthias Zeller or Ray Hoff). The domain field will remain blank.
- 6) No adjustments need to be made in the “Automated Tasks” window.
- 7) Click on the “Security Options” tab and adjust the encryption level to whatever level is being run at the host site. Ask the host administrator (e.g., at YSU this is Zeller or Hoff) for this information.
- 8) Using the window brought up by the “Protect Item” tab you can set a local password for the Remote icon you are creating. The password would then have to be entered before the icon on your computer could be used.
- 9) Click “OK” at the bottom of the window. A new remote icon will appear. This can then be renamed as you prefer.

PCAnywhere Installation and Usage Notes

III. Connecting a remote computer to the host computer:

1) To connect to the host computer (the diffractometer PC at YSU) simply click on the newly created remote icon. As long as the host computer has been activated connection will take place in a couple of seconds. If the connection attempt has been refused the host function has not been launched on the diffractometer computer or somebody else is already logged in. Contact the host site operator to fix this problem.

2) Once the connection has been made the host computer's desktop will appear in a window on the remote computer. At this point the remote and host computer have joint control of the host computer's desktop. If you cannot see the whole desktop of the diffractometer PC in the PCAnywhere window on your PC click on the "Screen Scaling" button in the remote control menu (You also can change your computer monitor's resolution to achieve the same, a monitor resolution of 1280 x 1024 should work well.)

IV. Remote Control of the APEX CCD Diffractometer:

1) Now that you have control over the desktop of the host computer you have full access to all of the single crystal diffractometer control and X-Ray structure solution and refinement software. Your other rights on the host computer will depend on the privileges of your account on the host computer, set by the local administrator (Zeller or Hoff at YSU).¹ For detailed procedural information on the use of the diffractometer and the software refer to the [User Guide](#) prepared by Matthias Zeller and Allen Hunter. [Note: This guide is now slightly outdated, please send comments to M. Zeller at mzeller@cc.ysu.edu.]

V. Features of PCAnywhere (refer to Figures 1 & 2):

Note: The following section may be slightly different for different editions of PCAnywhere.

1) All of the features of PCAnywhere that can be used while a remote computer is connected to a host computer are controlled by a series of icons along the top left corner (or the left margin) of the PCAnywhere window that opens when the connection takes place. These are labeled A–K in Figure 1 and explained below.

A: The left icon labeled "A" expands the PCAnywhere window to fill the screen of the remote PC's monitor. The right icon returns the PCAnywhere window to its original size.

¹ The possible settings are: A) Superuser (caller has full access rights to host machine) or B) Specified Access rights (yes or no for a) allow caller to blank screen, b) allow caller to cancel host, c) allow caller to restart host, d) allow caller to upload files, e) allow caller to download files, d) allow use of CTRL BRK, e) limit time allowed per session, f) caller subject to inactivity timeout

PCAnywhere Installation and Usage Notes

- B: This is the “View/Modify Online Options” icon. This can be used to modify various aspects of the remote control process. For example, the host computers keyboard can be locked here. This icon is not normally needed.
- C. This is the “File Transfer” icon. Clicking on it will open a window that shows the folder/file structure of the remote computer on the left hand side and the folder/file structure of the host computer on the right hand side. This feature can be used to transfer diffraction data and files from the host site to the remote site so that the actual data processing and structural solution can take place at the remote site. Files and folders are transferred by clicking on them followed by arrow icons that specify the direction of the transfer (host to remote or remote to host). Transferring a full data set can easily take an hour or more and is most efficiently done during less busy network times.
- D. This is the “Transfer Clipboard to or from Host” icon. This enables “cutting and pasting” to take place between the remote site and the host site.
- E. This is the “Chat with Host Operator” icon. This icon opens a separate chat window to enable communication between the computer operators at the remote site and host site. There is a box on the bottom of this window where messages can be typed then submitted by clicking the “enter” key. Chat dialogue is then displayed in the top of the chat window.
- F. This the “Start/Stop Session Recording” icon.

PCAnywhere Installation and Usage Notes

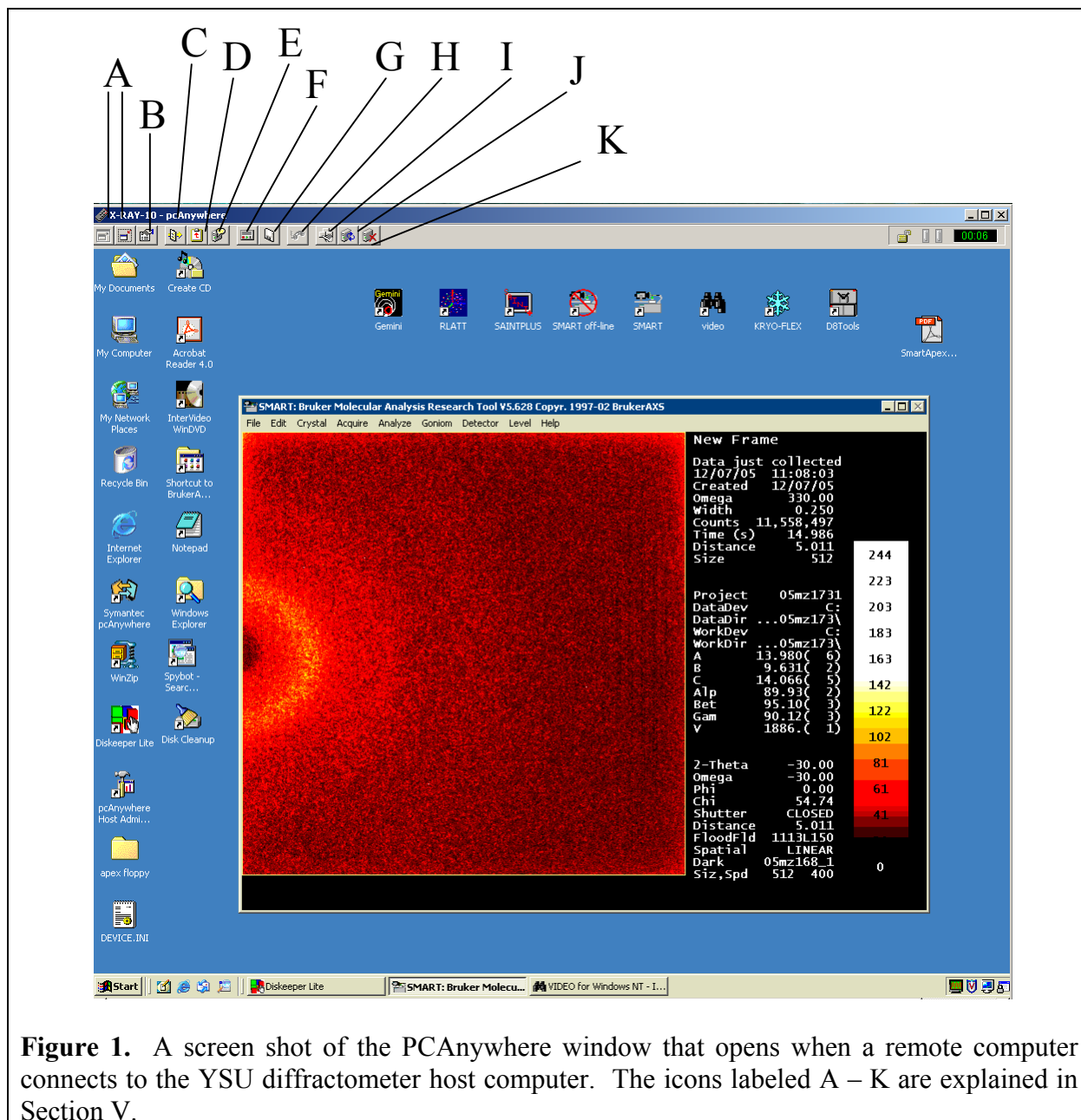


Figure 1. A screen shot of the PCAnywhere window that opens when a remote computer connects to the YSU diffractometer host computer. The icons labeled A – K are explained in Section V.

PCAnywhere Installation and Usage Notes

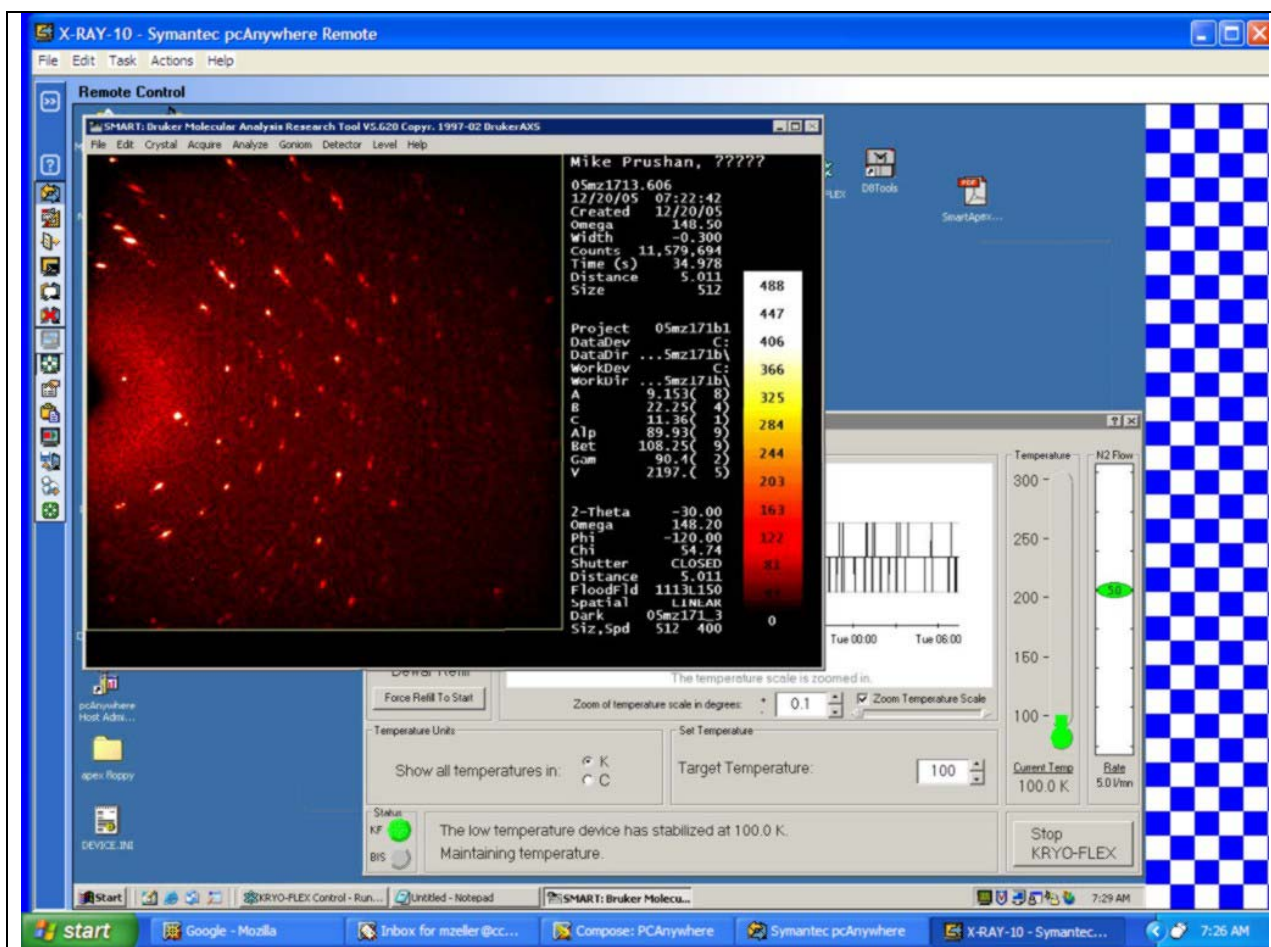


Figure 2. A second screen shot of the PCAnywhere window with the diffractometer collecting data and the low-temperature system in use.

- G. This is the “Save the Current Screen” icon. Once selected this will write a picture file (with a .SCN extension) that contains everything within the PCAnywhere window. This is a convenient method for preserving rotational frames or diffraction patterns.
- H. This is the “Switch to Voice” icon. This requires a special setup and has not been used during remote diffractometer control.
- I. This is the “Send Control-Alt-Delete” to host icon. This can be used to close a frozen program at the host site from the remote site.
- J. This is the “Restart Host Computer” icon.
- K. This is the “End Remote Control Session” icon. Selecting this terminates the connection between the remote and host computers.

PCAnywhere Installation and Usage Notes

VI. Terminating the connection between the remote computer and the host computer:

1) Click on the “End remote control session” icon (see Part V. J. above) that is located along the top toolbar of the PC Anywhere window to end the remote control session once work and file transfers have been completed.

VII. Further Questions:

1) If you have any further questions, please contact the author of these notes: Dr. Paul Szalay, Department of Chemistry, Muskingum College, New Concord, Ohio, 740-826-8231, pszalay@muskingum.edu.