Internet Access and Computing at the INT

Checking email without a local account

If all you need is a telnet or secure shell terminal to an outside computer, you can use any available PC without having a local account. Log in using the password given to you at check-in.

You may then start a terminal session with the buttons on the upper left hand side of the screen. If you receive an error message when trying to start a telnet session, try an SSH session instead. SSH is generally more secure than telnet, and is preferred by many institutions.

Connecting your own laptop

You are welcome to use your own laptop and connect to the University network. It is not protected by a firewall, so you must be certain that your computer has the necessary security patches (Windows users, please note!).

♦ There is a T-1 line in each office for connecting to laptops. If you do not find it, ask the staff. Please do not unplug any lines going into the desktops; they are being used in our Condor network.

♦ The connection protocol is DHCP. If, after plugging the computer in, it does not find the network, you may need to reconfigure your laptop. Help for this is available through our Computer Support Group (see below).

♦ You may also configure your computer to print directly to the INT printers. Again, help is available online and through our Computer Support Group. See:

http://librarian.phys.washington.edu/pacs/index.php/INT_Printing

It is not possible to offer E-mail or other help for laptop users. If you need additional services, please use an account on the INT visitor computers.

INT visitor accounts

When you check in at the INT front desk, the INT staff will give you a username and password for an INT visitor account. The visitor account is a temporary account, for your use while you are visiting the INT.

Important: Because the account is temporary, it will be terminated when you leave the INT. If you have files stored on the INT computer, be sure to move them before or promptly after you leave. **Please remember to formally log off before you leave the INT or the next visitor will not be able to log on.**

Getting help

INT computing is supported by the Computer Support Group of the Physics Department.

The CSG Help Desk is staffed 8am-5pm, Monday-Friday. They do ask for your patience as the group serves the Physics and Astronomy departments as well as the INT.

Help Desk contact information

Email: help@phys.washington.edu

If you are unable to Send an email, you may ask an available INT staff person to send one for you.

When reporting a problem, please provide the following information.
- Identify yourself as an INT visitor, give your name, office number, user account, and the name of your machine.
- Give a description of the problem.
- Provide a time when you expect to be in the office.

Note: For paper jams in the printer, please ask an INT staff member in Room C411 for assistance.

Using local e-mail
- Mail Addressing and Delivery:
- Your local physics email account address will be the user account given to you at check-in.
- Reading & Sending Mail -- Mail on Mail Server:
  Any mail-reading program that supports secure (encrypted) IMAP should work with the IMAP server on mail.phys, but we recommend the use of Mozilla.
- If you are interested in configuring Pine (on a workstation or PC) or Netscape/Mozilla/Thunderbird to access the mailserver, please refer to the following link:

  http://www.phys.washington.edu/pacs/info/mail.html

Printing
- Default printer: The INT default printer, "Morris," is located in the copy room, Room C427. To print a document, type after the shell prompt: lpr filename.
- ASCII and Postscript: If the file is an ASCII text file, it will be printed as such. If the file is a Postscript file starting with the characters #% it will be interpreted as Postscript. In other cases, e.g. a Windows-generated file that starts with some other characters, it will print reams of garbage—so please monitor your Postscript printing jobs to make sure they get started all right. To get two pages on a sheet and correct formatting for main pages, print the ASCII document using the command **enscript filename**.
- Transparencies and color printing: Transparencies may be printed on the printer named "color," the Phaser 6360, in Room C427. Please ask the INT staff for the correct Xerox transparencies. If anything else is used, the machine could be destroyed. Load the transparencies into the tray with rough side down (otherwise the ink is not absorbed). You can also print in color on paper, using the printer marked "paper." The Linux command to print a file on either of the color printers is:

- **lpr -Ptransparency   for the transparency printer**
  lpr -Pcolor   to print a color printout on paper

♦ Printing from a laptop: Please go to website below:

http://librarian.phys.washington.edu/pacs/index.php/INT_Printing

Note: For paper jams in printers, please ask an INT staff member in Room C411 for assistance.

Using text editors
The Red Hat Linux operating system comes with a number of text editors including pico, xemacx and joe.

♦ Pico: Pico looks a lot like the Pine email program. Type pico filename at a command line to use Pico. You will find the commands for Pico at the bottom of the window.
♦ Xemacs: Xemacs is a mouse-controlled text editor. To invoke Xemacs, type at a command prompt: Xemacs filename

Doc, xls, ppt, etc.
The suite of office software emulating the Microsoft products is OpenOffice, accessed with the commands ooffice, ooimpress, or by clicking on the file icon. Icons appear for all files in the directory ~/Desktop/.

Using Tex and Latex
Latex is the recommended typesetting system for scientific text. It uses the program Tex. It is invoked by the commands:

    tex filename[.tex]
    latex filename[.tex]

Here, filename.tex is a text file you have created with a text editor. The .tex qualifier may be left out. If you use labels in your referencing, you will need to run (la)tex twice. The output of either Tex or Latex is a file named filename.dvi. The typeset document may be viewed with the command:

    xdvi filename[.dvi]

To print the .dvi file generated by Tex or Latex, first convert it to postscript by typing at the shell prompt: dvips filename[.dvi] Then, print the .ps file that was generated:

    lpr filename.ps

    INT also has installed pdflatex. This application converts directly to a PDF file format.

    pdflatex filename[.tex]

If you only want to print, for example, pages 15 to 23 of the document, use the following options in dvips:

    dvips -p 15 -l 23 filename.ps

A sample document including tables and figures is on the INT web page.

Reading .pdf and .doc files
To view a file in the .pdf format (Adobe Portable Document File format):

    acroread filename.pdf

To view a file in .doc format (Microsoft Word) from a Linux PC. Type at the shell prompt:
ooffice.

Then click on the "new text document" icon and click your way to the file you want to open.

Creating graphics
♦ Gnuplot: Gnuplot makes nice figures. To process a gnuplot script filename, type at the
   shell prompt: gnuplot filename
♦ Xfig: To produce graphics that may include additional features and components besides
   usual xy plots, try xfig. With this program you can create images composed of elements
   like lines, circles, text, other eps figures, etc. Internally the figures are represented not
   as bitmaps but as collections of objects that can be changed later, and are stored in files
   with the extension .fig . To open the program with the stored graphic filename.fig, type at
   the shell prompt:
      xfig filename.fig

To get a printable form of the graphic, create a Postscript file from within the xfig program.
The click sequence from the taskbar is file > export > Encapsulated Postscript.

Using Mathematica
For computer-assisted algebra, Mathematica is available on INT computers.

♦ Mathematica: Mathematica is invoked in an xterm window by typing at the command
   prompt: math. To use the Mathematica graphical interface, click the icon on the desktop
   screen or type mathematica at the shell prompt.

Scientific computing
The INT computers allow programming in C and C++ as well as Fortran.

    For the gnu fortran compiler, type: f77 filename.f

    For the Intel fortran compiler, type ifort filename.f

The INT has additional computing resources for needs that go beyond what the Linux PC
provides. If you are in need of additional resources, please contact George Bertsch.

If you really need Windows...
There is a Windows PC in Room C427 which has programs such as PowerPoint that are not
available on Linux. The Print button of most programs will launch a menu that allows you to
choose Morris or conversion to PDF (for printing from a Linux machine).