Why have computer labs when students have their own computers? Rob Dickert, manager of the Computer Integrated Classroom Support (CIC-S) unit, can testify to the increasing importance of computing as an integral part of teaching and learning.

Computer Integrated Classrooms (CICs) are used for one or more of:

- “Hands-on” learning. From a single class session to an entire semester, faculty and students work together in the CIC space. They may be studying computing-based topics like programming, or using the computers to facilitate other topics, using collaborative writing, virtual demonstrations, or other computing-based features.
- Using high-end software. Pricing or licensing restrictions makes some software inappropriate for student-owned machines that can be accessed in the CICs.
- Online testing. A controlled environment addresses needs for asynchronous testing, presentation of virtual examples, and promoting integrity in exam-taking.
- Consistency and reliability. The CIC-S team ensures the dependability of the CIC environment, saving faculty and student time.

From the three minimal computer labs of fifteen years ago, Virginia Tech’s computer-intensive learning environment now has many facilities, including the 18 CICs managed by this team. With over 1000 machines in all, these are:

<table>
<thead>
<tr>
<th>Ambler-Johnston 4102</th>
<th>Donaldson Brown Graduate Center (opening Fall 2005)</th>
<th>Randolph 114E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arch Annex 1</td>
<td>Henderson 23A</td>
<td>Saunders 101</td>
</tr>
<tr>
<td>Art &amp; Design Learning Center 112</td>
<td>Major Williams 502</td>
<td>Shanks 160, 180, and 360</td>
</tr>
<tr>
<td>Chem/Phys 305</td>
<td>Math Emporium</td>
<td>Torgersen 1010, 1080, and 3250</td>
</tr>
<tr>
<td>Derring 2069</td>
<td>Price 301A</td>
<td>Ware lab/Military 102</td>
</tr>
</tbody>
</table>

The CIC Support Team maintains software and hardware, including installations. The Math Emporium is a Mac environment; most others run Windows. The CIC-S uses Symantec’s Ghost to create a single image for each lab. Deep Freeze so users have administrative permissions, and Restore to return each machine to its prior state on restart. Similar procedures are followed in the Mac labs with Carbon Copy Cloner, DriveShield, NetRestore, and NetBoot.

Special CICs include the Math Emporium. In collaboration with the Math Department, Bryan Shake and Mary Compton manage work in the Math Emporium, overseeing about 40 part-time, mostly student, workers. The Computer Aided Design (CAD) lab in Engineering is another unique setting, with roaming profiles and home directory space available. The CAD setting, like most CICs, is available to all Virginia Tech affiliates. CIC-S also manages the classrooms in the AISB and Southgate.

For a number of years, CIC printing was managed by an outside vendor. Recently, the CIC Support team has taken over the management and maintenance of the student printing operation in the CICs because vendor fees were too high.

Rob Grant oversees the TechConnect program and the Torgersen bridge. Other members of the CIC Support team are Brian Myers, Louie Price, Barry Browning, and Marcus Sparks.
High Performance Computing Seminar

Donaldson Brown Hotel and Conference Center is the site on May 25 and 26 for the High Performance Computing Conference. Leading manufacturers and independent hardware vendors will highlight their views of the future of high performance computing. Keynote speakers include Eng Lim Goh, Senior Vice President and Chief Technology Officer, SGI, Steve Modica, Principal Engineer, SGI, Reconfigurable Application Specific Computing (RASC) with FPGAs (Field Programmable GATG Arrays), David Barkai, HPC Computational Architect, Intel, Alex Grossman, Director of Hardware Storage, Apple, Calvin Ribbens, Professor of Computational Science, Virginia Tech. http://www.jrti.com/htdocs-new/events/vt_hpcconf_agenda.html

In the news. . .

Daisy, an open source tool contributed by the Microsoft Implementation Group (MIG) was noted in the February 23 Business column of the Columbia, South Carolina State newspaper. The article by Charlie Paschal, “Don’t forget Windows updates,” points to Daisy’s functions. It identifies the operating system and service pack level, determines which hot fixes should be applied, downloads the hot fixes, and installs them. The article gives detailed instructions, reflecting the author’s appreciation of the merit of the tool. See http://opensource.w2k.vt.edu.

PID Policy

Virginia Tech has a new PID Policy. It codifies uses of PIDs since their inception as e-mail addresses. The new policy reflects the wider use of PID and password for more online services. Goals of the policy are to:

Enhance security,
Clarify oversight responsibilities, and
Document changes.

For several years, the “decoupling” project has sought to provide online credentials without presuming access to services.

The policy establishes PIDs as truly personal identifiers, or individual online logon credentials. PIDs can be extended to more roles. Former students, including alumni, may retain (or create) a PID to use online services like requesting transcripts. PIDs have been provided to affiliates of the Virginia College of Osteopathic Medicine (VCOM). Work is underway to permit “sponsored individuals”—consultants, visitors, other short-term affiliates—to have a “regular” PID, increasing individual accountability.

With the current stage of decoupling, individuals eligible for university e-mail service will continue to have a mailbox with the name PID@vt.edu. But PID@vt.edu may not be a valid mailbox if the person is not eligible for e-mail service. For example, VCOM students do not receive e-mail service through Virginia Tech.

Changes to PIDs will not normally be made. In the past, it was important to have the PID be the “public face” of the individual. Instead, e-mail users are now encouraged to set a “preferred alias” that can be changed when their circumstances change—marital changes that are accompanied by a name change, a change in job or status, or even as a tool to manage spam. Preferred aliases are published as the e-mail addresses by PeopleSearch.

As of this writing, the PID policy is in the process of being assigned a university policy number. Look for it to appear in the “General” policies at http://www.policies.vt.edu/