THE 2013 **IT REFERENCE** GUIDE

VirginiaTech
Invent the Future®

Essentials

Whether you're new to Virginia Tech or just reviewing your computing and communications needs, you'll benefit from an awareness of the essential services and tasks described within this guide.

If you're new to Virginia Tech, see "Transitioning" on www.computing.vt.edu.

Understand your responsibilities for acceptable use (www.policies.vt.edu/acceptableuse.php).

> Acceptable use of information technology is ethical, reflects academic honesty, and shows restraint in the consumption of shared resources. It demonstrates respect for intellectual property, ownership of data, system security mechanisms, and individuals' rights to privacy and to freedom from intimidation and harassment.

Your PID is your key to many university online services. See www.my.vt.edu. Set your account recovery options, in case you forget the password.

Your PID's string of letters and characters is also the form of several other online access IDs. For security purposes, these IDs must have different passwords:

- Wireless network access
- Hokies IDs for access to Exchange and Windows-related services
- Banner access if required for your job

Be sure your computer has appropriate security settings. See www.security.vt.edu. If you use Windows, consider VT WSUS to automatically install locally-tested updates (search for "VT WSUS" on www.computing.vt.edu).

Access your VT Google Apps email at http://start.google.vt.edu. Employees can choose to create an Exchange account instead. Visit AD Admin (http://adadmin.w2k.vt.edu) to sign up for Exchange.

Set your preferences for VT Alerts (www.alerts.vt.edu), a system of automatic phone, text, and email alerts that is activated in the event of emergencies or during adverse weather events.

Verify your emergency contacts (from www.my.vt.edu, select the "Personal Info" tab).

For computing and communications information, see www.computing.vt.edu.

For customer service assistance with university computing or data resources, submit your issue to www.4help.vt.edu or call 540-231-4357.

What's new

CONNECTtoVT-Wireless (https://computing.vt.edu/content/xpressconnect) simplifies initial connections of devices to the university's wireless network. Once established, subsequent connections to the university's VT-Wireless network will be automatic. The credentials used to log in to the network will be your network ID (same as your PID) and a unique network password. Set up your network password on www.my.vt.edu, the My VT portal.

BlueRidge is Virginia Tech's latest and largest computing asset. This Cray CS300-AC cluster was ranked in the Top500 list, the industry-standard ranking of the world's 500 fastest supercomputers. Its measured 86.3 teraflops—86.3 trillion floating point operations per second—is more than eight times the computing power provided by System X, which put Virginia Tech on the supercomputing map in 2003.

A new organization, **Technology-enhanced Learning & Online Strategies (TLOS)**, formed from Learning Technologies and parts of the Institute for Distance and Distributed Learning, is now your first stop for exploring technology-enhanced active learning, strategies for increasing student engagement, and for planning and developing distance learning, online content, and hybrid courses. For more information, see www.tlos.vt.edu or call 540-231-2309.

In conjunction with its move from Network Infrastructure and Services to the new TLOS organization, **Digital Media Services** (formerly Video/Broadcast Services) will increase its emphasis on streaming digital media to the desktop and archiving services and, coming in the spring of 2014, deploying a small number of networked classrooms.

A **new research tab in the My VT** portal (www.my.vt.edu) gives faculty members one place to look for items they need to be aware of on their proposals or awards, such as Project Authorization Notices, 60-day notices, Responsible Conduct of Research and Conflict of Interest training, compliance protocol reviews, and expirations. The tab also has links to research administration tools, such as funding opportunities, limited submissions, and compliance tools.

A key **upgrade to campus network connections** from the Blacksburg campus to the Internet occurred in early August. The upgrade prepared for greater redundancy which, in turn, protects against accidental outages; established the foundation for increased network capacity and speed; and installed new equipment that is easier to upgrade without powering down, reducing the need for future interruptions in service.

What's new

The **TimeClock Plus** system enables the electronic entry, routing, and approval of wage employee timekeeping. The system, first piloted in fall 2012, is centrally managed by the Payroll Office. The goal is to improve timekeeping and leave reporting processes at the university.

A new template for **information technology risk assessment** is available to departments through the Converged Technology for Security, Safety, and Resilience site at www.it.vt.edu/ctssr/risk_assessment/.

Distributed scanning for exams and surveys replaces centralized service. Scanners have been placed in several locations on campus to provide instructors with more control over test processing. The benefits include scanning at any time, saving answer keys electronically, convenient locations, permitting multiple answers and point values, and the ability to rescore on your own computer. See www.tds.vt.edu/pages/datalink.html.

The **Geospatial Archive Resource and Data Exchange Network (GARDEN)**—a joint initiative between the Virginia Geographic Information Network and leading Virginia universities provides a locally hosted, faster-performing set of map layers. See http://garden.gis.vt.edu.

Security and IDs

Key resources

- www.security.vt.edu
- www.antivirus.vt.edu
- VT Windows Software Update Service—Check A-Z index for VT WSUS on www.computing.vt.edu.

Key actions

- Install security updates to your systems and applications.
- Secure your passwords.
- Don't share your passwords; don't leave them exposed for someone to see.
- Use different passwords for non-university systems.
- Change your passwords at least yearly, and anytime you suspect an exposure.
- Beware scams and phishing—Virginia Tech will never request your password by email.
- Run Identity Finder (www.security.vt.edu) on your university-owned computers.

Data protection

Personally identifying information (PII)—Social Security numbers, credit/debit card numbers, bank account numbers, passport numbers, and driver's license numbers—is attractive to identity thieves. Remember the data on smart mobile devices. The IT Security Office offers additional tools to manage sensitive information securely.

Other sensitive data—research data and intellectual property, medical records, student records, detailed personnel records, and many other types—can also be attractive to thieves and must be carefully protected.

If you suspect an unauthorized exposure of personal information, report it immediately by calling 540-231-HELP (540-231-4357).

Consider

RLAN—a restricted limited access network—is designed for personnel in offices that must deal with quantities of PII (see above). If you think your office qualifies, contact the IT Security Office.

BYOD is more than just another computing acronym; rather, "bring your own device" recognizes that business information is often stored on personally owned devices. Be sure to check these for sensitive information, including PII.

eCommunications and network access

Key resources

- In the eCommunications section of www.computing.vt.edu
    - VT Google Apps Mail
    - Exchange
    - Instant messaging
    - TelePresence
    - Unified Communications

- In the network access section of www.computing.vt.edu
    - Wireless campus network
    - The university's wired network—or go to www.cns.vt.edu

- For voice and unified communications
    - www.cns.vt.edu for legacy system support and information
    - www.nis.vt.edu/uc for Unified Communications support and information

Key actions

- Establish your VT Google Apps password at https://my.vt.edu/accounts/myaccounts.
- Follow Unified Communications at www.nis.vt.edu/uc.

Unified Communications is Virginia Tech's multi-year program to connect the university community through new and emerging communications technologies. Unified Communications enables the integration of real-time communications services, including telephony, instant messaging, chat, and desktop video conferencing with asynchronous communications, such as email, voicemail, and fax.

You can follow the progress of the program on the Unified Communications (UC) website, www.nis.vt.edu/uc. Employees who have transitioned to UC can find support documentation there. If you are still on the legacy telephone system, find support at www.cns.vt.edu.

eCommunications and network access

Consider

- **Records retention and email**
  Information Technology at Virginia Tech arranges for email services to the university community, largely through contracts with external vendors (e.g., Google). These contracts put the burden of ensuring that the system works on the provider, and the newer contracts offer far more generous space to keep email and other information. But the provider does not replace our individual responsibility for management and retention of email. Individual employees using any university email system—on-site, outsourced, or departmental—are responsible for

  (a) identifying emails that you wrote that may constitute an official "university record"—a documentation of official university transactions;
  (b) retaining those official records for the appropriate length of time *(for example, three years for departmental correspondence);* and
  (c) destroying those records after the appropriate retention period, following the procedures established by Records Management Services. To obtain a Certificate of Records Destruction, see www.rms.vt.edu.

  Records Management Services can assist with information on how to define a university record, and what the retention periods are. Contact RMS at 540-231-0224 or recmgmt@vt.edu.

- **Email and appropriate locations for university data**
  VT Google Apps accounts are available to the university community through a negotiated contract that provides acceptable for storage of university files and information on VT Google Apps Mail, Calendar, Drives/Docs, Sites, Contacts, and Talk. Other Google services can be used, but fall under the Google terms of service and do not provide this protection for university information. Note that Google is not an acceptable location for information subject to export control and related regulations.

Instructional support

Key resources

- Scholar—https://scholar.vt.edu
- Networked Learning Institute (replacing FDI)—www.nli.tlos.vt.edu
- Graduate Education Development Institute—www.gedi.vt.edu
- Digital Media Services—www.dms.tlos.vt.edu
- Digital Imaging—www.emd.vt.edu
- Distance, online, and hybrid learning—see Technology-enhanced Learning & Online Strategies—www.tlos.vt.edu, or 540-231-2309

Key actions

- Visit InnovationSpace—1140 Torgersen Hall and www.is.vt.edu.
- Learn through online tutorials at http://lynda.vt.edu.
- Learn more about assistive technologies—visit www.assist.vt.edu or call 540-231-3461.

Technology-enhanced Learning & Online Strategies is a new organization to support technology-enhanced teaching and learning in many environments, from real to virtual. TLOS emerges from the former Learning Technologies and the Institute for Distance and Distributed Learning. During the transition and start-up period over the fall semester, all services and support provided by both former organizations will continue, and new offerings will surface. Marketing, admissions, registration, and related functions for distance learning students are now part of the Office of Enrollment and Degree Management.

Students' email addresses

Students' email addresses are withheld from VT PeopleSearch unless an individual student has elected to permit display there. To find student email addresses for university business purposes, consult the Knowledge Base, http://answers.vt.edu/kb/entry/3702/.

Research computing and research tools

Key resources

- High performance computing and visualization—www.arc.vt.edu
- Geographic information service and resources—www.gis.vt.edu
- Discovery Commons repository—https://dcr.emd.vt.edu
- Individual grant information—www.my.vt.edu "Research" tab

Key actions

- Look for research topics at Networked Learning workshops—www.nli.tlos.vt.edu.
- Contact Network Infrastructure and Services if you need specialized research network resources (NIS.PR@vt.edu).
- Explore the TelePresence videoconferencing opportunities—check the A-Z index on www.computing.vt.edu.

High-performance computing options

With a total of 5,088 cores and 20 TB of memory, **BlueRidge** is ARC's largest research computing system to date. It has joined HokieSpeed, a 200-node GPU system, and HokieOne, a 500-core shared memory machine. This suite of high-performance computers is available to university researchers, along with Athena, a 1,300-core system with GPUs and a large RAM memory footprint, and Ithaca, an IBM iDataPlex system supporting commercial software packages such as MATLAB.

Software and hardware

Key resources

- Information Technology Acquisitions—www.ita.vt.edu

Key actions

- Participate in the Networked Learning Institute—www.nli.tlos.vt.edu, or the ACC distribution program for hardware refreshes. See www.computing.vt.edu, "Software and Hardware."

- Learn more about assistive technologies—visit www.assist.vt.edu, or call 540-231-3461.

Ensure that software and IT service procurements—even small or no-cost ones—follow university policies and standards, including the IT Procurement standard (www.it.vt.edu/files/Procurement_STANDARD.pdf).

What university information should—and should not—be "in the cloud"? If you are contemplating using a vendor-supplied computing service or other off-site information technology service—even "free" services, ask yourself the questions below:

- Does Virginia Tech have an approved contract with this provider? Legal and policy issues will have been negotiated in the contract process. Contracts specify the required protection of university data, including sensitive information, such as data covered by FERPA, HIPAA, Social Security breach laws, or intellectual property.
- Is the service reliable enough to meet your needs? Reliability includes both "up" times for the service, and the ability to retrieve and remove information when needed.
- What is your responsibility for records management of the data? "University records" document the transaction of university business.

A strong contract is your only source of control for services and systems run by entities outside Virginia Tech.

Consider

- Using VDWS—the Virtual Dedicated Windows Servers service—to reduce hardware and management costs. Search for VDWS on www.computing.vt.edu.

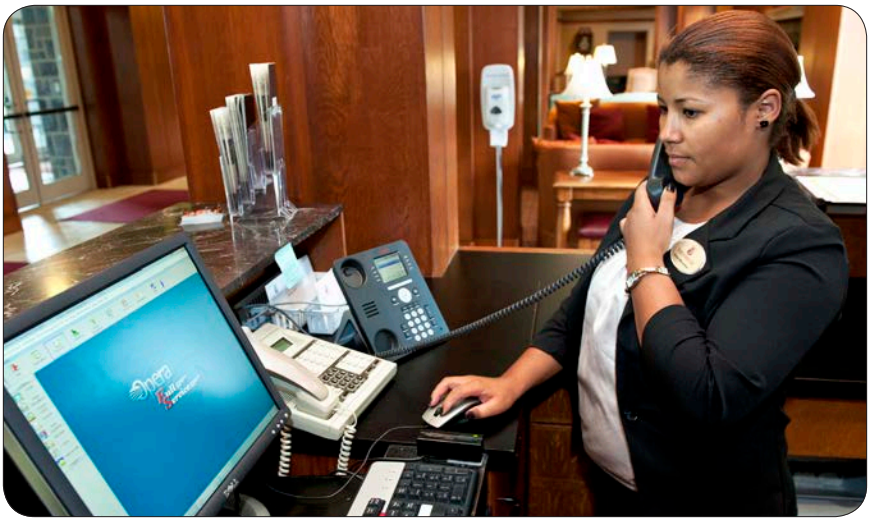
University data—personal info and records; Banner/Warehouse

Key resources

- Standard reports—from www.computing.vt.edu, find "Banner/Warehouse," then "Banner Reporting Tools"
- Custom reports—www.iwa.vt.edu
- Listing of data stewards—"Standard for administrative data management" (www.it.vt.edu/files/AdministrativeDataManagementStandard.pdf)

Key actions

- Request and review Banner access—www.ims.vt.edu/information/bannerauthorization.html.
- Review and manage your own information—My VT (www.my.vt.edu) and VT Alerts (www.alerts.vt.edu).



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