

Welcome

- Computing Environment
 - Network Connection
 - Computing Groups
 - WiFi
 - Linux
-
- Windows and hardware support – relevant to Mac and Linux users

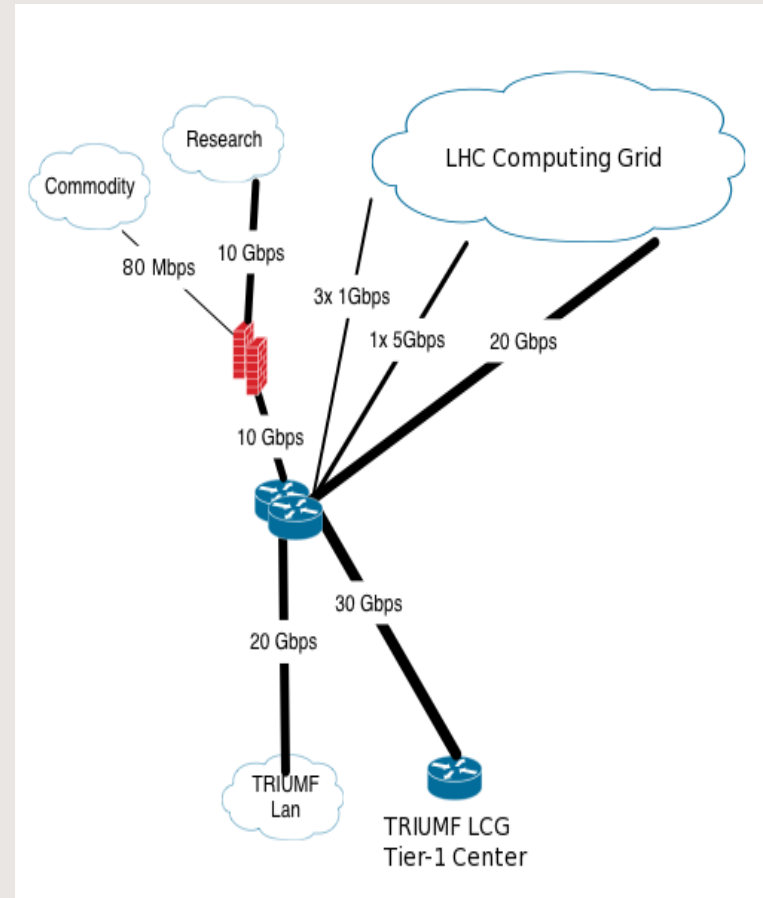
Diverse Computing Environment

Operating systems

- VMS, Solaris, *BSD, Linux (many distros), MacOS-X, MS-Windows, embedded systems
- Software
- Commercial, open-source, in-house, experiment data-analysis, ...
- Specialised HW for controls, data-acquisition, ...
- High-performance clusters, powerful stand-alones, thin-clients, ...

Network Connections

- Commodity internet has limited bandwidth. Use with care.
- Connections to universities, other labs, Compute-Canada facilities (e.g. WestGrid) , ... automatically routed through high-bandwidth research network (CANARIE)
- ATLAS Tier-1 Centre traffic is completely separate



Computing Groups

- **MIS – Management Information Systems**
 - Web-applications and databases: Identity, accounting, HR, purchasing, ...
 - Main web-site
- **DAQ - Data Acquisition**
 - Software and hardware for running experiments
- **ATLAS Tier-1 Centre**
 - Grid computing for storage and analysis of data from ATLAS detector at the LHC
- **CCN – Core Computing and Networking**
 - Network, e-mail, web, printing, vidconf, backup, PC-hardware, VM hosting, application hosting, ...

- In transition between old and new
 - Three SSIDs (WiFi networks) advertised
- TRIUMF Visitor – new hardware
 - No authentication required
 - Open a web-browser and agree to an AUP
 - Same access privileges as external, but can use VPN
- TRIUMF WLAN – old hardware
 - Shared key
 - Internal access
- TRIUMF Secure – new hardware
 - Temporarily using e-mail server for authentication
 - Internal access

- Common in research environments
 - Free of usage restrictions and free of charge
 - Good development tools
- Groups manage their own systems and do self support
- Printing is usually pre-configured and automatic
- PCs combined into an NIS cluster
 - Shared login credentials
 - Shared file-systems => home directory may be on a different PC
- DAQ group provides a Linux-PC backup service (amanda)
 - Ask if your files are backed up
- Commercial scientific-software from site-wide share
 - Mathematica, MATLAB, COMSOL (limited), Ansys

Windows Domain and Desktop Support

Within the CCN Group

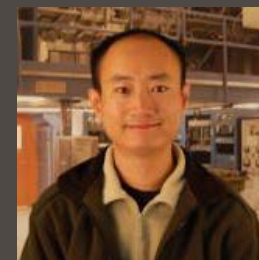
Members: Orlando de la Cruz, Keith Ng, Robert Watt
Located in room 232 in the ISAC II building, 2nd floor

Need Help?

Contact us via the TRIUMF Helpdesk Web site,
<https://helpdesk.triumf.ca>,
queue = TRWIN Domain and PC Support Group



Orlando



Keith



Rob

Session Topics

- Services provided by the Windows Support Group
- Accounts for Windows
- File storage and printing
- Security
- Backups
- Access from Offsite
- TRIUMF computers versus personal systems
- New System Recommendations
- Getting assistance – Helpdesk

Services Provided by the WD&DS Group

- Windows Domain – TRWIN
- File Storage
- Printing
- Hardware recommendations, system setup, diagnostics, repairs, spare parts, recycling
- Windows (Vista to Win 10) and application support
- Backups
- Software license management – license pools, license distribution, accounting for these
- Windows Remote Desktop Server (TRWINRDS) – mostly for Linux or Mac people.
- Remote access to file storage
- Various Windows based servers and services: SEP, WSUS, WebDAV, Solidworks Vault and utilities, Training, Deployment, etc
- Maintain web pages related to these services.

Windows accounts

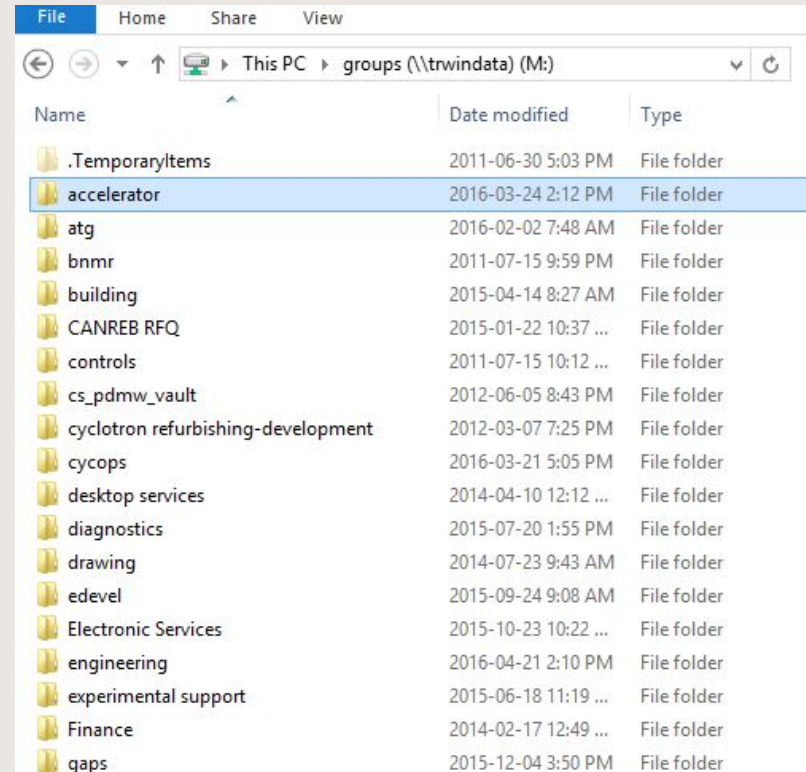
- Numerous accounts at TRIUMF. Not yet consolidated but soon.
- TRIUMF Windows Domain is called TRWIN.
- TRWIN account name = TRIUMF ID name.
- Most Windows systems are joined to the domain. Some exceptions. When logged in with a TRWIN account, you have mapped drives, print server, Windows updates, and better support (RDP).
- Access from non-domain systems? Yes but limited.
- Group memberships provide access control.

File Storage and Printers

- [\\trwindata\groups\....](#) - M: drive, Group folders, restricted access based on group membership, frequent backup
- [\\trwindata\users or \users2](#) - H: drive, Home folders, not shared, backed up
- [\\trwindata\scratch](#) - S: drive, temporary storage, **Important: Everyone with TRWIN account has full access. Content is not backed up.**
- [\\trwindata\apps](#) - N: drive, various common apps available for installation

Note: If large amount of space is required, talk to us.

Cont...



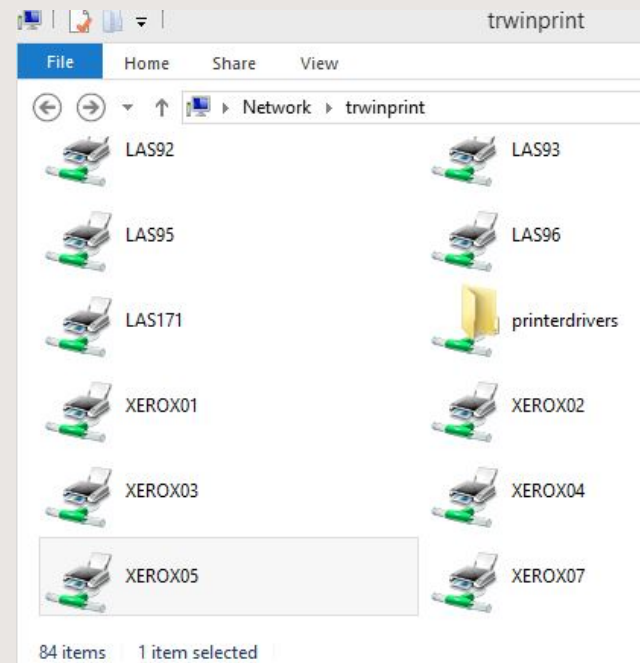
Name	Date modified	Type
.TemporaryItems	2011-06-30 5:03 PM	File folder
accelerator	2016-03-24 2:12 PM	File folder
atg	2016-02-02 7:48 AM	File folder
bnmr	2011-07-15 9:59 PM	File folder
building	2015-04-14 8:27 AM	File folder
CANREB RFQ	2015-01-22 10:37 ...	File folder
controls	2011-07-15 10:12 ...	File folder
cs_pdmw_vault	2012-06-05 8:43 PM	File folder
cyclotron refurbishing-development	2012-03-07 7:25 PM	File folder
cycops	2016-03-21 5:05 PM	File folder
desktop services	2014-04-10 12:12 ...	File folder
diagnostics	2015-07-20 1:55 PM	File folder
drawing	2014-07-23 9:43 AM	File folder
edevel	2015-09-24 9:08 AM	File folder
Electronic Services	2015-10-23 10:22 ...	File folder
engineering	2016-04-21 2:10 PM	File folder
experimental support	2015-06-18 11:19 ...	File folder
Finance	2014-02-17 12:49 ...	File folder
gaps	2015-12-04 3:50 PM	File folder

File Storage and Printers

- Accessing TRWINDATA shares from Mac
 - Use Finder
 - Go, Connect to Server
 - Enter as smb://trwindata
- Accessing TRWINDATA shares from Linux
 - Mount with “mount -t cifs '\\trwindata\groups\it-services' /mnt/trwin-it -o user=xxxx”
 - Or use “smbclient -W TRWIN -U xxxx //trwindata/groups”
 - *xxxx = trwin username*

File Storage and Printers

- TRWINPRINT - for use on Windows systems joined to the TRWIN domain. <\\trwinprint>
 - Install printer by double-clicking on printer name
- WINPRINT - anonymous access print server for non-domain Windows systems. <\\winprint>
 - Install printer by double-clicking on printer name



List of printers at
<http://ccn.triumf.ca/printing/list-printers>

TRIUMF list of network printers

#	name	device	model	location	media	sides
1	CLAS10	clas10.triumf.ca	HP LJ 300-400 color M351-M451 Postscript	Directors Office, MOB	na letter 8.5x11in	two-sided
2	CLAS11	clas11.triumf.ca	HP LJ 300-400 color M351-M451 Postscript	ISAC-II Room 138	na letter 8.5x11in	two-sided
3	CLAS12	clas12.atg.triumf.ca	HP Color LaserJet M553 Postscript	Room 204 Chem Annex	na letter 8.5x11in	two-sided
4	CLAS13	clas13.triumf.ca	Samsung CLX-9252 9352 Series PS	Service Annex, 2nd floor	na letter 8.5x11in	two-sided
5	CLAS14	clas14.triumf.ca	HP LaserJet 500 color M551 Postscript	Safety Trailer	na letter 8.5x11in	two-sided
6	CLAS15	clas15.triumf.ca	HP Color LaserJet cp2025dn pd3, hp cups 3.15.9	Trailer Mm	na letter 8.5x11in	two-sided

- Email – use caution on attachments and links.
- Avoid running with admin privileges.
- TRIUMF account passwords should be strong. Don't share it.
- Be cautious on the Web
- Personal devices – laptops
 - Disable sharing applications – torrents
 - Run AV app – clean before connecting to TRIUMF.
 - Keep Windows up to date as well as Java, Adobe apps.

- TRWIN related storage has backup features running (frequent storage snapshots).
 - The content of Groups, Users, and Users2 are backed up numerous times per day.
- Best option for data protection is to store files in these locations.
- Back up of laptops via ASG Live Navigator.
Mostly for “on the road” people.
- Backup desktops with Bacula service.
- System imaging for servicing provided in lab by WD&DS group – Macrium Reflect

Access from Offsite

- Most access to TRIUMF resources should be done through VPN. Some examples
 - Remote Desktop to Windows systems
 - Secure FTP
 - Connecting to UBC Services Portal
- Limitations
 - File sharing is blocked

TRIUMF computers vs personal systems

- TRIUMF owned PCs
 - Standardized systems that we provide service for.
 - Most are joined to TRWN domain to provide easier access to resources
 - Licensed applications available
 - Connection to VLANs allowed
 - Backup utilities available
- Personal systems
 - No support for hardware, OS, or apps
 - No backups
 - No installation of TRIUMF licensed software
 - Cannot be joined to Windows domain
 - Minimal network access

New System Recommendations

- If you are required to purchase new computing hardware do review our hardware recommendations page at <http://ccn.triumf.ca/pc-hardware/computing-hw-recommendations>.
- We can review your needs and find best fit.
- Desktops, workstations, laptops, tablets and accessories. Some customization is OK.
- Purchasing Dept works with our group to ensure ordered systems meet the standards.
- We provide support for recommended system.

Need Assistance - Helpdesk

- All requests for assistance should go through the TRIUMF Helpdesk at <https://helpdesk.triumf.ca>
 - Some exceptions.
- Please avoid dropping by office or phone calls.
- Helpdesk tickets are preferable to emails.
- Windows and hardware related issues – choose “TRWIN Domain and PC Support” queue.
- Login with trmail account or Guest. If Guest, provide contact details in the body of the ticket.

- Helpdesk – <https://helpdesk.triumf.ca>
- Computing web pages
 - <http://ccn.triumf.ca/>
 - <http://www.triumf.ca/information-systems-and-technology> (under construction)

Social Group Plug

- <http://www.triumf.ca/triumf-social-club>
- TRIUMF Running Group
- Anyone can join us Tuesdays and Thursdays at noon

