

ITX Meeting Topics

NOTE: *This list is ever evolving based on feedback from ITX members. Please if you have a topic you would like to see included in a meeting or have any feedback to help make the ITX meeting content more valuable please let us know. Thanks.*

Current Topic: (April 26th, 2023)

- Time Management Discussion

Next Topics:

- May 31st, 2023: Topic - TBD

Future Potential Topic Queue (in no specific order and scope to be determined):

- Core Skill Sets (possible topics): Shell Scripting, VI/VIM and Emacs, networking (host and or network focused), L^AT_EX, managing and compiling applications from source, Numerical differences in system architectures,
- Security: Learning from historical events (what happened, how it was discovered, how it was fixed, how did it change things since)...
- Managing student labs, lessons learned
- VDI would be a good topic too.
- IT is a modern classroom (not a lab, but looking at the IOT, multimedia, etc elements) remote and local...
- Various grad student (or similar) research stories focused on the technology that enables them to get their research done. High level story of research leading into the technology used to accomplish. Look for cases that show a high level of applicability to the common campus community.
- OS/System tuning, performance monitoring, and troubleshooting (good topic for multiple short training sessions)
- Security, including the support of protected/regulated content (good topic for multiple short training sessions)
- Data management & curation (the long term data preservation issues)
- Openstack & other cloud stacks & Campus/UIT VM best practices (Hitachi Hybrid & Cloud Store maybe?)
- VM/Container: for portability (Maybe see if SDSS would present on their usage)
- Application integration with security in mind including with campus ldap etc (Need some specific examples including devel environment etc...)
 - Break out the security part
 - Break out the auth integration part
 - How to pursue review/vetting with campus
 - How to do dev/testing without impacting live

- *Ansible, Salt, Chef/Puppet, Vagrant Config Management series (maybe a meeting per) (Good topics for short training as well as open discussion after. Need to find folks that can do training)
- 2Factor Authentication (Duo) (check to see if there is still an active interest and what aspect would they want to see)
- <Insert your ideas here>

Recent Topics (most recent is last):

- Docker/Containers
- Kubernetes
- Object/Cloud Storage
- Need for general Campus Storage/Archive solution.
- Compute Resources available to the Campus Community (Anita Orendt)
- IT Training - Strategies, Funding, Experiences.
- Open source backup & DR technical solutions review - Bacula/Amanda.
- Filesystems - ZFS
- Campus Science DMZ & Perfsonar
- Component to end user monitoring and analysis in a next-gen environment. - Elliot Fennech
- CEPH Object Storage - Sam Liston, Paul Fischer
- Cloud/Object Storage continued conversation and usage cases discussion.
- Pitfalls, Practices, & Choices in the SSD/NVMe Market
- Singularity: Containers for HPC and shared (you don't have root) systems
- Integrating alternate systems via SSSD/LDAP with Campus AD/LDAP.
- Meltdown/Spectre Patching & Performance Impact Experiences
- Training: Host Network Performance Tuning & WIP: Puppet based Configuration Management
- WIP: Foreman/Puppet/Ansible for Bare Metal provisioning and orchestration.
- Discussion/Presentation: Data Curation
- AWS Cloud Burst Usage Case - Brent Pederson
- Windows security quick wins and the CIS security controls top six - Dustin Udy
- Applied monitoring with the elastic stack (elk) and additional opensource plugins: Luan Trang
- Understanding/Using Linux CGroups (Control Groups) - Brian Haymore
- Supporting oversubscribed VM infrastructure at the small to medium scale. - David Richardson
- Data Center Automation for the Hybrid Cloud. - David Hawkins
- Streaming Big Data and NLP (Natural Language Processing) - Tyler Ford & Christian Updyke
- Research Infrastructure for Computer Science: Clouds Through Mobile Wireless networks - Rob Ricci and Kirk Webb
- Providing services at the edge using kubernetes for the SLATE project - Jason Stidd
- "Specter Projects", projects that don't make it to completion and the conditions that

cause this. - Piotr Pawlikowski (UIT)

- Jupyter Notebook - Jeff Folsom & Mark Keller (EHSL)
- WordPress Security - Lessons learned from a security incident and how to prevent them in the future - Jason Stidd & Dustin Udy
- Migrating services to containers - Mitchell Steinman, CHPC
- Monitoring Series #1 - Intro, License monitoring, 3D Viz of monitoring data, etc.. - Dylan Gardner, Robben Migacz, Paul Fischer
- Monitoring Series #2 - Dashboard VM host monitoring, using open source tools for research and operation. - Andrew Golightly & Randy Madsen
- Monitoring Series #3 - Getting started with open source monitoring & observability tools - Paul Fischer
- User Interaction Tracking. An app in early development for the Graduate School (Go and MongoDB) - Jason Stidd
- Getting the most out of the Center for Internet Security 20 Critical Controls - Dustin Udy (ISO)
- Open OnDemand - An NSF-funded open-source remote web based access portal for remote resources and applications - Martin Cuma (CHPC)
- Open Discussion on the impact, options, and considerations of RedHat's recently announced plans to shift CentOS to CentOS Stream
- Exploring use cases for Docker and Containers
- Open Discussion and Review: Revisit previous meeting topics, surface new points of interest, and maybe earmark some future ITX meeting topics.
- UETN optical and routing roadmap - who it touches and how it delivers
- Introduction to system build automation, workflow automation and configuration management with GitHub Actions.
- HPC Total Cost of Ownership Project - Cloud vs On Prem
- Open Discussion - including procedures for onboarding/offboarding systems & devices.
- Machine Learning on Streaming Data
- Community discussion on recent security issues
- Cloud Training - Ideas on how to get up to speed and stay current
- An Exploration of UETN's Private LTE Pilot Project
- Walk through UETN's Evolved Patch Core (EPC) for CBRS Private LTE Network.
- Bareos Walkthrough with S3 Targets for Storage Backend
- Thin alternatives to virtual machines that ordinary users, with no special administrative permission, can install and use
- Hands-on Introduction to Python (5 Part Series)
- Testing Ansible Content with Vagrant & Molecule
- Introduction of Docker for DevOps with some real use case examples from Graduate School
- Open discussion on compliance requirements

