
SciComp Compute Coordinator Meeting

Sept 7, 2023

Brad Sawatzky

JLab (internal) SciComp Review 2024

- Tentative dates:
 - First week of Feb, 2024
 - Formal Charge and dates distributed soon
 - *Let me know if you see a conflict/issue with Feb!*
- Nominal 2-day review following historical pattern
 - [Dec 2021 Review Indico](#)
[Access Key: "JLAB2021"]
 - » See [Review Report](#) and [Responses](#) documents on that page
- Will require updates on
 - Scientific Computing Systems
 - » incl. OSG usage/plans
 - EPSCI Report
 - Hall Reports/Projections
 - Data Science Report
 - EIC, Theory Reports/Projections
- Possible special topics
 - SRO status and plans
 - AI/ML progress
 - HPDF status and pre-planning(?)

Hall ESX Virtual Machine Cluster

- VMs within the Hall experimental enclave will be possible within weeks
 - » High-uptime infrastructure explicitly targeted to support Hall beam operations, etc.
 - » Update policy, downtime scheduling, defined by Hall Compute Coords as usual.
- Slow control systems
 - » EPICS softIOCs
 - » Windows/Rockwell cryo controls
 - cmagnets, skylla10
 - » PXE boot hosts/services
- Data-base hosts
 - » RCDB, CCDB hosts
- “Remote CH” support hosts
- VM hosts will functionally operate within the Hall subnets (no firewall issues)
 - Direct access within respective subnets
 - 2-factor hop (via. hallgw) as with any existing Hall hosts
- Take advantage of VM flexibility
 - snapshotting / backups
 - auto-failover on HW issues
 - advantages wrt “cloning”, load balancing, etc
- Keep this in mind for future deployments, HW upgrades, etc

Ongoing Containerization Support

- CST will be developing some more formal containerization support for Users
 - Brad, Bryan, Wes, Laura will talk next week to lay groundwork
 - Documentation
 - » ie. Easy 'on-ramp' / how-to
 - Infrastructure
 - » Docker, Podman, etc?
 - What else?
 - » We want your input/advice on what your Halls use, friction points, etc
- *Please email brads@jlab.org with suggestions, advice, input!*
- Among other benefits, containers can provide
 - 'Plug and play' software configurations
 - Version / configuration snapshots
 - Ability to run 'custom' software frameworks on other datacenters, computers, laptops
- Also necessary / encouraged to streamline upcoming Farm transition from RHELX → ALMA9
 - *(No date for this yet...)*