

EIC Computing news & requirements

J. Lauret et al.

EIC user Registration

- Assumptions
 - The EICUG PhoneBook will be the record of ALL EIC users - a request will NOT be approved unless member is in the PhoneBook (this brings a level of confidence in the organization)
 - PhoneBook record should be checked periodically (all sorted out with IB)
 - Thomas will continue to be the Point of Contact for all Guest appointment requests
- Instructions [drafted here](#)
 - Please provide feedback - [propose to have the instructions on the EICUG Web site](#) (if agreed, I will contact Christine Aidala for final OK - she had feedback)
 - Instructions aimed as a first stage “speed-up” - if all information is available, a Guest approval should take days (not months)
 - “*Remote and Physical Access*” - this new category will cause a two stage approval: stage 1: for remote access first (users should be told to proceed with that), then stage 2 the vetting will continue for site access. Asking for an SDCC account will be possible as soon as a stage 1.

EIC/OSG meeting

Sponsored / organized by J.Lauret

Meeting between EIC reps and members of the OSG ET. Good communication and productive meeting. A few emerging action items

- Provide submit hosts on both JLab/ BNL sides. Add one hosted at CNAF (INFN) later.
 - Submission from through the submit host from a lab vetted account will NOT require CERTificates (if OSGConnect is desired, it WILL). Note - the EIC like a VO i.e. a group in the OSG hierarchy. Not pushing access via CERT implies the OSG negotiates the resources, not the VO.
- Leverage OSG Data Federation (and caches) to allow datasets to be accessible from anywhere/everywhere
 - 100 TB cache / storage. Data brought back to institution. Namespace merging JLab/BNL possible
- Other
 - Possible use of containers via singularity many places (not recommended as restrict to some resources)
 - CVMFS - agreed to use BNL's Stratum 0 for now (if the user registration is solved and working as planned) - majority of e sites have CVMFS available

Feedback

- 14 Working Groups, 8 answered. Missing
 - Particle ID
 - Calorimetry
 - Far forward detectors
 - Polarimetry
 - Central Detector Integration
 - Complementarity
- Concerns:
 - Polarimetry, Central Detector Integration, and Complementarity may not need much storage
 - Remainder could be an issue (Calorimeter and PID could be CPU intensive)

● Physics WG: Inclusive Reactions	1
● Physics WG: Semi-Inclusive Re...	1
● Physics WG: Jets and HQ	1
● Physics WG: Exclusive Reactions	1
● Physics WG: Diffractive Reacti...	1
● Detector WG: Tracking	1
● Detector WG: Particle ID	0
● Detector WG: Calorimetry	0
● Detector WG: Far-Forward Det...	0
● Detector WG: DAQ/Electronics	1
● Detector WG: Polarimetry / An...	0
● Detector WG: Central Detector...	0
● Detector WG: Forward Detect...	1
● Detector WG: Complementarity	0

Storage

- Communicated with several conveners for precisions
 - Generally, understood “backed-up storage” as a reliable storage (not necessarily that data goes on tape). Safety of user’s work./ code / results the primary concern.
 - Understood “volatile storage” as a scratch space for dumping simulation results - archival into HPSS envisioned.
- The numbers
 - Total storage requested: Persistent: 29.2 TB / Volatile 165 TB
 - Average (Beta distribution): 21 TB / 25 TB @ 14 WG
 - Persistent = 294 TB / Volatile = 350 TB expected as needed
- Persistent storage: EIC has 375 TB @ BNL, 80 TB used (GPFS) - this would be considered persistent.
 - **Enable snapshot on that areas (20% impact) => 353 TB needed** - BNL covers for all BUT ...
- Volatile storage: EIC has “whatever it can take” from BNLBox
 - **350 TB needed** - procurement of 1 PByte of storage and put into operation as either storage?

CPU

- Feedback from conveners was all over the map
 - 100 cores - assume this does not mean a constant 100 cores but 3 months constant use. 200k
 - 20k hours, 400 k hours to 600k hours
- Assuming 1 M core hours as a start - this could be provided by the OSG
 - [Is this the way we want to go?](#)
 - A note that “the OSG” means federated resources here - storage and CPU from JLab/BNL. If this is the desirable avenue, would contribute.
 - We would need to ensure proper monitoring works as expected (it should but a TBC)

Other items

- BNLBox
 - Provide feedback on [Kolja's instructions](#).- generic account + password change / read-only
 - [SDCC Instructions](#) for BNLBox access also to be checked (should be consistent if not cross-referenced)
- CVMFS
 - Highly suggest a convention / hierarchy organization if not done already (+ documentation)
 - Will need to provide access to a few more people
- Other
 - Archival storage - procurement of +1 (2?) drive for HPSS archive for the EIC
 - EIC/OSG cleanup underway (we have multiple EIC org declared)
 - IO requirements not gathered (pending) - initial discussion I had indicates 10th MB/sec/job ??
 - Organize EIC computing a bit better - meeting once every other week OK?
 - InvenioRDM interreets?
 - What else? ...