ET-PP WP8 + EiB

Analysis and discussion about urget issues and opportunities

Parallel session **Computing Model and Software Tools**

Tue 11:30-13:00 - Room 504

Agenda

11:30 → 13:00 **Parallel Session: Computing Model and Software Tools** Room 504, 5th Floor (UPF-Bar...

Conveners: Achim Stahl (RWTH-Aachen), Nadia Tonello (BSC)

Zoom Connections

11:30	**ET-O requirements and synergies with WP8 EiB**	30m
12:00	**Cloud tools for file sharing, analysis and requirements analysis**	30m
12:30	**Preparation for the Geneva workshop in October**	20m
12:50	**Computational capabilities at Wigner RCP and a potential industrial partner**	10m

PM Tools - Joint ETO & ET Collaboration parallel session

Objective
Computing and data model
for ET activity - scientists and coordinators

Priority

- ET Authentication and Authorization Infrastructure
- File sharing (working documents, media files for dissemination, …)
- Publication of results (final deliverable documents and web files, MDC support, ..)
- Ticketing system (requirements collection, users support)
- Software development platform (GitLab)
- …

General considerations

- Give priority to urgent needs
- Evaluate and give recommendations
- No service provision
- No funding for licenses or maintenance

Requirements

- ET AAI based on ETMD
- Folders for files publication (pictures, videos, …)
- Full permissions control
- Full control over the usage of the content (GDPR compliant)
- Tools based on open source/known software (EGO, CERN services, ESCAPE, …)
- Scalable
- Easy user interface,
- Good practices for optimal usage
- Helpdesk
- Connection with other ET services and tools

ET-O requirements and synergies with WP8 EiB

- How can we collaborate and coordinate the work between EiB+WP8 and the ET-O?
  - Discussion postponed: dedicated meeting/workshop with experts from ET-O
  - Coordination

- Short-term (we need it now) or long-term solution (we wait until we have a stable solution)?
- Who will decide which tool to adopt?
- Who will deploy the service and operate it?
- Who/how to get funding for maintenance and licenses?

Start WP2 discussion for financial aspects

Cloud tools for file sharing

Presentation by Alba Gonzalvez (BSC- WP8)

		Cloud tools			
	Features	**CERNbox (based on OwnCloud)**	**B2DROP (NextCloud)**	**INFNcloud (based on OwnCloud)**	**SURF drive**
Price and capacity features	Credentials	CERN computing account	B2DROP account	Dynamic OIDC/Indico IAM or local	Own trusted institutional account
	Free plan	yes	yes	yes	no
	Price plans	-	premium	-	yes
	Quota/user	1 TB	Up to 20 GB (100-200GB premium)	200 GB	500 GB (limited)
	Max file size	10 GB up to 50 GB	10 GB	10 GB	50 GB
	Max. num. users	unlimited	Up to 5000 (depending on the plan)	Hundreds	Up to 750

Preparation for the Geneva workshop in October

- Objective
  - D8.1: Computing model requirements
- What we have:
  - Initial ET draft from ESFRI document
  - IGWN/VIRGO-LIGO computing models
  - Initial input from MDC

What we might need: ET relevant aspects (from other projects:

- LISA
- CERN
- SKA
- Vera Rubin Obs.
- CTA
- Euclid, …

Other input from OSB –ISB- ETPP WPs – ET-O?

Computational capabilities at Wigner

Daniel Barta
Wigner Institute

Two potential interesting partners for ET

- ✦**Wigner Datacenter**
- ✦**evopro Innovation Labs Ltd.**

Wigner Scientific Computing Laboratory (WSCLab)

Composed of the following facilities:

- **WLCG ALICE / CMS Tier-2 Site**
  4000 vCPU (shared between CMS (2/3) and ALICE (1/3));
  1.2 PB Storage
  HEPSPEC6 hours: 342 439 409 (2021 / 2022)
- **WLCG ALICE Analysis Facility**
  Re-utilizing the Tier-0 @ Budapest hardwares
  4096 vCPU + 8192 GB RAM
  Raw storage capacity: ~2.6 PB
  Usable storage capacity: ~1.3 PB (Plasma Research Accelerator)
- **WSG Virgo Tier-2 Site / EuPRAXIA Site**
  Re-utilizing Wigner Cloud hardware
  1600 (usable: 1500) VCPU + 5120 GB RAM
  CEPH FS storage capacity: 1 PB (raw) —> 0.5 PB (usable)
- **GPU Laboratory (grant-based projects may apply)**
  Established in 2010 by G. G. Barnaföldi & G. Debreczeni & P. Lévai
  Aim: GPU usage in HEP and Gravity + developing on new tech.
  GPU Performance: ~526 TFLOP of single-precision & ~91 TFLOP double
  - The machines of the GPU Lab are built to be a testbed for experimenting with GPU technologies and to test algorithms utilizing multiple cards.
  - There are configurations hosting NVIDIA cards with CUDA support and OpenCL capable devices (in the form of AMD GPUs and Intel Xeon Phis).