



# HEPiX Autumn 2021 Summary

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# Participants

- before workshop, around 230 registrants
- During the week steady stream of people joining us
- Finally: 370 registered participants
  
- Participants were very disciplined –  
video conferencing etiquette was well observed!

# Programme

- Most regular tracks were present
- Workshop running from Monday through Thursday
  - Morning sessions primarily aimed at Asia & Europe
    - 09:00h – 12:00h CEST
  - Evening sessions primarily aimed at North America and Europe
    - 17:00h – 20:00h CEST
  - Are these time OK for you? – please send us feedback!
- All sessions have been recorded and will be made available online
  - Big thanks to all who have helped making failsafe recordings from different sites
- Most sessions were attended by 70-80 participants, peak at Linux Distro BoF

# Site reports

- from a range of sites, with many different topics
- return to working on-site again,
  - while also seeing a shift to flexibility to work from home
- licensing cost / vendor lock-ins creating uncomfortable situations
- delay in IT equipment shipments on account of chip shortages
- plans and installations of new data centers
  - maybe more in the Facilities track next time?
- many centers moving to >100Gbps uplinks

# Operating Systems

- Linux Distro BoFs showed that there is a big interest in the future Linux Distros
  - CERN and FNAL showed their common statement
  - moving towards Centos Stream
- other sites presenting their views and requirements as they are serving communities apart from HEP
  - handling kernel modules and special drivers from 3rd parties
- HEP and Photon Science experiments stating their views wrt experiment software in online/offline computing, accelerator controls
- RedHat explaining their offering for academic institutions
  - with some fog around who counts as such (dependent on location)
  - stating that an academic site license will be interesting for those sites deploying more than 1000 hosts
- Will be covered in more detail in the report by Yves after the lunch break

# Networking & Security

- again, interesting and disturbing news on cyber security
  - Phishing-as-a-Service and the industry around it
- discussion on end user IT security awareness and what IT providers can do to help their users and themselves
  - to be continued in future HEPiX
- update from the Research Networking Technical working group
- report from the WLCG network monitoring and analytics efforts
- thoughts on resource trust: host certificates in dynamic landscapes
- report from the IPv6 working group
- Collaborative Security between Threat Intelligence and Security Operations Centres
- a sequel to the use of LoRaWAN and IoT technology to protect CERN staff during the pandemic

# Computing & Batch

- summary report on the past HTCondor workshop
- reports on the activities in and challenges for the Benchmarking Working Group
  - developing HEP-SCORE as a new standard
- report on the WLCG task force on HEP-SCORE
- showcase of monitoring and managing a HTCondor batch cluster at CNAF
- overview of Belle II distributed computing infrastructure

# Grids, Clouds & Virtualisation

- report on HIFIS – the activity developing and sharing scientific IT resources among sites in the Helmholtz Association
- showcase of software development proposal in HIFIS EFSS for federated group based sharing
- report on the creation of a Kubernetes based analysis facility for ATLAS
- journey of development of CERN webscape using Kubernetes



# Storage & Filesystems

- Creating a high-throughput EOS instance for ALICE online/offline
- Implementation of tape recall scheduling optimisation in dCache for Belle II
- EOS next generation: new features and plans for EOS5
- powerful storage for all science disciplines in a federated environment on the basis of dCache
  
- migration of tape data and tape library infrastructure at BNLs SDCC
- migration process from CASTOR to CTA at CERN
- optimising bandwidth utilisation through the RX Extended SACK Table Proposal

# Basic IT services

- Migrating from a commercial system to Open Source: Gitlab at DESY
- Switching to a new ticketing system for CC-IN2P3: Zammad
- Automated Backup and Recovery for Databases on Demand at CERN
- Designing and deploying a redesigned User Registry at DESY
- Transitioning into AV media post-processing based on FOSS
  
- Transition from On-Premise to On-Cloud videoconferencing at CERN
  - a service HEPiX has been relying on for the last year: big Thank You!

# Group feeling



Thanks to Sebastian for the idea and realisation

# Comments and Discussions

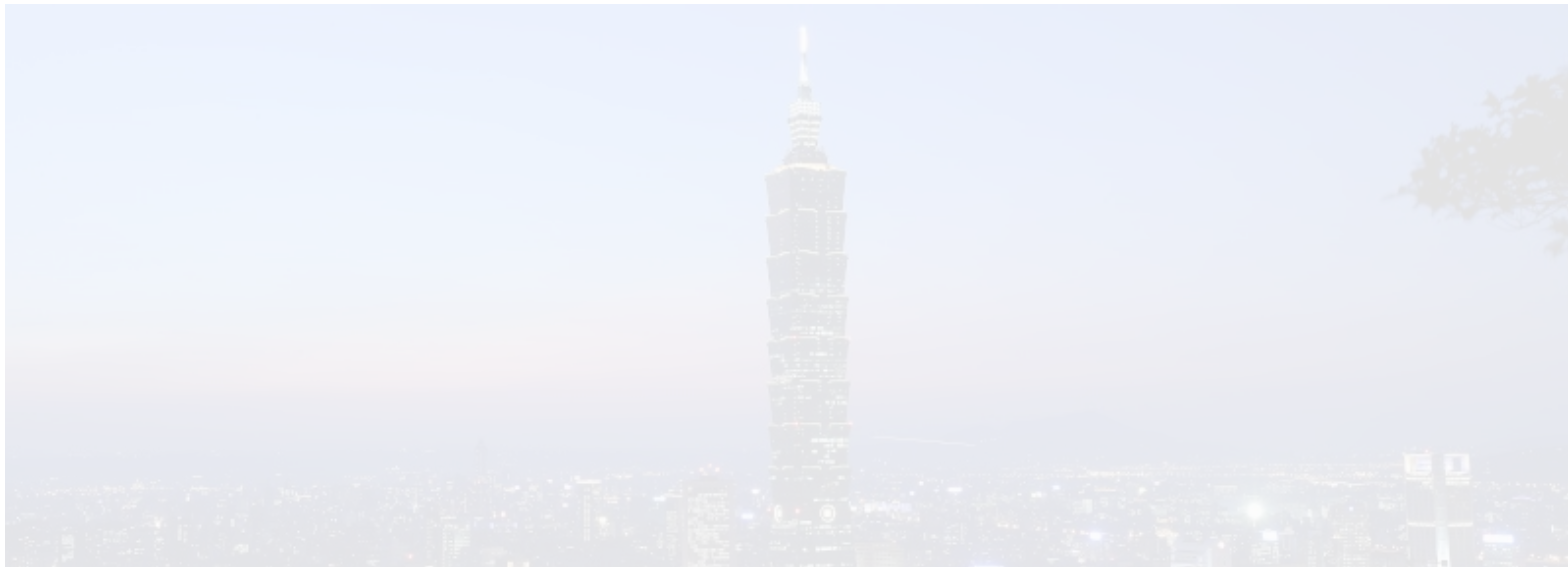
- Of course HEPiX thrives on offline discussions and brief ‘coffee break’ exchanges
- These were not possible this week
  - at least not as we are used to, in person
- Use of the HedgeDoc shared document proved successful
  - background questions to and discussion with speakers
  - document will be closed some time next week, so you can still add info
    - if you want a permanently open document – let us know
  - access problems from some IdPs are ‘known problems’
    - will address those in detail after HEPiX
- Discussion on CO2 footprints by IT groups, actions aimed at Green IT
  - focus for ‘Facilities’ track in Spring 2022? Feedback invited!

# Board meeting

- review of current meeting
  - tracks, ideas for new themes, parallel socializing rooms during coffee breaks
- planning ahead – physical meetings uncertain
  - virtual meeting and physical meeting are being prepared in parallel
  - will wait for decision of program committee for ISGC 2022 as HEPiX is planned back-to-back with this conference before final decision will be made
- we would like to ask you for feedback
  - HEPiX co-chairs will be contacting you in the coming weeks

# Finally

Hope to see you again in Spring 2022



Academia Sinica – ASGC  
Taipei  
14 – 18 March 2022

or

