

HPC User Meeting

Welcome / Introduction / General overview

The HPC team

- What we can and what we can't do
- Information channels
- Further meetings

Yves Kemp
HPC User Meeting
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Overview on (IT managed) computing infrastructures @ DESY

> Grid

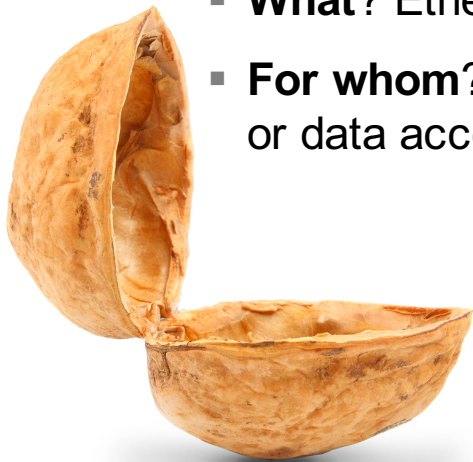
- **What?** Ethernet interconnected batch cluster with access via Grid & certificates.
- **For whom?** Many jobs with small #cores, no parallelism needed, potentially using resources outside of DESY (or being external to DESY)

> BIRD

- **What?** Ethernet interconnected batch cluster + WGS with local access
- **For whom?** Many jobs with small-some #cores, some parallelism possible, complete workflows possible as WGS part of the system

> HPC / Maxwell

- **What?** Ethernet + Infiniband interconnected cluster + WGS with local access
- **For whom?** Jobs with larger #cores, using InfiniBand for fast inter-node communication or data access, complete workflows possible as WGS part of the system



The HPC Team

- > The HPC cluster is integrated into IT
 - Many people are involved on different levels
 - None of the people involved works exclusively on HPC cluster

- > Mostly involved people are mostly the ones speaking today



What we can do ... And what we can't

- > We design, build and operate an/one HPC facility
- > We speak with users about what they need – basis for design and further evolution of the facility
- > The facility comprises both infrastructure (Hardware, network, bare access, ...) and platform (Workflow tools, software provisioning, ...)
- > We support users on a facility level

- > We cannot guarantee to help you with computational aspects (which algorithms? Which language? ...)
- > We cannot guarantee to help you with specialized software issues



Information channels

> From IT to users:

- „Cluster downtime in NN days“, “New configuration“, ...
- Currently it-hpc-users@desy.de: Self-subscription
- Maxwell-users@desy.de: Self-subscription + automatic subscription of people with Maxwell resource
- Who has Maxwell resource? 😊
- In future, only maxwell-users will be used!
- Communicators in groups should subscribed themselves!

> From users to IT:

- „Something in the facility is not working!“
- Ticket system: maxwell.service@desy.de

> From users to users:

- Currently it-hpc-users@desy.de and maxwell-users@desy.de
- Do users feel the need for maxwell-discuss@desy.de ?



Further HPC meetings and events

- We (IT) plans to have at least one user meeting per year
 - Contributions from groups are welcome (Experience-reports e.g.)
 - In this case, frequency will be higher (e.g. 4/year)
- In addition: Other formats possible:
 - Weekly meetings of ~15 minutes with most active users from last week?
 - ...
- Courses:
 - HPC lecture, including OpenMP. MPI, GPU ... With exercises: From IT
 - IT can organize other workshops/courses on other topics with internal or external experts

