Sci-GaIA in Support of Communities

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Outline

- The legacy of previous projects
- Research communities in Africa
- Communities supported by Sci-GaIA
  - Research communities
  - Technical communities
- The discussion forum
The legacy of previous projects

• Sci-GaIA is the latest in a series of support actions stretching back to 2008
  – HP/UNESCO Brain Gain Initiative
  – CHAIN
  – ei4Africa
  – CHAIN-REDS

• Over nearly 10 years, we have developed a resilient, sustainable group of communities around e-Infrastructure, e-Science
How do communities form?

- Communities form around common themes
  - Particular grand challenge or theme (Human Heredity, Origins of the Universe, Climate change)
  - General platform, method or trend (HPC, Open Science, Big Data, Open Education)
  - Communities can be created for a particular project

- In a well-connected environment, communities form organically. But how are they sustained?

- Sustaining communities requires an environment which both supports their base, and allows them to grow
This is not a well-connected environment...
This could become one...

https://afterfibre nsr c.org/
But connections are not just measured in terms of the fibre network

- It is *people* who are the most important nodes in research networks

- NRENs enable and support the day-to-day scientific work, but also reduce the distance barrier between individual researchers

- It is the *connections* that count in research communities – essential to be able allow organic growth and self-sustainability
Research communities in Africa are alive and well

• African research is experiencing an injection of energy

• Big research projects
  – Astronomy (SKA/MeerKAT/SALT)
  – Bioinformatics (H3Africa)
  – Physics (LHC experiments)
  – Climate (CORDIS)

• Human Capacity – Next Einstein Initiative

• But also many smaller, no less important collaborations...
But pure academic research needs infrastructure

• Research at scale requires Research Infrastructutre.
• Not just telescopes, sequencing machines and accelerators!
• Modern research is entirely reliant on e-Infrastructure -
  - Networks, Data (movement, storage, archival, processing), computing facilities (HPC, grid, cloud)
• These are often multi-institutional, cross-domain platforms – they need to *inter-operate*
• Vast technical communities of practice develop, maintain and discuss their usage
Sci-GaIA Support of Communities (WP description)

- Identify, promote and support both web-based and face-to-face cooperation between application facilities, service providers and associated end-user communities that can gain in their fields from using the e-Infrastructure tools fostered and promoted by the project.

- Identify innovations and experiences made in the supported African user-communities and ensure that they are scientifically reviewed, selected and then communicated and disseminated to relevant stakeholder groups.

- Ensure models for sustainability in the operation of African user-communities are developed and tested.

- Ensure the global interoperability and reach of the e-Infrastructures supported.

- Identify the need for planning, development and coordination of policies, programmes and contents of e-Infrastructures.
Sci-GaIA’s support of communities – the User Forum

- Mandated by the project agreement, the User Forum was created in April 2015.
- A virtual space for communities of practice – both research and technical – to discover connections between them.
- A supplement to the “real-world” connections between researchers.
- A “knowledge glue” support the research and training services in the Open Science Platform.
A platform for Open Science needs communities; Open Science communities need a platform
The African e-Infrastructures Discussion Forum

• Built with Discourse, the Civilised Discourse Construction Kit - based on experience of the last 20+ years of managing communities online

• Access via Identity Federation – log in with your home institute

• Public and private spaces for communities to engage with their members and wider public

• Actively supported, community moderated

• Recognition of contributions made to the health of the community via badges
No barrier to entry
Anyone can simply log in and engage. Catch-All authentication if needed
Forum facts and figures

- Total number of users > 200
- Topic Categories: ~40
  - Some categories are protected from public view
  - Groups manage their own categories
- Communities of Practice and projects:
  - TZ-COPS (Tanzanian Communities of Practice)
  - DARIAH (Digital Humanities)
  - WIMEA-ICT, African Weather Stations
  - MURIA (Medicine)
  - Igrid (SmartGrid)
  - Technology Transfer Alliance
The forum drives identity federations

- The African e-Infrastructure Discussion Forum is a service provider of several identity federations, including the inter-federation edugain
  - You can log in with your home credentials from almost anywhere.
- Identity Federations bring services to researchers and make it easier for them to be shared amongst institutes.
- Without services in an identity federation, the justification for investing effort in the development of identity providers at institutes is unclear.
- By forcing authentication via identity federation, we stimulate both the demand for new services, as well as the demand for inclusion of institutes in African Identity Federations.
The Forum Drives Training and Development

• The forum has been used to support Communities of Practice, but also in support of other training activities

• Event feedback and discussion
  – The forum has been announced at every event – sign up is easy and quick
  – Clear peaks of activity during and after events

• Winter School and Hackfest support
  – Participants of the Winter School and Hackfest use the forum to report issues and discuss technical issues with their peers and instructors
  – When clarified, problems are marked “solved” and create a technical knowledge base to supplement the documentation
Now... join us!

• The forum will be supported long after the end of the project, and each new connection makes it stronger.

• Take 5 minutes to sign up to the forum – http://discourse.sci-gaia.eu

• Introduce yourself! Tell the community who you are, what you’re interested in and what your secret super power is!

• Tell a friend, make yourself at home: find a group or community you want to join, create a new one...
Engage !