Building a Better Community:

Collaborative FLOSS development across national boundaries

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To cover

- *Apologies from Chris for his unavoidable absence!*

- Hydra as a use case
  - Fedora and Hydra
  - Community underpinning
  - The Hydra community – collaboration in action

- Reflections on progress to date

Fedora and Hydra

Hydra	Hydra
Hydra	Hydra

Hydra provides user interfaces and workflows over the repository
Concept of multiple Hydra 'heads' over single body of content

Fedora

Fedora is the digital repository system, managing the content in a highly structured way

Storage

The content is stored either locally or in the Cloud

Hydra

- Originally a collaborative project between:
  - University of Hull
  - University of Virginia
  - Stanford University
  - Fedora Commons/DuraSpace
  - MediaShelf LLC (now Data Curation Experts)

- Unfunded (in itself)
  - Activity based on identification of a common need

- Working towards a reusable framework for multipurpose, multifunction, multi-institutional repository-enabled solutions

- Timeframe: 2008-11 (but now extended indefinitely)

- Website: https://projecthydra.org

Fundamental Assumption #1

No single system can provide the full range of repository-based solutions for a given institution's needs,

...yet sustainable solutions require a common repository infrastructure.

Fundamental Assumption #2

No single institution can resource the development of a full range of solutions on its own,

...yet each needs the flexibility to tailor solutions to local demands and workflows.

Creating a sustainable open source project

- Two pieces to make the whole

What is Hydra? Community

- Meetings, of which Hydra Connect is the big, annual get-together

~200 Hydranauts from 60 institutions in the US and Europe attended Hydra Connect 2015 in Minneapolis.   *Photo: Mark Bussey / Colin Smith*

- Interest / Working Group community activity

- Mailing lists, Slack, Skype/Hangouts, etc
  - See: https://wiki.duraspace.org/pages/viewpage.action?pageId=43910187

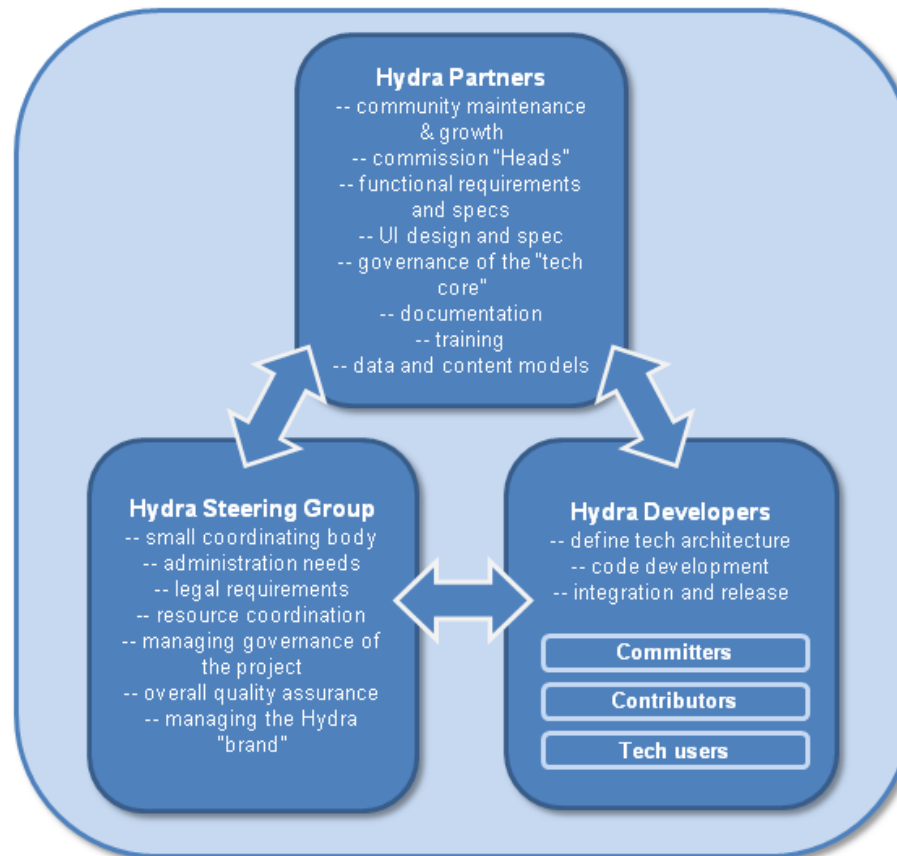# Hydra: building what we need

- Hydra has always been about building what institutions need
  - If this hadn't been the case it would have ended long ago

- Challenges
  - Do more with less
  - Do it fast *enough*
  - Do it well

- The Hydra Way - Working in Community
  - Mutual respect
  - Shared purpose
  - Continual engagement and assessment
  - Tangible results

Community structure

- Community structure to coordinate activity

Hydra partnership

- From the beginning key aims have been and are:
    - to enable others to join the partnership as and when they wished (Now up to 30 Partners)
    - to establish a framework for sustaining a Hydra community as much as any technical outputs that emerge
    - to foster a structure through which Partners make an active commitment to contribute in their own way to the ongoing development of Hydra

- Establishing a legal and organisational basis for contribution and partnership through an MoU

"If you want to go fast, go alone. If you want to go far, go together"

(African proverb)

Hydra: building it in ways that everyone can contribute

- Libraries are good at developing solutions that use library technologies and standards

  - Or they have a 'library' take on using generic technologies
  - This can lead to silo skill sets

- Hydra has endeavoured to follow standard development practice in all its work

  - Enables solutions outside of libraries to be accommodated
  - Ability to bring in generic software developers/consultancies to contribute to solutions

- Bringing library knowledge to technology solutions

Openness, with quality embedded

- All code is on github
  - projecthydra and projecthydra-labs

- Committers' process of nomination based on demonstrated practice

- Formal Contributor Licensing Agreement
  - For institutions (50+) and individuals (200+)

- Code contribution principles
  - Everything must be tested and shown to be working before it gets accepted
  - See: https://wiki.duraspace.org/display/hydra/Hydra+Community+Principles

A Worldwide Presence

Partners · Adopters · Solution bundle users · https://www.google.com/maps/d/viewer?mid=1eoLSoWriVJcg75DMj1ujry1kQGY

Reflections

- The initial Partners identified a common need, but also recognised that we needed different ways to address this
  - Hence, Hydra as a reusable framework to meet local needs building on a common base
  - We avoided trying to build another 'solution', but focused on a way to more easily implement solutions

- Community demand is pushing Hydra toward a 'product' based on the framework – evolution of our development
  - Hydra in a Box will be an encapsulation of Hydra capability, built through community effort and based on the same framework

Thank you

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