

The Making of Hydra

Common Solutions for Common Problems



Common Problems

...create the need for collaboration

Problem # 1

There was no single software product that provided solutions for common needs

...finding sustainable solutions requires a common repository infrastructure

Common use case needs

Services Sought

Electronic theses and dissertations

Open access articles

Data curation applications(s)

General purpose institutional repository

Manuscript and archival collection delivery

Library materials accessioning tools

Digitization workflow system

Common basic function needs

Function	Description
Deposit	Upload simple or multipart objects, one-at-a-time or in bulk
Manage	Edit an object's content, metadata, and permissions
Search	Full text and fielded search for both user discovery and administration
Browse	Sequential viewing of objects by collection, attribute, or ad hoc filtering
Deliver	View, download, and disseminate objects through user and machine interfaces

Common Solutions

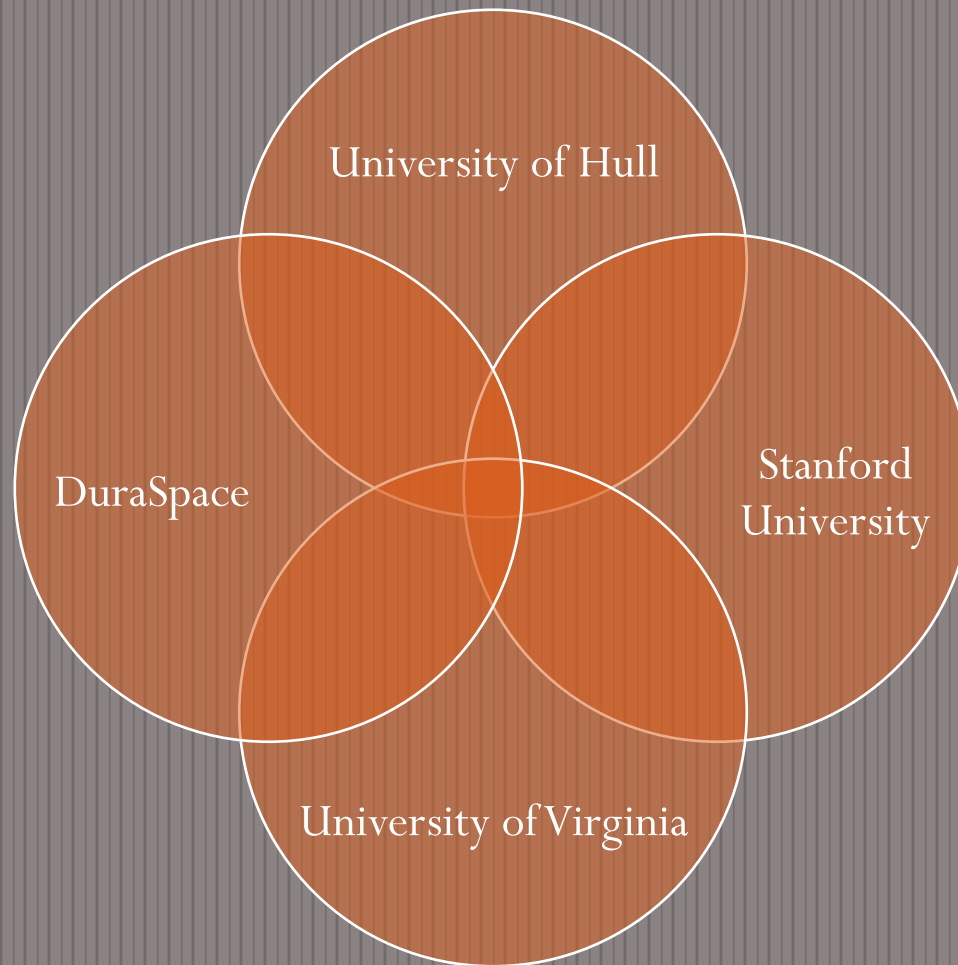
...arise from collaborating to solve a common problem

Problem # 2

No single institution had the technical or financial resources to develop a scalable and sustainable solution

*...finding a common solution requires
finding like-minded partners*

A Partnership is Formed



Hydra was conceived

... “one body, many heads”

An open architecture

- *many contributors to a common core [Hydrangea]*

Collaboratively built solution bundles

- *customizable and adaptable for local needs*

A community model

- *developers and adopters who extend / enhance the code*

Hydra's Operating Principles

Tailored applications and workflows

A common repository infrastructure

Flexible, atomistic data models

Modular, “lego brick” services

Library of user interaction widgets

Easily skinned user interface

Hydra's Technical Framework



<https://wiki.duraspace.org/display/hydra>

Common Commitment

...makes a collaboration successful

Hydra “heads”

- ❖ ETDs
- ❖ SALT
- ❖ EEMS
- ❖ IR@Hull
- ❖ LIBRA

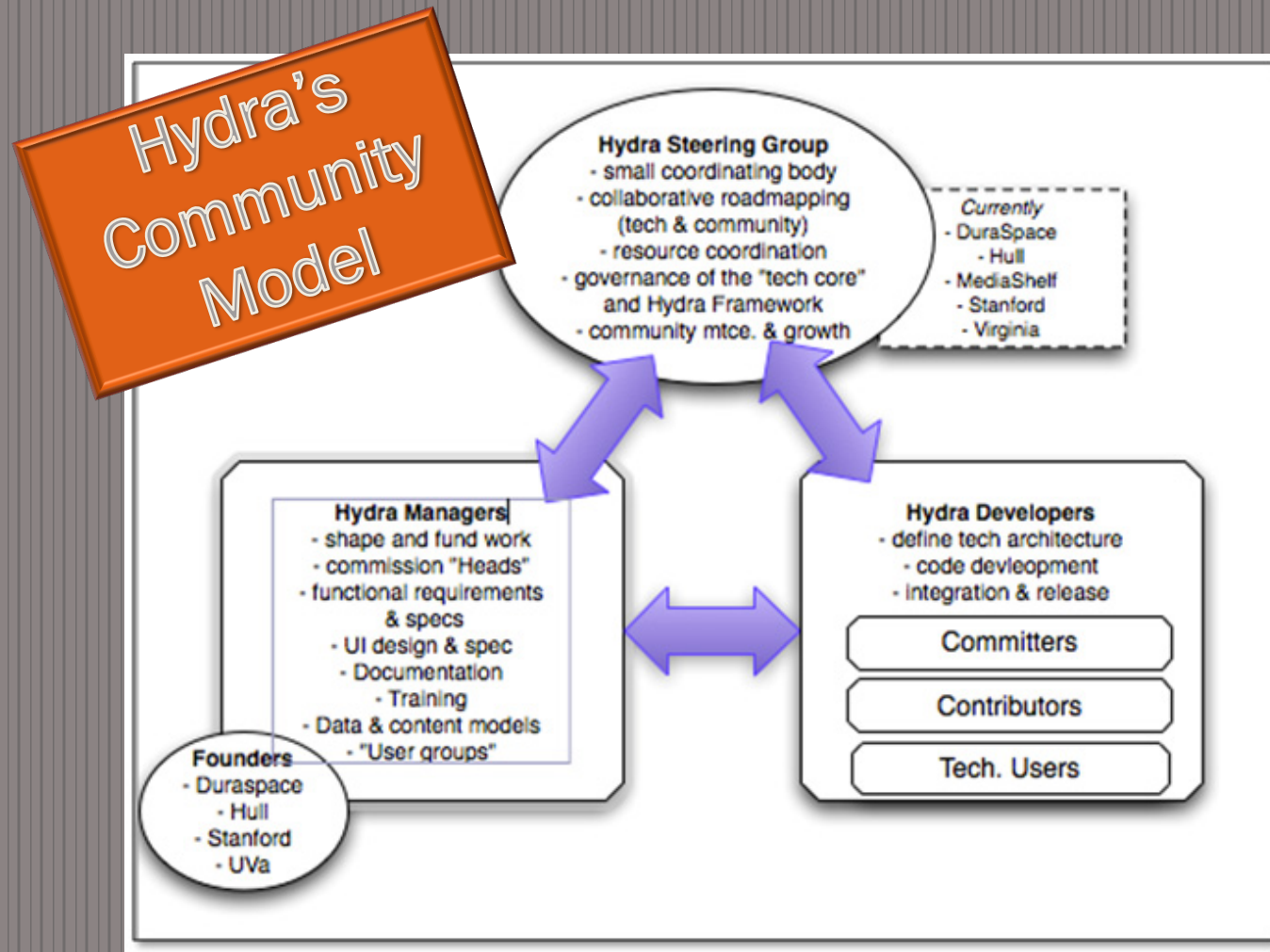
The screenshot shows the LIBRA website interface. At the top, it says "UNIVERSITY OF VIRGINIA LIBRARY" and "LIBRA". A search bar is visible with a "Search" button. Below the search bar, there's a navigation menu with categories like "Type of Work" (Article (8), Book (2)), "Department" (University of Virginia Library (4), Department of Nursing (2), Civil & Env Engr (1), Department of Economics (1)), and "Peer Reviewed (2)". The main content area features a "Welcome to LIBRA" message, a "Please Note" about login requirements, and two buttons: "Learn More" and "Add Your Work". Below this, there are sections for "Open Access Works", "Electronic Theses & Dissertations", and "Datasets", each with a brief description and a "Learn more..." link. An image of a classical building facade is shown next to the "Open Access Works" section. The footer contains contact information for the University of Virginia Library, including address, phone, and fax, along with a copyright notice and a logo for "hydra".

Hydra's Success

Growth Measures

Use Cases	Solutions for more than 7 use cases
Committers	More than 25 committers (7 organizations)
Partners	# of partners doubled
Blacklight	Dozens of implementations
Workshops	7 workshops; more than 20 attendees at each
Cost-effective	OhLoh est. cost to develop Hydrangea from scratch at \$4.6M (84 person yrs @ \$55k /yr)

Hydra's Evolution



“If you want to go fast, go alone.
If you want to go far, go together”

African Proverb

<https://wiki.duraspace.org/display/hydra>

hydra

A stylized red dragon logo is positioned to the right of the word 'hydra'. The dragon is depicted in a dynamic, curved pose, with its head facing left and its body arching upwards and then downwards. The dragon's body is a vibrant red color, and it has a long, flowing tail that extends downwards and to the left, ending in a small flame-like tip. The dragon's head is detailed with small spikes and a prominent eye.