The Copyright Hub and DOI

'What is the Copyright Hub and how does it fit with the DOI ecosystem'

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Our Goal.....

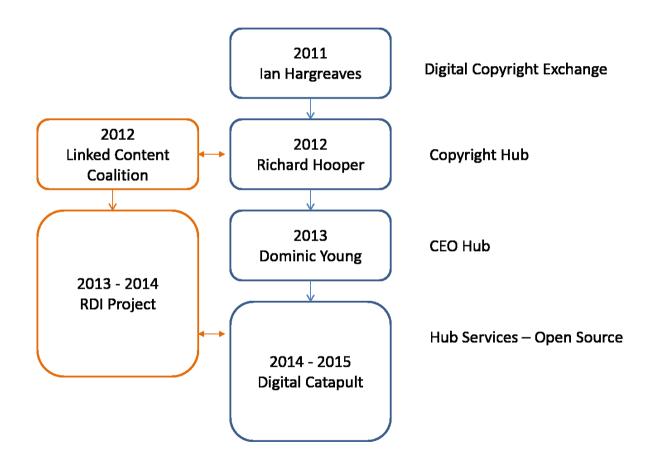
https://vimeo.com/111096150

http://copyrighthub.co.uk/video





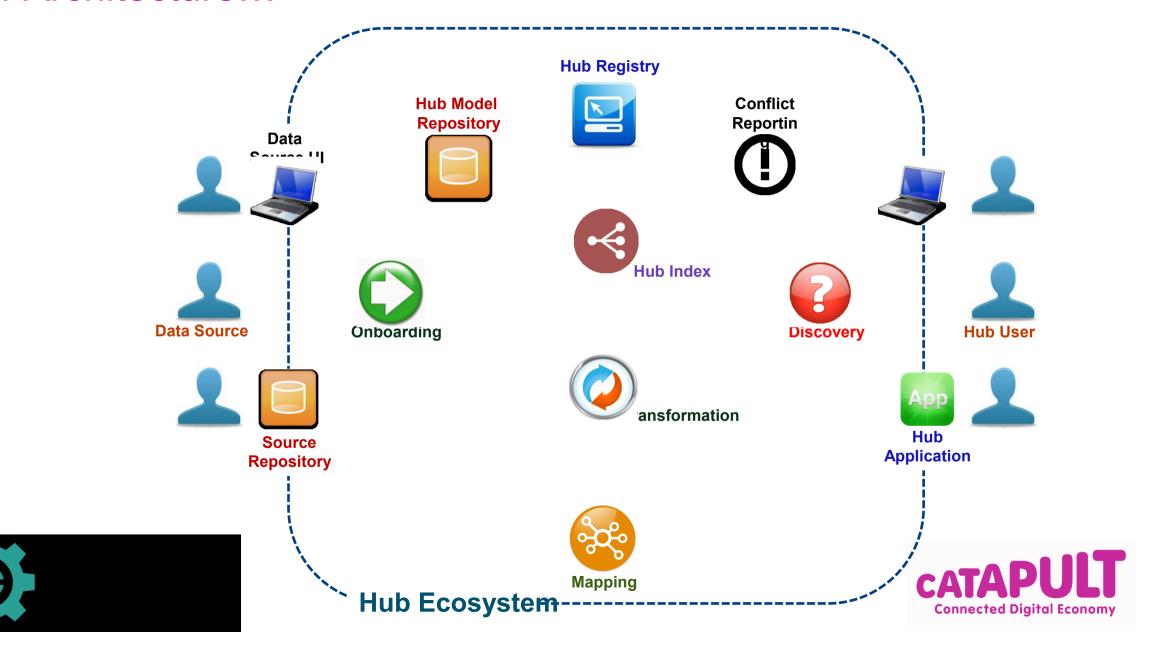
Our History.....







Our Architecture...



Key Terms.....

- HubKey –index key within Hub Ecosystem maps to specific Entity in a Repository
- Source ID any identifier used by a Source which may also be "public" (e.g. DOI,ISBN)
- Service Resolution URL the API Endpoint at which a Service is found
- Index Service routes requests using these IDs to Services "hub of the Hub"
- Registry Service maintains mappings and repository configuration used by above





Hub Index

Hub Model Repository





Now comes the process which is the key to the way the Hub is "bound together" - the **Hub Index.**





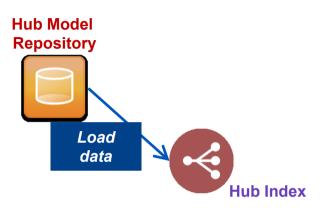
How to Join: **Hub Index Hub Model** Repository Load data the source Repository **Hub Index** automatically updates the Index with the IDs of all the Creations for which it has information which it wants to make accessible.



How to Join: **Hub Index Hub Model** Repository Load data Because the aggregator **Hub Index** may offer different kinds of Services, the Index is also told what those services are, and a Web Address (URL) at which the service can be found...



Hub Index



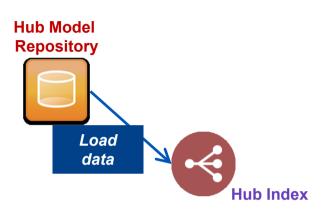
...so the Index stores "what" and "where". For example:

ID = ISBN 9781234567890 Service = License Offer Service 1 At = www.abcd.co.uk





Hub Index

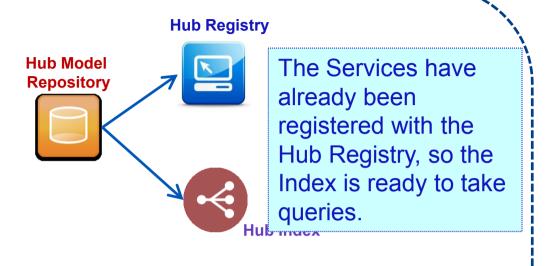


If a Repository has more than one ID for the same Creation (which is common) these are also stored at the Index. This allows the Index to build up a network of "Same As" links, and to detect errors in these.





Hub Index





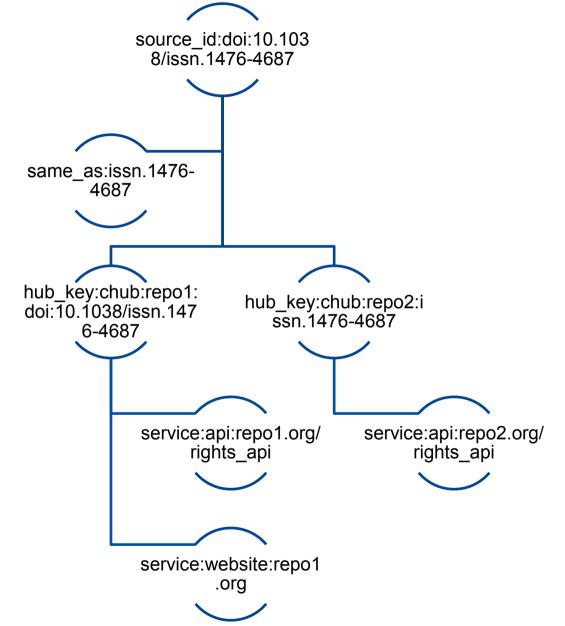


Joining workflow in Summary

- Repository registers with Registry Service includes information below
 - ID Types they support
 - Method to update Index Service (push, pull , live)
 - URLs to Repository API endpoints and types
 - Authentication and Security Information
- Index service
 - Updated by 'push' from repository or 'pull' based on schedule in registry
 - Matches source IDs between different repositories
 - Alerts on conflicts in particular incorrect 'same_as' assertions
 - Optimised for multiple ID lookups
 - Can Query repositories in real time if desired (live)



Sample Record in Index service







Querying workflow in Summary

- User or service queries index service with a 'source ID' or 'Hub Key'
- Index returns with following depending on type of query
 - Web page to present rights information based on ID if via a web browser
 - API response containing related IDs, Hub_Keys and service URL endpoints which can provide rights information
 or services within the eco-system





What we are investigating

- Underlying technology behind DOI (Handle) can it be used for Index Service?
- Resolution 'types' model supported by Handle/DOI
- More complex assertions of ID relationships beyond 'sameAs'

Find out from yourselves - DOI Operators and Registries - about how it works in practice





Summary

What the Hub is:

- A core set of Open Source Services
- An eco-system of Companies and Services connected to above the Hub(s)
- Route Rights/License Information between services in eco-system
- Mapping of Rights/License between different formats using the LCC model

Current Status: Completed Alpha phase working on Beta now using Agile/Continous Pipeline methodology





Any questions?





More Information

- The Digital Catapult: www.cde.catapult.org.uk
- The Copyright Hub: http://www.copyrighthub.co.uk/
- Mark Hewis: mark.hewis@cde.catapult.org.uk @Mhewis

Contact myself to join the Copyright Hub Technical Working Group

• Further information from Dominic Young Dominic.Young@copyrighthub.co.uk



