

Digital preservation



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Preservation: Different views



- Data is not being deleted
- Data is being stored in a repository
- Data is being kept by a sustainable organisation
- Data is being managed actively
- Services and repositories for bit preservation
- Planning and curation for long-term access and use (e.g. research data sets)
- Digital archiving for potential future access

Strategies



- Keep data accessible today and tomorrow
- Lots Of Copies Keep Stuff Safe (locks.org)
- Defining preservation levels (expected life time, importance, etc.)
- Continuous management
- Risk assessment
- Trusted repositories/audit and standards
- Bit preservation
- Logical preservation
 - Emulation (e.g. computer games, software)
 - Migration (e.g. obsolete file formats)

Preservation platforms



- Examples:
 - Archivematica (open source initiative)
 - Hull involved in testing project
 - Danish National Bit Archive
 - Royal Library is partner and co-developer
 - Hydra/Fedora?
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- Claim: To qualify as preservation platform, the software in question must be able to meet a certain set of defined requirements for preservation.

Tools



- Examples:
 - Characterisation
 - Validation
 - Statistics about objects
 - Preservation planning
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- Open Preservation Foundation

Hydra and digital preservation



- Part of many institution's use cases!
- In some cases the repository will meet all preservation needs (=defined requirements)
- Fast and effective basic repository functions needed by tools:
 - Search and indexing
 - Retrieve and update metadata
- Hydra gems integrating the essential tools
- Prepared for integration with preservation platforms

Digital Preservation Interest Group



- <https://wiki.duraspace.org/display/hydra/Hydra+Digital+Preservation+Interest+Group>
- Explore the role of Hydra in fulfilling digital preservation use cases
- Formulate precise statements about Hydra and preservation
- Facilitate integration of Hydra with preservation platforms and tools
- Explore cooperation with open source communities such as Open Preservation Foundation (OPF) and others

Royal Library activities



- Bit preservation in national bit repository
- Tools integrated into Valhal (Hydra solution)
- Plan for 2015: tool integration (with OPF whenever feasible)
- Adopting the fast rate of tool development
- Plan for 2016: preservation planning and integration of tools for that
- R & D area
- All development takes place in community context



PLUGGABLE HYDRA INFRASTRUCTURE AT THE ROYAL LIBRARY, COPENHAGEN



ASSESSMENT OF DIGITAL BORN MATERIALS
(AUDIO, E-BOOKS, E-MAILS, PRINT READY PDF, VIDEO...)

IN HOUSE PRODUCTION
(DIGITIZED BOOKS, AUDIO, VIDEO, LETTERS...)

PUBLISHER DEPOSIT
(E-BOOKS, COMPUTER GAMES...)



CONSUMERS
(EUROPEANA, NATIONAL BIBLIOGRAPHY...)

PRESERVATION PLATFORM (YGGDRASIL) JAVA PLATFORM



BITREPOSITORY.ORG

KB BITMAGASIN



Data pillar
(tape) Aarhus



Data pillar
(Distributed) Copenhagen



Data pillar
(SAN) Norway



Checksums pillar
Amager

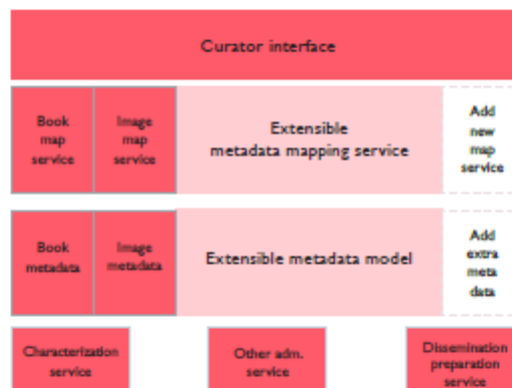


Checksums pillar
Norway



Checksums pillar
Cloud

ADMINISTRATION PLATFORM (VALHAL) HYDRA PLATFORM



Fedora Commons™

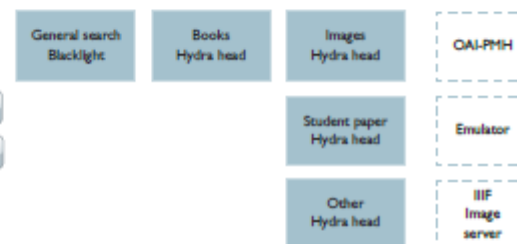


Metadata repository



Asset store

DISSEMINATION PLATFORM (BIFROST) HYDRA PLATFORM



Fedora Commons™



Metadata repository



Asset store

Discussion



- What are your digital preservation needs?
- How can Hydra help in that?
- What would be the most relevant area to further develop Hydra with respect to preservation use cases?