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Oxford DAMS – Design for Longevity

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DAMS Design Principles

- The Theory...
 - Content centred design
 - Layered component architecture
 - Generics over specifics
 - Capability focus
- Hindsight is a wonderful thing...

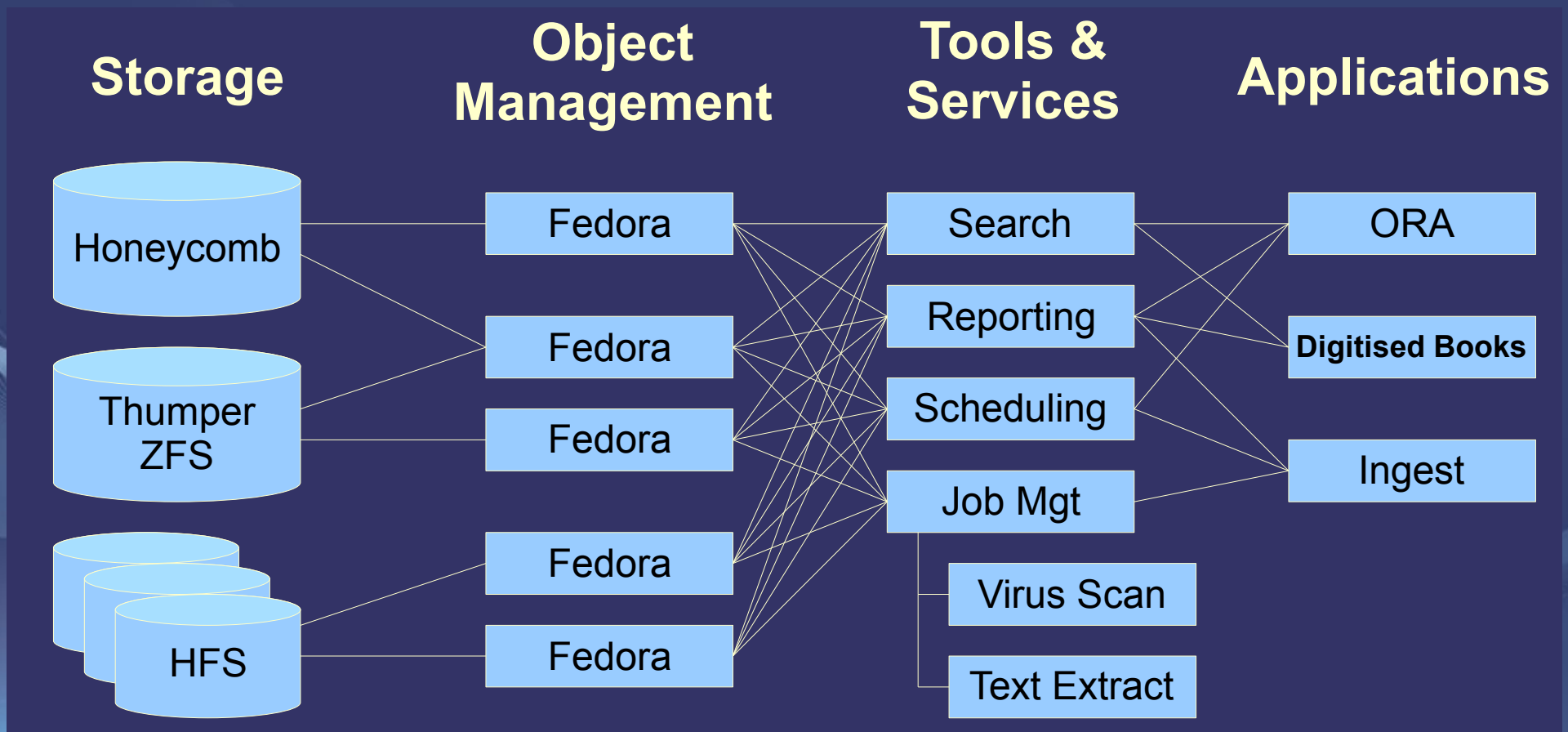
Content Centred Design

- “Librarian's View”
 - People change
 - Requirements & processes change
 - Buildings/containers change
 - Only the content persists
- User requirements/process modelling can only take us so far
 - End up as limitations

Layered Component Architecture (1)

- Systems and standards change rapidly
- “Big bang” implementations are a bad fit
 - Infrequent, inflexible, failure-prone
- Loosely coupled components
 - Web services model (REST > SOAP)
- Any component can be replaced
 - Design/select with a view to replacement
 - Few, simple, well-defined API's

Layered Component Architecture (2)



Generics over Specifics

- Identify generic operations in applications
 - Push into the tools layer
 - Simplifies future application development
 - Replacement can upgrade all applications
- A generic capability is much less likely to become obsolete than a specific one
 - Protects investment in development

Capability Focus

- Every design decision should be reviewed...
 - What does it allow us to do?
 - What might it prevent us from doing that we will really regret later?
- Scalability will always be an issue
- Short focussed workflows
 - Decouple actions as much as possible
 - Avoid packaging – metadata changes!



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DAMS Architecture

- The practice...

Oxford University Research Archive
ora.ouls.ox.ac.uk

Questions

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Oxford Research Archive

ora.ouls.ox.ac.uk

Developer's Blog

oxfordrepo.wordpress.com

Google Code

look for: `python fedora-commons`