

# LionShare: Secure P2P File Sharing and Collaboration

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# Presentation Overview

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- LionShare
  - LionShare Technology Overview
  - A Quick Look at LionShare
  - Potential Future Directions
- Fedora
  - Fedora Overview
- Discussion



# What is LionShare?

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- P2P file-sharing and collaboration tool with “**Secure Accessibility**”
  - Open source project
  - Cross-platform software
- Secure means to LionShare...
  - Based on institutional digital identity
  - Based on certificates
  - Ability for owner to place control on who has access to shared resources
  - Ability for owner to place a license on how a resource is used (Creative Commons)



# LionShare Use Cases

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- Improved P2P File Sharing
  - Psych professor shares 25 videos on effects of alcohol
- Access Control
  - Art prof shares personal Japanese painting collection with students w/permissions for only her students
- Tools to Help Organize and Use Files
  - Art History Slide Library adds discipline-appropriate metadata to organize A&A shared collections
- Tools for Collaboration
  - IST students groups share project finding with each group members w/permissions and use Chat Group to discuss resources



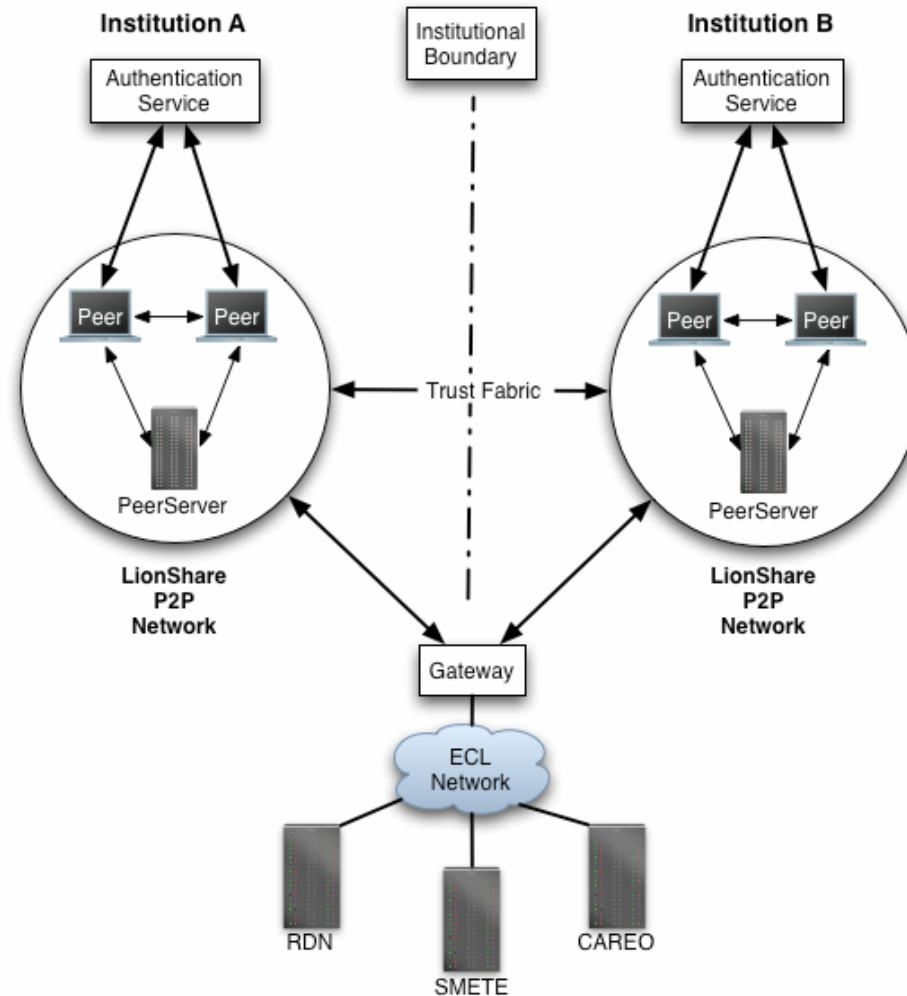
# LionShare Main Features

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- Share securely
- Search
- Organize
- Collaborate



# LionShare Architecture





# Demo of LionShare

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# Future Directions

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# To Support ArchaeoInformatics

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- Browser-base interface
  - Ubiquitous access
    - Wire/Wireless/Mobile Internet
  - Lightweight client architecture
    - Footprint for desktop client is getting light
    - To add more intelligence to the network



# To Support ArchaeoInformatics

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- Semantic Web-base search
  - Interoperability
  - Inference capability
    - Semantic search and discovery for digital information
      - OWL (Web Ontology Language)
      - RDF/RDFS (Resource Description Framework / Schema)



# To Support ArchaeoInformatics

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- Workflow Engine
  - Data set migration
  - Publication approval processes
- Content management platform
  - Collaborative spaces
  - Workflow
  - Web Services architecture
  - Documentation
  - Syndication
  - And more ....



# WebLion CMS Platform

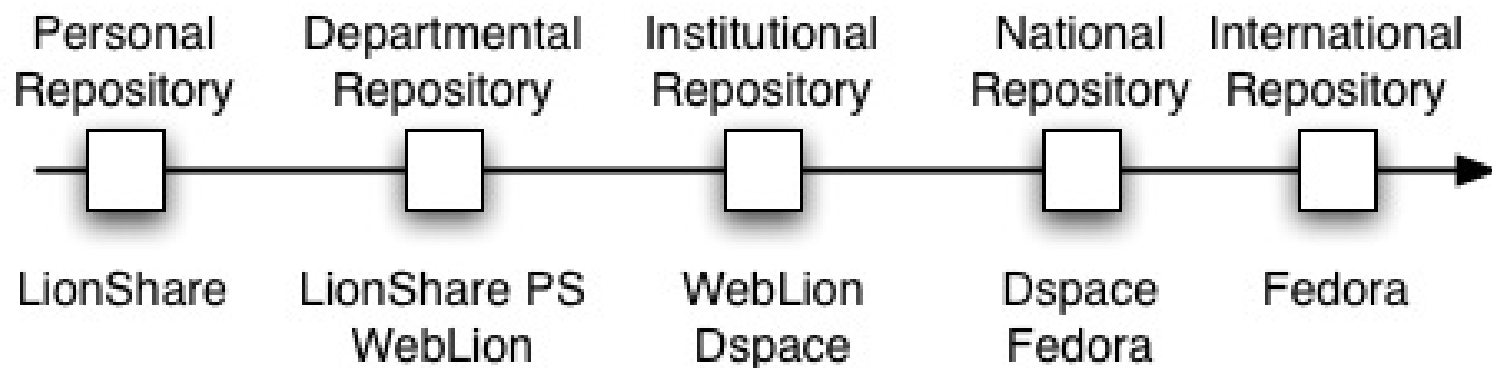
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- Content Management System
- Based on Zope and Plone
- Open Source
- User interface for dynamic workflow
- Supports Web Services
- Modular architecture
  - Collaborative spaces
  - Integrated with ID management system
  - Integrated with LionShare



# The Big Picture

## Repository Continuum





# Fedora Overview

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- Andrew W. Mellon Foundation has granted Univ. of Virginia and Cornell since 2001.
- Open source software development project
- Fedora 1.0 released in May 2003
  - Current version is Fedora 2.2.4
- Gordon and Betty Moore Foundation granted \$4.3M since 2007.
- Web site: <http://www.fedora-commons.org/>



# Fedora Features

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- Flexible Extensible Digital Object Repository Architecture
  - Powerful digital object model
  - Extensible metadata management
  - Expressive inter-object relationships
  - Web service integration
  - Version management
  - Configurable security architecture
  - Open source software



# Fedora Applications

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- Digital preservation
- Institutional repository
- Content management system (CMS)
- Distribute digital library
- Multi-media Web sites

# Discussion

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