

# Toward a Toolbox

Approaches to Service Management



Hydra Connect 2 ♦ Cleveland, Ohio ♦ October 2014

# Our Panel

- Introductions
- Dive into Key Issues
  - Service and support models
  - Reporting and assessment
  - Relationship to development process
  - Challenges
- Open discussion

**Hannah Frost** - Digital Library Services Manager,  
Stanford University Libraries

**Patricia Hswe** - Digital Content Strategist and Head,  
ScholarSphere User Services, Penn State University

**Claire Stewart** - Head of Digital Collections department  
& Director of the Center for Scholarly Communication and  
Digital Curation, the Northwestern University Library

# Stanford

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In this work, a detailed empirical analysis of two kinds of tree-like structure, in a variety of real and synthetic networks, is presented.

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- » [Digital Collections in SearchWorks](#)
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Your Active Collections (24).

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<a href="#">PASIG*DC: Preservation and Archiving Special Interest Group meeting, May 2013</a>		<a href="#">2 items</a>	2 draft
<a href="#">Internal Documents</a>		<a href="#">22 items</a>	1 draft; 21 published
<a href="#">Stanford Law School Monographs</a>		<a href="#">3 items</a>	3 waiting for approval
<a href="#">Graduate School of Education Open Archive</a>		<a href="#">106 items</a>	6 draft; 3 waiting for approval; 97 published
<a href="#">Undergraduate Theses, Department of Biology, 2013-2014</a>		<a href="#">49 items</a>	49 published
<a href="#">Lobell Laboratory</a>		<a href="#">1 item</a>	1 published
<a href="#">Hopkins Marine Station Collection</a>		<a href="#">13 items</a>	6 draft; 7 published
<a href="#">Preserving Virtual Worlds</a>		<a href="#">8 items</a>	8 published
<a href="#">Stanford University Libraries staff publications and research</a>		<a href="#">5 items</a>	5 published

# Stanford

- Two Hydra heads for IR content in prod
  - ETD
  - General purpose
- Product and Service Management team
- Developing service models and tools

# Penn State

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**Featured Researcher**

**John Leeman, Geosciences PhD Student**

John Leeman is a PhD student in the Penn State Rock and Sediment Mechanics Laboratory, part of the geoscience department. He studies earthquakes and earthquake physics at the laboratory scale. His group presses rock samples and studies their frictional properties, rupture nucleation, acoustic velocity, etc. The group also characterizes the friction, permeability, porosity, and velocity behavior of natural samples from places like the San Andreas fault, Antarctica, or New Zealand.

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**Homeland Security News...** X  
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Keywords: Homeland Security, Newsletter, IMPS-HLS

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# Penn State University

- Two Hydra heads in production
  - ScholarSphere (publicly accessible)
  - ArchiveSphere (restricted access)
- ScholarSphere repository service
  - Service owner/manager – University Libraries (UL)
  - Repository services developer team in Information Technology Services (ITS), our central IT division

# Northwestern University

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Digital Image Library\*



World War II Poster Collection at Northwestern University Library



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## Repository | audio + video

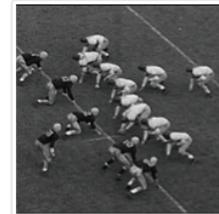
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Robert Marcellus Master Class Audio Archives



Northwestern University Football Films

## Using the System

The Audio+Video Repository houses audio and video collections.

- Use the search box, or browse using the terms on the left side to discover content.
- Some content is only available when you sign in with your NetID and password.
- Login to [Blackboard](#) or [Canvas](#) to access course materials via the Library Media link.



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# Northwestern

- Two production Hydra heads under active development
  - Audio+Video Repository (Avalon)
  - Image Repository (formerly DIL, now + Menu)
- Models for interaction: service manager and service team (product owner is member) ↔ development team
  - Library Technology: Digital Collections and Enterprise Systems
  - NUIT: streaming server owners, central help desk

# Service models

Who are the users? And who is working with them? What roles do they play?

- Single service manager
- Tag teaming
- Service team

# Support models

## How are user issues addressed?

- Roles
- Response expectations
- Adapting to fluctuations
  - Users: Scaling up
  - Developers: Scaling back

# Relationship to development

## How do service managers and developers interact?

- Bi-directional (each informs the other)
- Use cases / user stories - *lingua franca*
- Also related to technology strategy
  - “Hydra Strategy Team”

# Reporting and assessment

What is important to collect and how (often)?

- Metrics and analytics
- User testing
- Feedback

# What challenges do you face?

- Changes in engineering resources
- Managing multiple Hydra heads
- Strategizing for existing and future Hydra infrastructure
- Service model philosophy
- Need for shared service management tools

# Sample Service Management Tool

The screenshot shows a Google Sheet titled "Release to Production Checklist" with a menu bar (File, Edit, View, Insert, Format, Data, Tools, Help) and a toolbar. The sheet contains a checklist with columns for Readiness Item, Details, and Status. The checklist is organized into sections: Service Operations (rows 5-19) and Service Support (rows 20-33). The status of each item is indicated by a colored background: green for "done", yellow for "in progress", red for "needs def", and white for "TBD".

	A	B	C	D
1	<b>Service Readiness</b>			
2	<b>Readiness Item</b>	<b>Details</b>		<b>Status</b>
5	<b>Service Operations</b>			
6	Puppetized			done
7	Performance	Determine if app requires highload configuration		
8	Deployed by capistrano 3			done
9	Checks against gemnasium	Checks against gemnasium		done
10	Security review	have we reviewed for security readiness (webauth, ports, etc.) (need way more definiton of this line)		
11	Code base is on DLSS github	Code base is on DLSS github		done
12	Working tests in place	should have working tests & a CI build on travis (required coverage stats?)		in progress
13	Dependencies specified	Uses is_it_working to define required dependencies (see e.g., <a href="https://argo.stanford.edu/is_it_working">https://argo.stanford.edu/is_it_working</a> )		in progress
14	Server Monitoring	Tracking underlying servers in support of service		done
15	Service Monitoring	service-specific Nagios dashboard set up		
16	Ticket tracking	Clarification of where (and which queue) the issues for this project reported (Jira? Github?)		TBD
17	Pre-prod/demo server setup	Do we need a pre-release server environemnt for demo testing?		
18	Service notification list and response policy	Who gets notifications when service outages or problems occur, and what is the appropriate level of response?		
19				
20	<b>Service Support</b>			
21	Ongoing application support requirements	What are the ongoing applications support requirements, and who is responsible for them?		in progress
22	Established support email list	create public email list of [servicename]-support@lists.stanford.edu		done
23	Establish "users" email list	create public announcement/user email dist lists		
24	Determine response/triage flow	who is "first on call" to answer questions (typically, the service manager, who may then route to engineers)		
25	Determine tech response/triage flow	who's first responder for server/app issues (Nagios alerts)		
26	Service manager/team privs	Are the service manager & service team set up with appropriate privs to address basic support issues?		
27	Monitoring responsibility	Determine who owns actively reviewing whatever monitoring has been set up		
28	Appropriate ticketing	Do we need a ticketing queue to track support issues (vs development)		done
29	Escalation process in place	Determine what kind of service this is? Mission critical or casual app and what escalation support needs are		needs def
30	Audience-specific responses	Do we need different response levels for internal vs guest users?		
31	Internal FAQ created	Are there known issues/FAQs we should generate for common issues		
32	Service Administration	Are we clear on workflow and process for who does service admin (e.g., setting up privs?)		
33	Request workflow	Does this service have a request aspect (for setting up privs, etc.). If so, is this process in place?		