SOCIETY OF CALIFORNIA ARCHIVISTS 2014 AGM
SESSION 4:
TECHNOLOGY & ARCHIVES EXCHANGE FORUM
PROGRAMMER & ARCHIVIST COLLABORATION
Background Information

UC San Diego Library, Digital Library Development Program

LEARN MORE ABOUT

Digital Library Development Program: http://libraries.ucsd.edu/about/digital-library/
Research Data Curation Program: http://libraries.ucsd.edu/services/data-curation/
Digital Collections Beta: http://library.ucsd.edu/dc
Contact Us: dlp@ucsd.edu

DIGITAL COLLECTIONS OPEN-SOURCE TECHNICAL REFERENCES:

Project Hydra: http://projecthydra.org/
Project Blacklight: http://projectblacklight.org/

DIGITAL COLLECTIONS COMMUNICATION PLATFORM:

JIRA: https://www.atlassian.com/get-jira
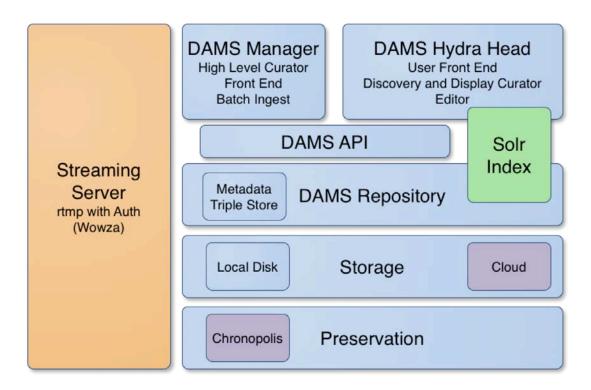Confluence: https://www.atlassian.com/software/confluence

TECHNICAL TOOLS AND SERVICES:

Github [external source code management]: http://github.com/ucsdlib/
Stash [internal source code management]: https://www.atlassian.com/software/stash
Bamboo [continuous integration & delivery]: https://www.atlassian.com/software/bamboo

UC SAN DIEGO LIBRARY DIGITAL ASSET MANAGEMENT SYSTEM (DAMS)

The UCSD Digital Library Asset Management System (DAMS) is a locally developed digital repository designed to store and manage digital assets of UC San Diego. The DAMS is an expression of our XDRE (eXtensible Digital Resource Environment) framework. Components include:
- Resource Description Framework (RDF) data model,
- Solr (an indexing service based on Lucene),
- JSON (Java Script Object Notation data exchange format),
- Samba and OpenStack file services
- ARKs (Archival Resource Keys, unique identifiers),
- Java based development platform,
- Ruby on Rails based display and discovery system using Hydra and Blacklight

The DAMS' flexible architecture can accept a variety of data formats, schemas and web services when ingesting digital assets. It stores digital content files and allows for the creation, indexing and searching of associated metadata to locate and retrieve the content files. Content can be composed of files in any format, including text, images, sound, video and data sets.

UCSF Legacy Tobacco Documents Library

LEARN MORE ABOUT

LTDL: http://legacy.library.ucsf.edu
Drug Industry Document Archive: http://dida.library.ucsf.edu
Contact us: http://www.library.ucsf.edu/tobacco/contact

TOOLS
Redmine Project Management: http://www.redmine.org
Confluence (Wiki): https://www.atlassian.com/software/confluence
Google Drive: https://drive.google.com
Lucidchart.om https://www.lucidchart.com
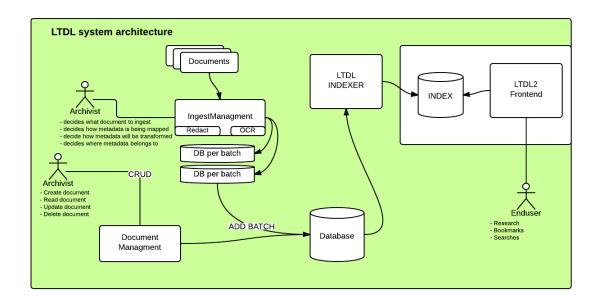Bitbucket.org: a source code repository in the cloud: https://bitbucket.org

SOFTWARE
Solr: open source enterprise search platform: https://lucene.apache.org/solr/
MySQL: open source relational database: http://dev.mysql.com

IaaS INFRASTRUCTURE AS A SERVICE
Amazon Web Services: http://aws.amazon.com
Google Cloud Platform: https://clould.google.com

LTDL SYSTEM ARCHITECTURE

LEGACY TOBACCO DOCUMENTS LIBRARY INFRASTRUCTURE

Loadbalancer

FRONTEND
(Customer facing)

Webserver

Server 03

NFS MOUNT

Webserver

Server 04

Appserver

Appserver

NFS MOUNT

MYSQL DATABASE

Database Server

RabbitMQ AMQP Message Broker

STAGING
Appserver/Webserver

INDEXER

INGEST MANAGER

OCR Webapp
Appserver/Webserver

Artifact Storage
Base Volumes

VM CLUSTER STORED ON SAN

12TB DOCUMENT STORAGE ON SAN

NFS mount

SAN Snapshot 1

Base Volume [EXT4]