

IGeLU Conference 2014

Alma, "the Cloud" and the Evolution of the Library Systems Department

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Agenda

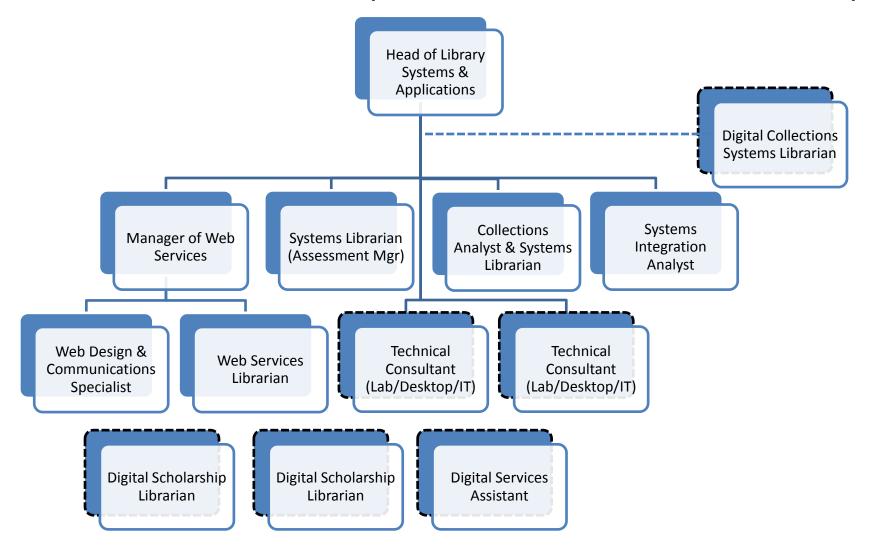
- Background:
 - About Boston College
 - BC University Libraries' Systems Department
- The BC Systems Timeline
- The BC "System of Systems"
- Changing Work from 1999 2014
- Distribution of Technical Responsibilities
- The "Clouds"
- Q&A

About Boston College

- Private, Jesuit Catholic University
- Chestnut Hill, Massachusetts
- 9,500 Undergraduates
- 4,500 Graduate/Professional
- 900 Faculty
- 8 Libraries; 3 million volumes; 740 online databases
- ARL Library
- Carnegie Classification: Comprehensive Doctoral/Research Institution with High Research Activity

The BC University Libraries' Systems Dept.

13 Staff Members (10 Professional; 3 Info Tech)



Boston College Library Systems Timeline

fears

1999-2000

2001-2004

2006-2007

2009-Now

Systems

Aleph@BC **Systems Staff: 4**

Metalib / SFX **ERMdb Systems Staff: 5** Primo@BC ARC (failed) **Systems Staff: 7** Into the cloud: Alma@BC (2012) **Systems Staff: 13**

- 1. Sysadmin 2. Training
 - ~17 million sites ~414 million users Netscape source rel JavaScript 3rd ed SalesForce API rel

- 1. Sysadmin
- 2. Reporting
- ~50 million sites ~900 million users Wikipedia release 250 Metalib DBs

- 1. Sysadmin
- 2. Service Dev
- 3. Reporting

- 1. Service Dev
- 2. Tech Strategy
- 3. Reporting
- 4. Sysadmin

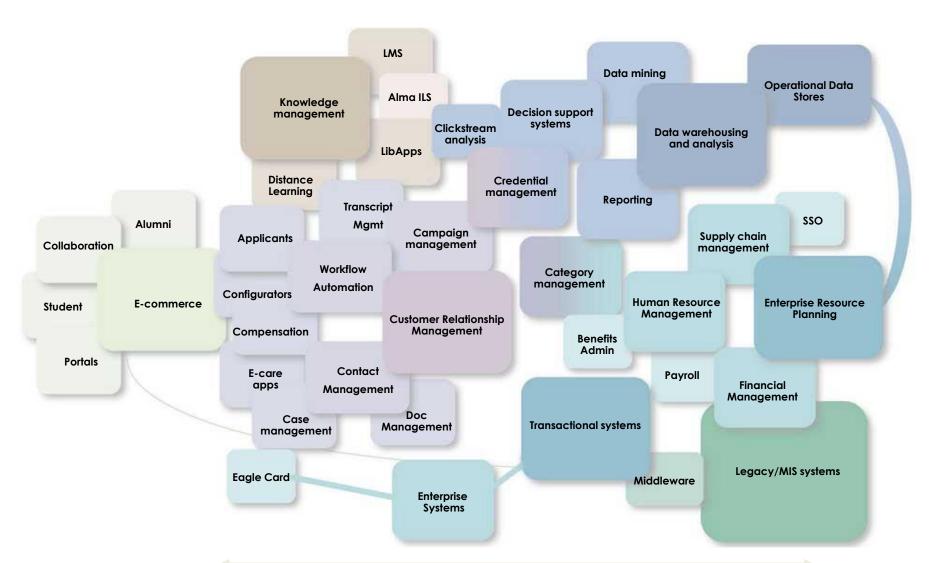
Web adopts Ajax **20 SFX Targets**

~80 million sites ~1.2 billion users XServer/Primo API Twittr release ~500 open APIs

~900 million sites ~2.8 billion users ~1.2 billion FB accts ~9000 open APIs 740 Metalib DBs

We Have Become a System of Systems

Over time BC moved from a mainframe-based administrative system (which included the ILS) to a massively complex system of systems. Effectively developing and implementing new online library services in this environment requires extensive collaboration.



Changing Work from 1999 – 2014

We went from focusing on...

- Aleph Support
 - Table Changes for Aleph/OPAC
 - ILS Service Packs / Hotfixes
 - Bib Data Indexing
 - Client Updates / Support
 - Troubleshooting
- Oracle Database Admin
- OPAC Customization
- Building Aleph SQL Reports
- Extracting Data for External Systems (Financial / OCLC / ILL, etc...)
- KB Updates / Maintenance
- Building and supporting ERMdb
- Building Library Web Site and Tools for End Users
- Talking about new technologies

To focusing on...

- Using data to power new dynamic, public-facing services
- Building reusable public (and staff) services using APIs and enterprise data
- Developing assessment tools
- Data access / data mining
- Tracking and responding to patron behavior
- Building library service integration tools for LMS and University systems
- Issue tracking / troubleshooting
- Alma / Primo configuration
- Collaboration on faculty and university projects
- Service level agreements. Cloud technologies.

Distribution of Responsibilities

Library Systems

*** Technology strategy ***
Assessment / reporting
App / interface / service dev
Sysconfig / troubleshooting
Integration / research projects

Online Library Services

BC ITS

Application infrastructure
Local cloud
Database admin
Backup / monitoring

Ex Libris & Others

App hosting
Upgrades / patches
Sysconfig / troubleshooting
Database admin
Backup / monitoring

"Cloud" vs. Local Applications @ BC Libraries

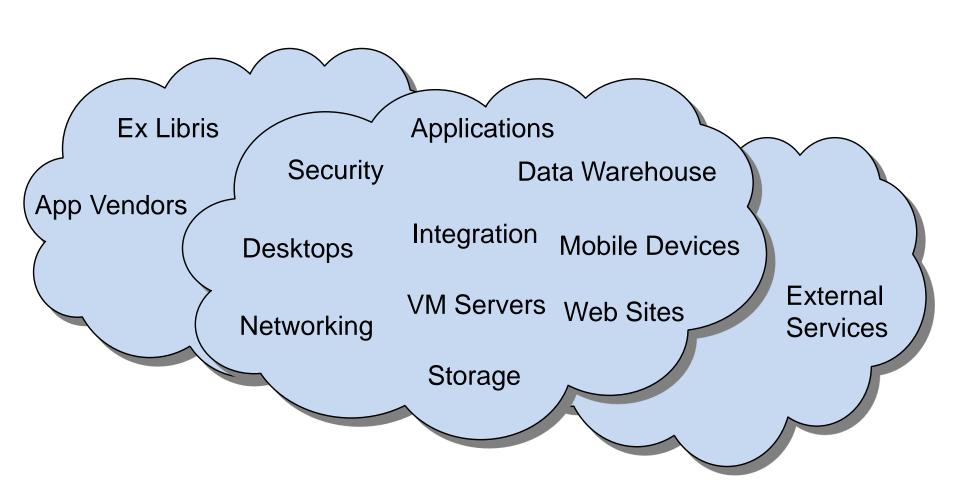
Cloud Applications

- Alma / UResolver
- Primo
- LibApps CMS (In Development)
- LibGuides
- Canvas LMS
- WorldCat Services
- Digital Measures (Faculty Activity)

Local Applications

- Metalib Federated DB Search
- Digitool
- LOCKSS (Public Network)
- MetaArchive LOCKSS (Private)
- Ultra: Born Digital Archiving Server
- Local BC Cloud (Virtual Servers)
 - EZProxy (Prod & Test)
 - Islandora Institutional Repository
 - ILLiad Interlibrary Loan
 - Confluence (Wiki & Jira)
 - Archivists Toolkit
 - Archives Space
 - OJS: BC Online Journals
 - 15 Web Application / Indexing & Reporting VMs

Many Clouds?



So the "clouds" help ...but there are risks

- Security ceded to cloud provider
 - Confidential data (how are they securing?)
 - Access control / authorization
 - Multitenancy and segregation of data
 - Software / VM exploits
- Availability of software & services / Unplanned downtime
 - What is vendor's redundancy plan? Do they allow audits?
 - Can you ensure continuity of service when there is a problem?
- Loss of control over your data & physical tech infrastructure
 - Legal jurisdiction, local laws may influence access & security
- Do you have access to backups / mirrored data?
- Ownership of your data (are you sure you own it?)
- Can you access your data in ways that match your needs?
 - Can you get all of your data out when/how you need?
 - What if the vendor goes out of business?
- Interoperability: How good is the API? Is it well-documented?
- Lock-in to service
 - Can you move app if vendor makes changes you do not like?



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Questions / Discussion?

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