University of Massachusetts Medical School

eScholarship@UMMS

University of Massachusetts and New England Area Librarian e-Science Symposium

2014 e-Science Symposium

Apr 9th, 12:00 AM

What Goes Where When in Managing Research Data?

David B. Lowe University of Connecticut - Storrs

Follow this and additional works at: https://escholarship.umassmed.edu/escience_symposium



Part of the Scholarly Communication Commons



This work is licensed under a Creative Commons Attribution 4.0 License.

Repository Citation

Lowe, D. B. (2014). What Goes Where When in Managing Research Data?. University of Massachusetts and New England Area Librarian e-Science Symposium. https://doi.org/10.13028/xmh9-0b18. Retrieved from https://escholarship.umassmed.edu/escience_symposium/2014/program/3

Creative Commons License



This work is licensed under a Creative Commons Attribution 4.0 License.

This material is brought to you by eScholarship@UMMS. It has been accepted for inclusion in University of Massachusetts and New England Area Librarian e-Science Symposium by an authorized administrator of eScholarship@UMMS. For more information, please contact Lisa.Palmer@umassmed.edu.

What Goes Where When in Managing Research Data?

David B. Lowe

Data Management Services Librarian UConn Libraries 4/9/2014

University of Massachusetts and New England Area e-Science Symposium

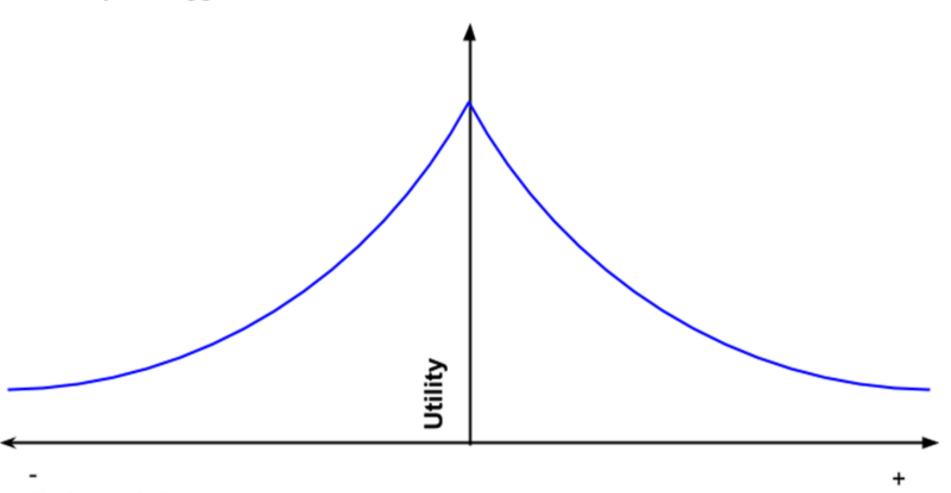
The Current State:

NSF-AGS	NSF-AST	NSF-BIO	NSF-CHE	NSF-CISE	NSF-DMR	NSF-EAR	NSF-EFRI	NSF-EHR	NSF-ENG	NSF-GEN	NSF-PHY	NSF-SBE	superset c
Products 1 of research	Products 1 of research	Data Collected, 1 Formats and Standards	Products 1 of research	Roles and 1 responsibi litles	Types of 1 data produced	1 Types of data	Types of 1 data produced	Data generated by the project	Roles and 1 responsibl lities	Types of 1 data produced	Types of 1 data produced	Roles and responsibi littles	Roles and responsibi littles
Data format	2 Data format	Data Storage 2 and Preservati on	Data format	Types of data	Data and 2 metadata standards	Data and 2 metadata standards	Data and 2 metadata formats	Period of 2 data retention	2 Expected data	Data and 2 metadata standards	Data and 2 metadata standards	2 Expected data	Types of data produced
Access to data, and data 3 sharing practices and policies	Access to data and data 3 sharing practices and policies	Dissemina 3 tion Methods	Access to data and data 3 sharing practices and policies	Policies for access and sharing and appropria te protection and privacy	Policies for access and sharing, and 3 provisions for appropria te protection /privacy	Policies for access and sharing	Access polices and provision	Data format 3 and dissemina tion	Period of 3 data retention	Policies 3 for access and sharing	Policies for access and sharing, and 3 provisions for appropria te protection //privacy	Period of 3 data retention	Period of data retention
Policies and provision s for re- use, re- 4 distributi on and producti on of derivativ es	Policies and provision for re- use, re- distributi on and products of derivativ es	Policies for Data 4 Sharing and Public Access	Policies and provision for re- use, re- 4 distributi on and products of derivativ es	Data storage and preservati on of access	Policies and provision 4 s for re- use, re- distributi on	Policies and provision 4 s for re- use, re- distributi on	Means of 4 sharing the outcome	Data storage and preservati on of access	Data 4 formats and metadata	Policies for re- 4 use, redistrib ution	Policies and provision 4 s for re- use, re- distributi on	Data format 4 and dissemina tion	Data format and dissemina tion
5 Archiving of data		Roles and 5 Responsib ilities	5 Archiving of data	Additional possible data 5 manageme nt requireme nts	Plans for archiving 5 and preservati on	Plans for archiving and preservati on of access		Additional possible data 5 manageme nt requireme nts	Data dissemina tion and policies for public access, sharing and publication n delays	Plans for archiving 5 & preservati on	Plans for archiving 5 and preservati on	Data storage and preservati on of access	Data storage and preservati on of access
									Data storage 6 and preservati on of access			Additional possible data 6 manageme nt requireme nts	Policies for access and sharing, and provisions for appropria te protection /privacy
													Policies and provision s for re- use, re- distributi 7 on
													Plans for archiving and preservati on Dissemin
													9 ation Additional possible data manageme nt requireme

So do you feel like this?



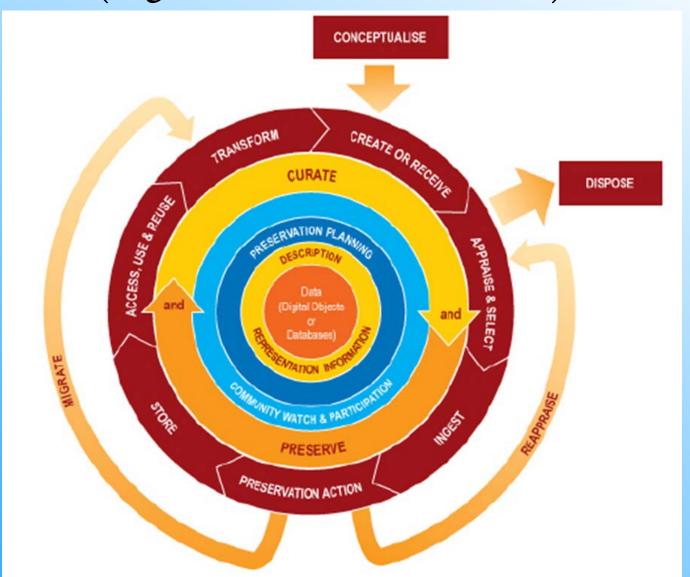
Utility of Suggested Solutions in the Context of Innovative Environments



"It depends."

"One size fits all."

Data Life Cycle Model (Digital Curation Centre, UK)



From Cycle to Linear Timeline

10+ years





3 years











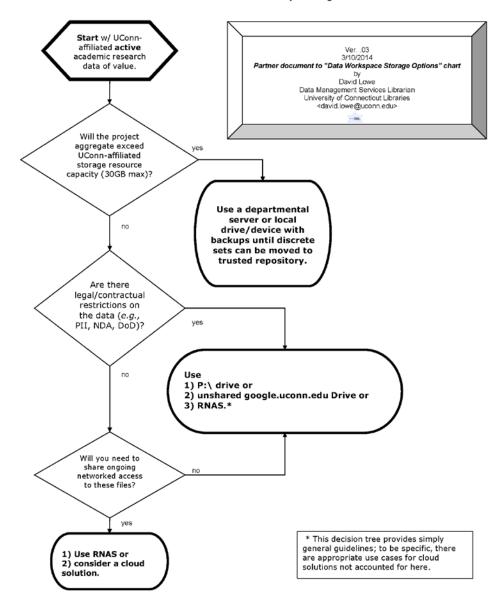
I. UConn Affiliate Resource:	maxGB free	GroupShareable (within UConn)	GlobalShareable (beyond UConn)	©	8	Link:	
					State-hosted; not single-		
					sign-on; more for dept.		
CM/FileNet	TBD	Yes	No	secure	documents	http://ecm.uconn.edu	
					questionable long term		
FS or "P:\ drive," individual	10	No	No	secure	solution	http://fileserver.uconn.edu	
					questionable long term		
FS or "P:\ drive," departmental	10/member	Yes	No	secure	solution	ıı	
ilelocker.uconn.edu	2	Yes	Yes	secure	short-term storage, sharing	http://filelocker.uconn.edu	
					not for large or A/V files,		
github.uconn.edu	1	Yes	Yes	secure	but code	http://github.uconn.edu	
google.uconn.edu Docs/Drive	30	Yes	Yes	secure	not long-term solution	http://google.uconn.edu	
					now B2B only via dept.; B2C		
					coming; not free above		
RNAS storage device	15	Yes	Yes	secure	allotment	http://rnas.uconn.edu/	
I. Departmental or Personal Resource:							
					questionable long term		
Departmental server	varies	varies	varies	convenient	solution	{your department}	
nedia/devices	varies	No	No	convenient	highly fragile	{your favorite electronics retailer}	
III. Cloud solutions:							
					terms/security		
Box.com	10	Yes	Yes	convenient	questionable	http://www.box.com/	
					terms/security		
Dropbox.com	2+	Yes	Yes	convenient	questionable	http://www.dropbox.com/	
	60MB upload				terms/security		
Evernote	max/month	Yes	Yes	convenient	questionable	http://www.evernote.com/	
					terms/security		
Google Docs/Drive (not via UConn)	15	Yes	Yes	convenient	questionable	http://drive.google.com	
					terms/security		
Apple) iCloud	5	photos +iOS	photos +iOS	convenient	questionable	http://www.icloud.com	
					terms/security		
MS) onedrive.com (was "skydrive")	7	Yes	Yes	convenient	questionable	http://www.skydrive.com	
IV. Coming to UConn:							
<u> </u>				secure, managed,	not free above allotment;		
.ibrary-managed Repository*	TBD	Yes	Yes	long-term	for archiving static data	http://classguides.lib.uconn.edu/datamanageme	

Active Data Working Space Decisions

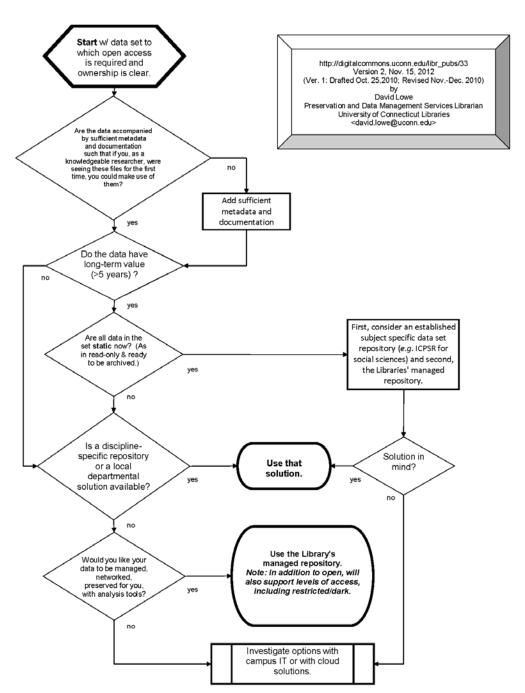
Acronyms:

- B2B (from options matrix): Business-to-Business, viz.: UITS to your department
- 2. B2C (from options matrix):
 Business-to-Customer, viz.: UITS to
 you
- DoD: Department of Defense (restricted for national security)
- 4. ECM (from options matrix): Enterprise Content Management
- 5. EFS (from options matrix): Enterprise File Servers
- NDA: Non-Disclosure Agreement (restricted by contract with a business entity)
- 7. PII: Personally Identifiable Information (restricted by laws for individual privacy)
- RNAS: Research Networked Attached Storage

Determining Optimal Working Space for Academic Research Data in UConn's Environment, or:
"Where should I work with my files right now?"



Static Data Decisions



Tightening Compliance Evidence from NSF Review Panel

- Fresh warning/cautionary tale from March 2014!
- PI had written in DMP (without our input):
 - "The data will be kept on the PI's data cluster for ten years beyond the life of the project. The long-term preservation of digital objects ... is the PI's ...responsibility."
- Reviewer responded:
 - "NSF specifies that it is the University, not the PI, that has ultimate responsibility for long-term preservation of the data."
 - Also questions access for research community

Near Future Work

- More decision trees!
 - Internal workflows
 - Embargoing and licensing levels
 - Cost modeling
- Direct costing institutional infrastructure
 - Within OMB Circular A-21 stipulations
 - Also per <u>NSF DMP FAQ #5</u>:
 - does not have to be "unfunded mandate"

?

dave@uconn.edu
@davidblowe
s.uconn.edu/dave