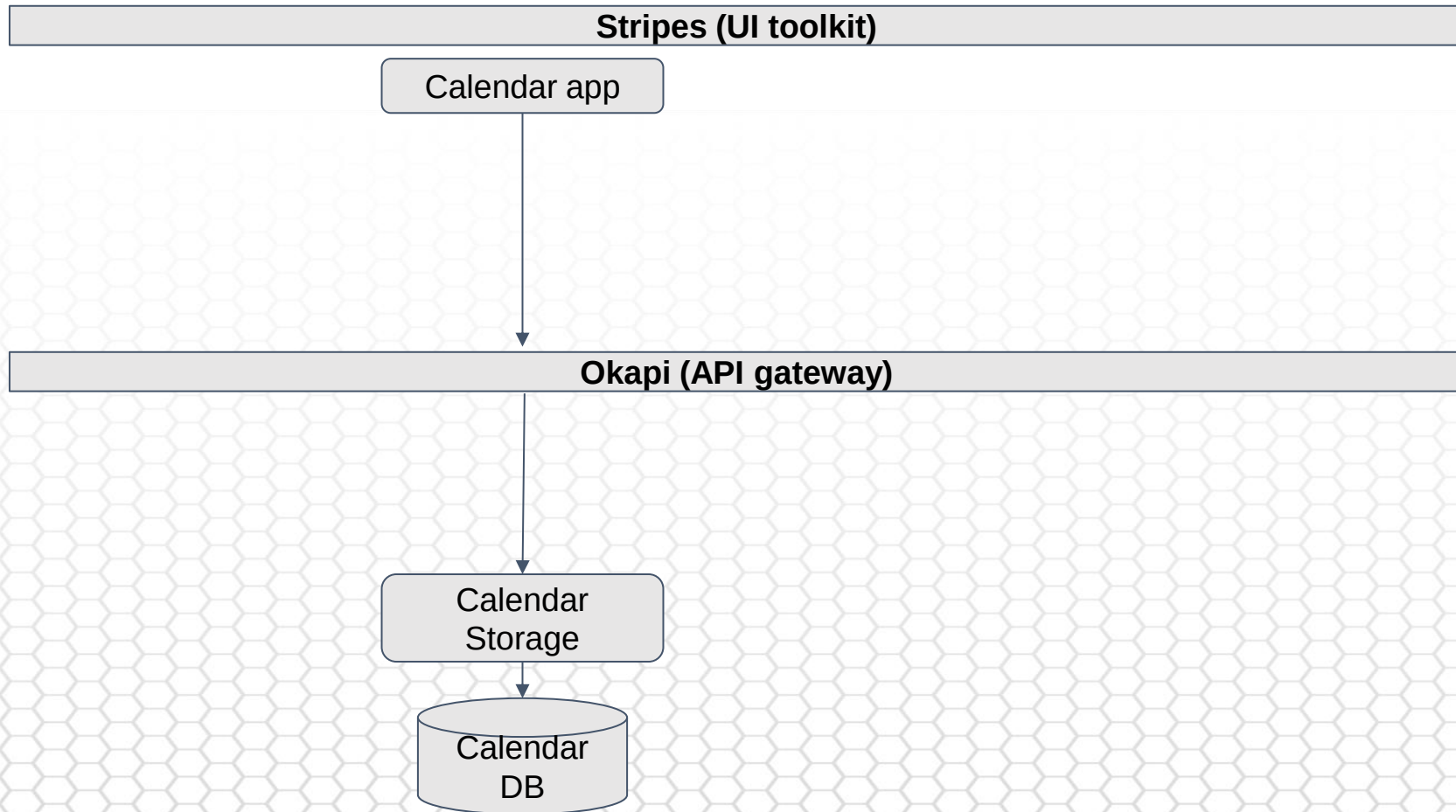
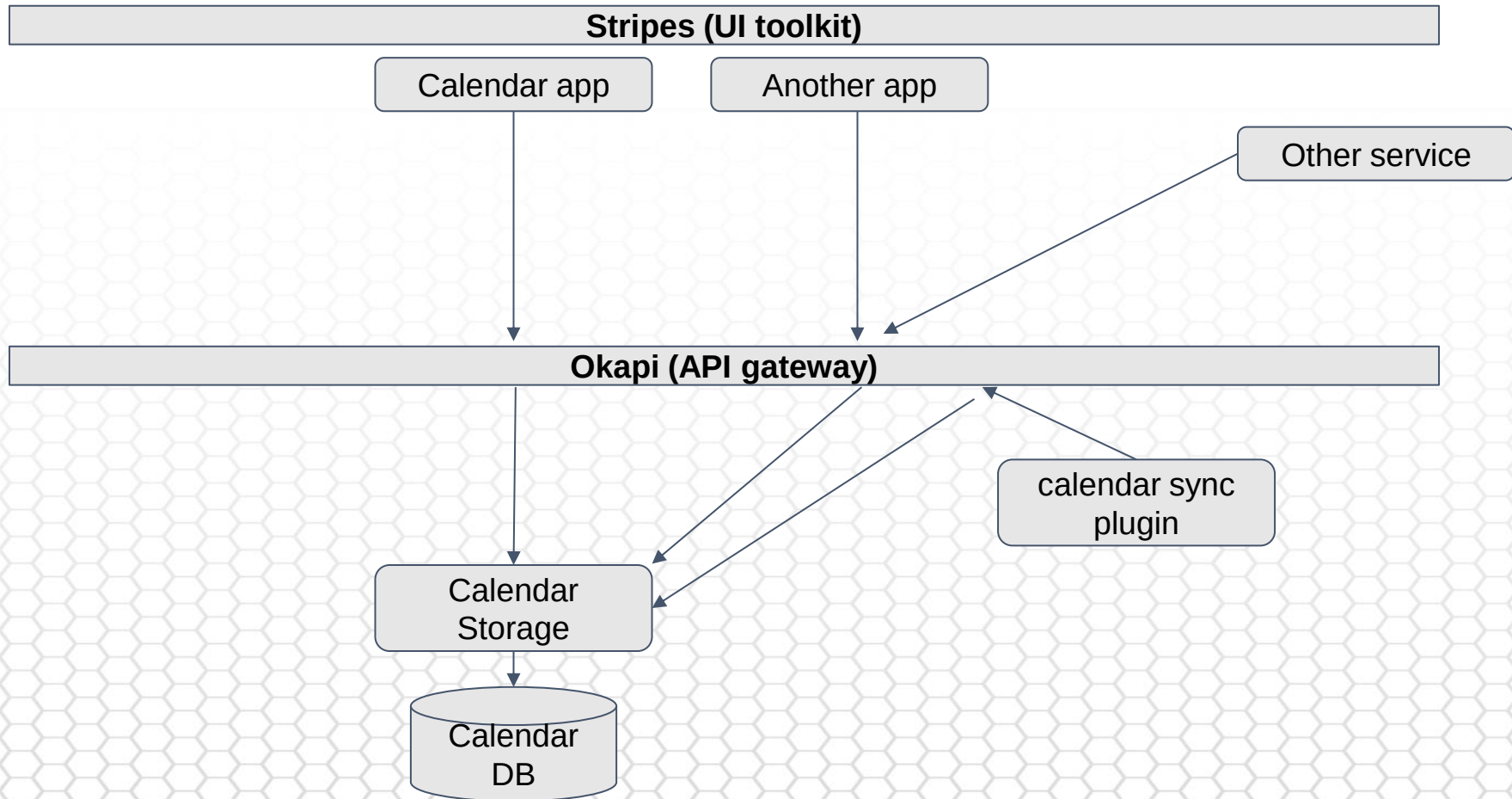
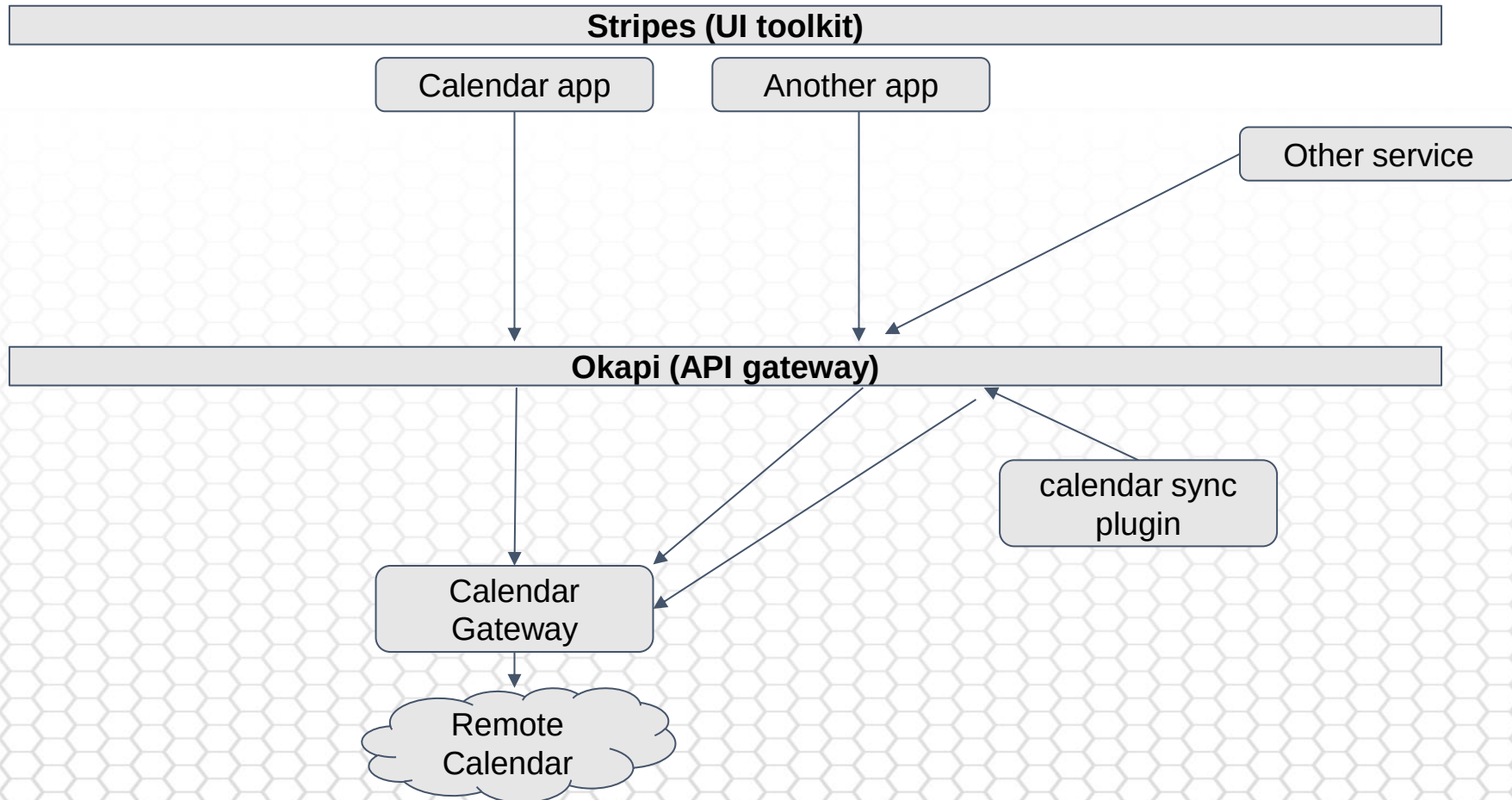


Pushing boundaries: FOLIO beyond the ILS

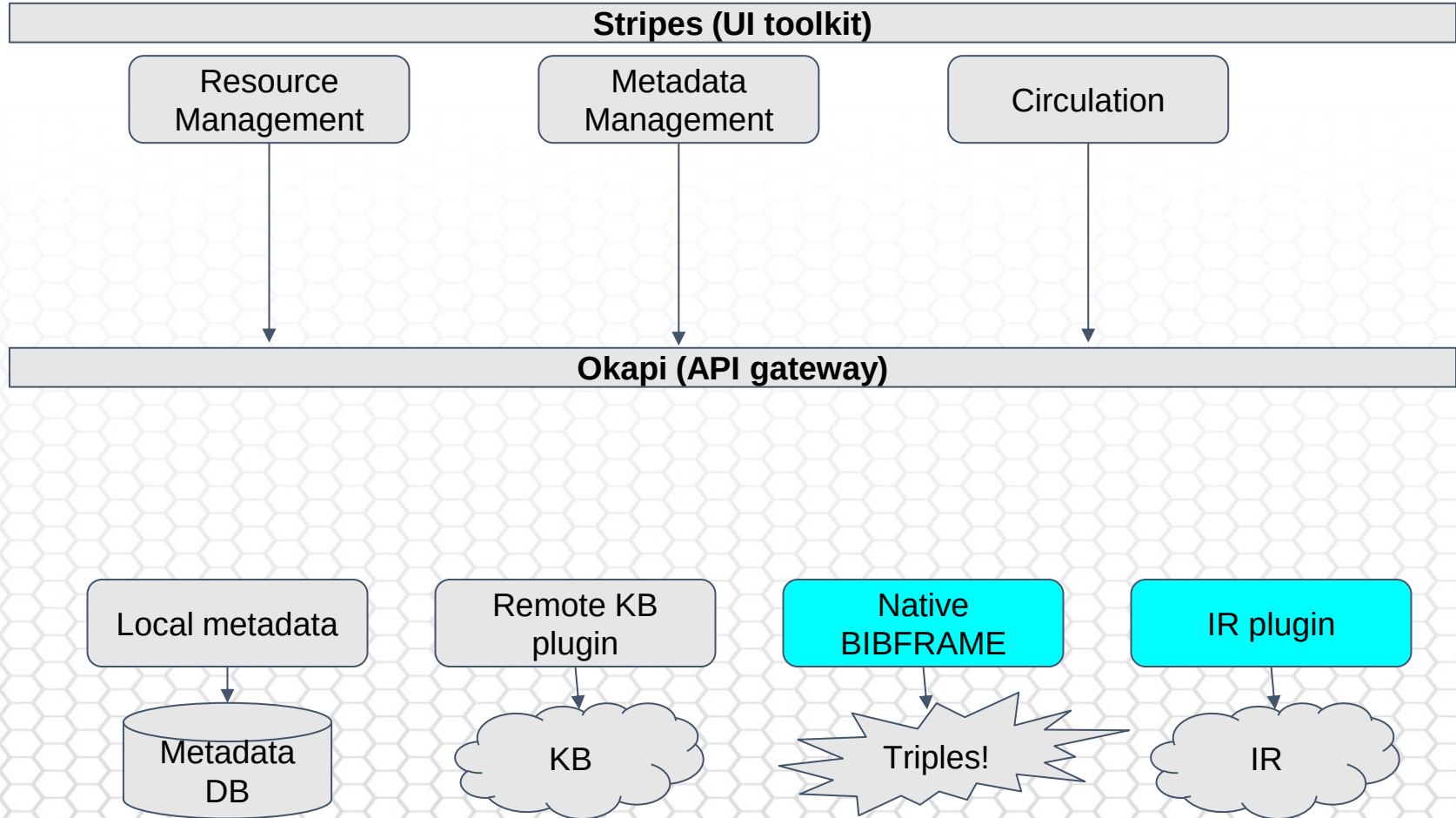
Sebastian Hammer
Index Data



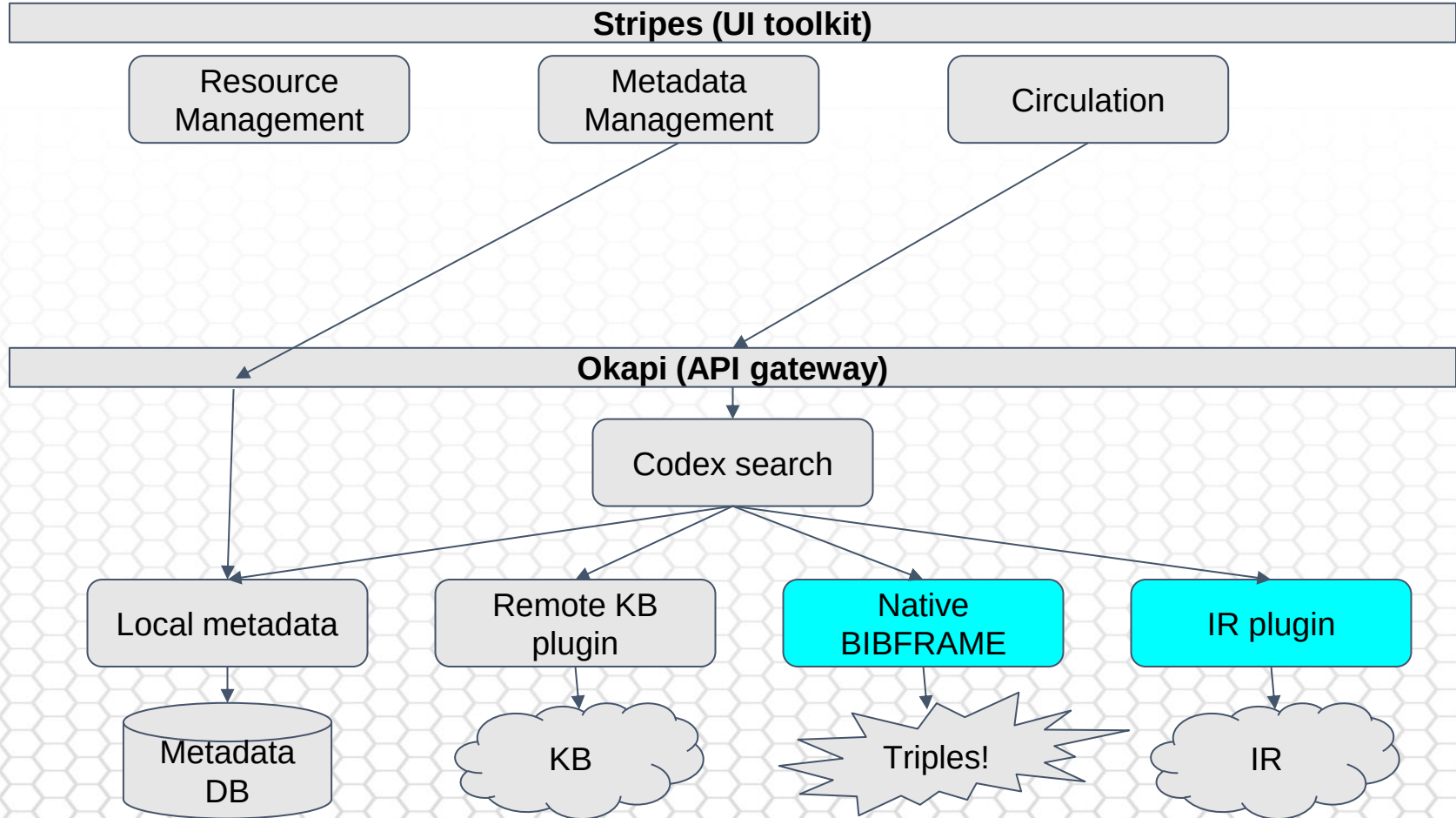




Bibliographic Metadata



Bibliographic Metadata



Keep apps small
and simple!

Each app should
do one thing well



FOLIO

Sebastian

Not Secure

folio-snapshot-stable.aws.indexdata.com/users/view/c9030267-5d3f-4dae-83ea-9e0e5d38cfde?filters=active.Active&que...

Users

Users

Inventory

Check out

Check in

Requests

Calendar

Codex Search

eHoldings

Vendors

Settings

Search & Filter

Reset all

Search

Status

Patron group

Users

58 Records found

+ New

Active	Name†	Barcode	Pa
Active	Bashirian, Eloise Chaya	461691977318746	staff
Active	Bechtelar, Amya	893914003148292	staff
Active	Bernhard, Alysa Reginald	652841523063777	gradu.
Active	Bernier, Isobel	746103146332327	faculty
Active	Bins, Keenan Vernie	313803484373320	faculty
Active	Blanda, Chloe Hazle	739606997596634	under
Active	Bogisich, Darlene Karl	510627141911278	staff
Active	Dach, Elmore Graciela	376434032632666	gradu.
Active	Denesik, Trystan	68058716539031	under
Active	DuBuque, Nels Weldon	472912414101617	faculty
Active	Farrell, Aron Dimitri	661638503117988	under
Active	Feeney, Edwardo Corrine	654391705375012	gradu.
Active	Gislason, Ava Hildegard	389787812526623	under
Active	Gottlieb, Desmond Jamie	510120821930673	under
Active	Hessel, Vanessa Jennie	371335122333722	staff
Active	Hills, Chet Junius	429111261439473	under
Active	Hirthe, Tamia	25521835145472	gradu.
Active	Howe, Seamus Eleanora	103008565134544	staff
Active	Huel, Stephon Lindsey	589151669670293	under
Active	Jacobi, Carlotta Diego	637474867225321	staff
Active	Jacobi, Delphia Beau	474896727726758	gradu.
Active	Jacobi, Eddie Dorcas	173825679767322	staff

Bashirian, Eloise Chaya

Collapse all

User information

Record last updated: 4/13/2018 3:35 AM

Last name	First name	Middle name	Barcode
Bashirian	Eloise	Chaya	461691977318746
Patron group	Status	Expiration date	Username
staff	active	3/15/2019	deonte

Extended information

Contact Information

Email	Phone	Mobile phone	Preferred contact
caleigh@hand-rogahn-and-becker.coop	1-269-249-7888 x4991	720.715.9121	Mail (Primary Address)

Addresses

Primary

Address Type	Address line 1	Address line 2	City
Work	95210 Bartell Plains		Selma
State/Prov./Region	Zip/Postal Code	Country	
AA	51641-5248	US	

FOLIO

Sebastian

←

→

↺

Not Secure

folio-snapshot-stable.aws.indexdata.com/inventory/view/3086ebea-a8e6-4afc-be7c-7574776c5fe3?filters=&query=al&sort...

🔑

☆

⌂

📁

🔍

🔒

🔧

📦 Inventory

👤 Users

📦 Inventory

🔍 Check out

📦 Check in

📄 Requests

📅 Calendar

🔍 Codex Search

📦 eHoldings

🏢 Vendors

⚙️ Settings

🔔

👤

✕

Search & Filter

🔄 Reset all

🔍 Search

All (title, contribut

al

✕

📁 Resource Type

☐ 3-D Objects

☐ Books

☐ Charts Posters

☐ Computer Files

☐ eBooks

☐ Error

☐ Kits

☐ Maps

☐ Mixed Material

☐ Music (Audio)

☐ Music (MMS)

☐ Music (Scores)

☐ Old Code

☐ Serials

☐ Spoken Record

☐ Theses

🔍

Inventory

4 Records found

+ New

Title	Contributors	Publishers
Al Gore	Baptiste, Tracey.	
Al Gore	Steffoff, Rebecca	
Al Gore	Anderson, Dale	
Al Gore and global warming	Harmon, Daniel E.	

✕

Al Gore

📄

✎

💬

Instance ID

3086ebea-a8e6-4afc-be7c-7574776c5fe3

Metadata source

TBA

Resource identifier

ISBN 1604139498 (hardcover)

ISBN 16376525

ISBN 2010030592

ISBN 9781604139495 (hardcover)

ISBN ocn606772036

Resource title

Al Gore

Contributor

Baptiste, Tracey.

Resource type

Books

📁 Holdings: Main Library >

👁️ View holdings

+ Add item

Item: Barcode	Status	Material Type
9546958212529	Available	book
9493877766418	Available	book
2887532577331	Available	book

FOLIO

Sebastian

Not Secure | folio-snapshot-stable.aws.indexdata.com/calendar

Calendar

Users

Inventory

Check out

Check in

Requests

Calendar

Codex Search

eHoldings

Vendors

Settings

Institutional calendar

today

back

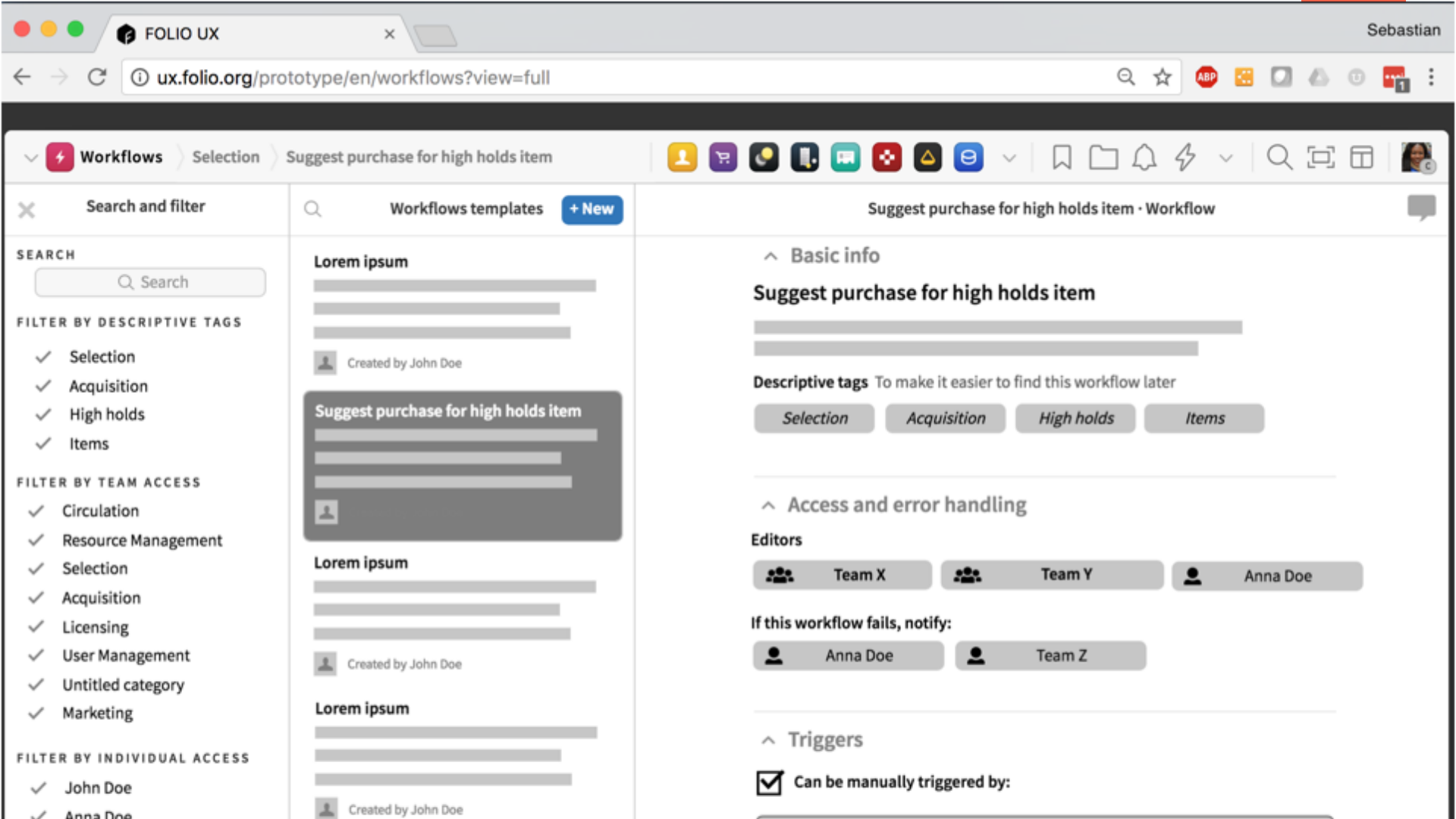
next

April 2018

month

week

Sun	Mon	Tue	Wed	Thu	Fri	Sat
01	02	03	04	05	06	07
08	09	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	01	02	03	04	05



FOLIO UX

Sebastian

ux.folio.org/prototype/en/workflows?view=full

Workflows

Selection

Suggest purchase for high holds item

Search and filter

SEARCH

Search

FILTER BY DESCRIPTIVE TAGS

✓ Selection

✓ Acquisition

✓ High holds

✓ Items

FILTER BY TEAM ACCESS

✓ Circulation

✓ Resource Management

✓ Selection

✓ Acquisition

✓ Licensing

✓ User Management

✓ Untitled category

✓ Marketing

FILTER BY INDIVIDUAL ACCESS

✓ John Doe

✓ Anna Doe

View workflow iteration log

Workflows templates

+

New

Lorem ipsum

Created by John Doe

Suggest purchase for high holds item

Created by John Doe

Lorem ipsum

Created by John Doe

Lorem ipsum

Created by John Doe

Lorem ipsum

Created by John Doe

Suggest purchase for high holds item · Workflow

An item's status changes to "on hold"

Workflow steps

Create variable for item
numberOfHolds = numberOfHolds + 1

Condition
numberOfHolds > 6

If condition is true:
Create task of type "Order Suggestion"
Assign to: John Doe

Timeout
Wait 90 days

Change variable
numberOfHolds = numberOfHolds - 1

When was this workflow iterated

FOLIO design paradigm



Decompose

Keep apps small and simple; each app should do one thing well



Combine

Combine apps into complex workflows to meet the needs of the library

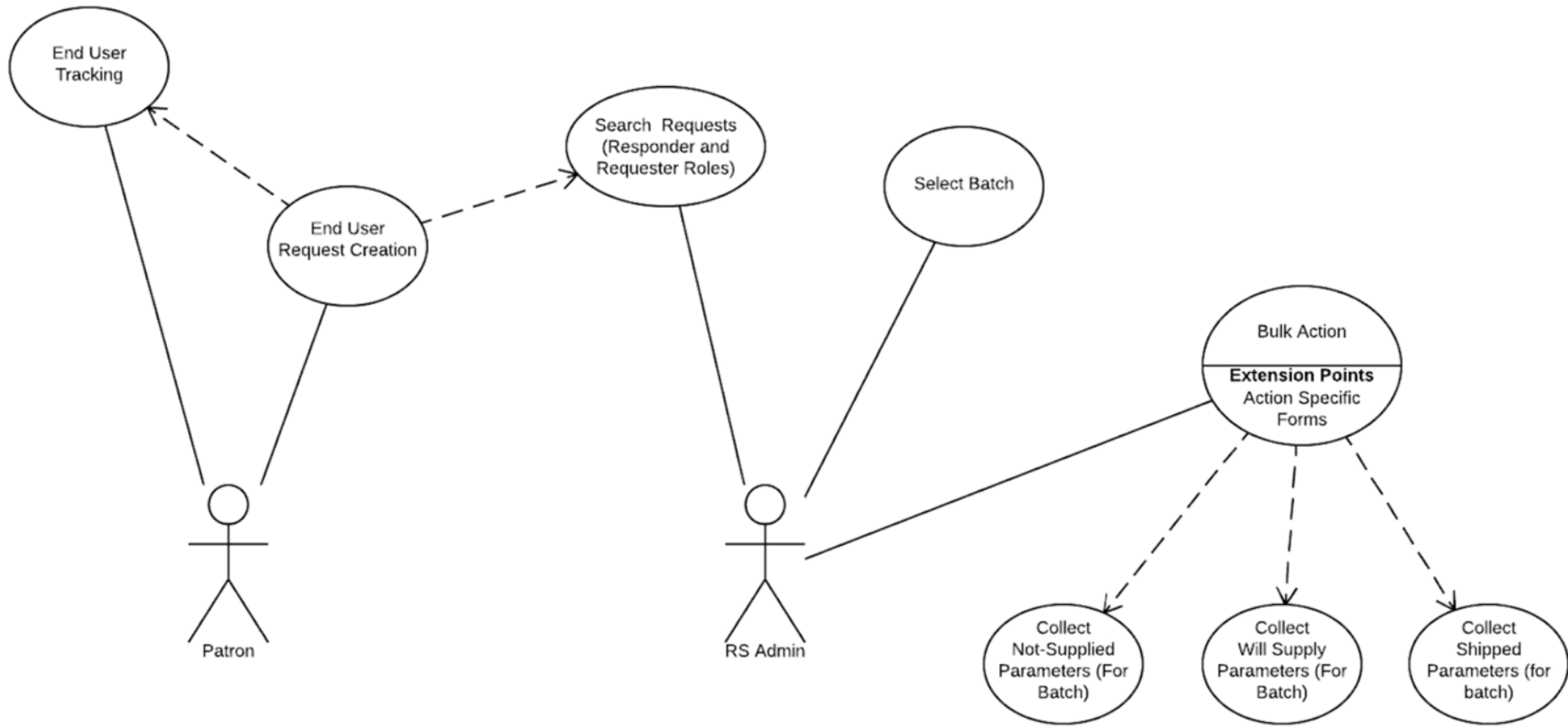


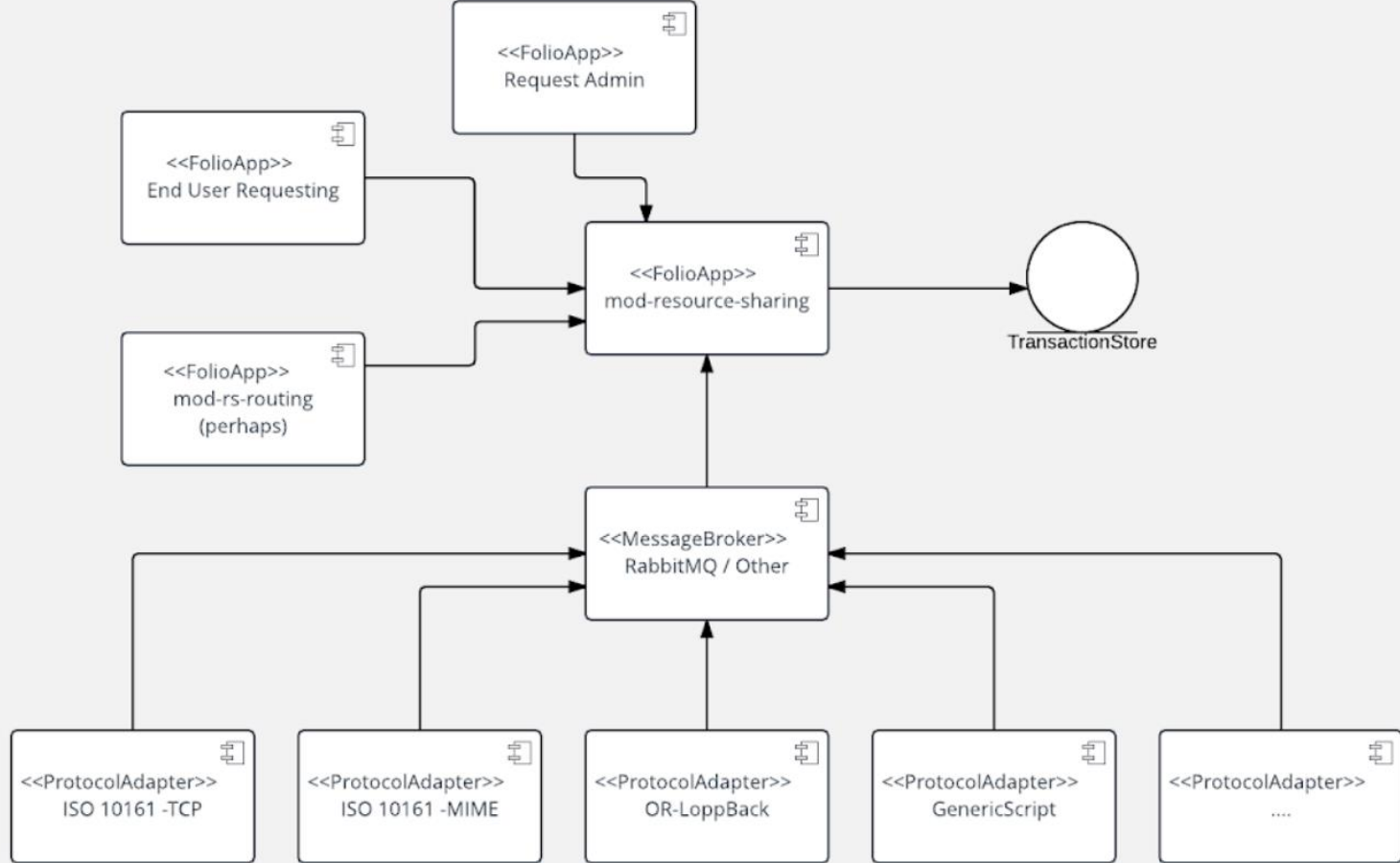
Share!

Workflows can be shared between organizations

Resource Sharing (ILL) in FOLIO







Resource Sharing :: Request Submission

×

Resource Sharing Request

title*

The effect of Caffeine on the seasoned applications developer

subTitle*

titleOfArticle*

 Please fill in this field.

Please fill in this field.

itemType*

patronId*

pagination

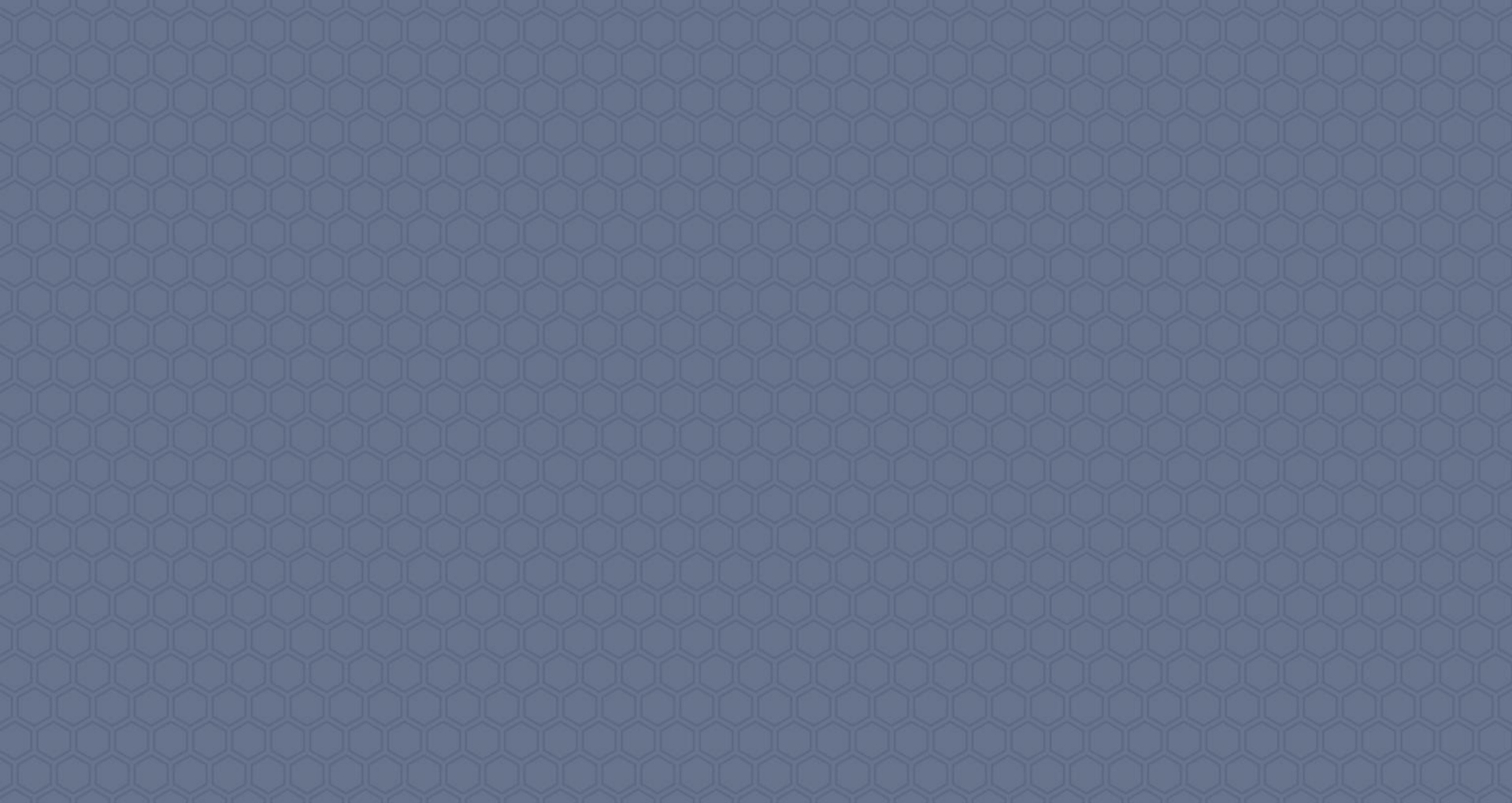
publisher

Resource Sharing :: Request Management

FOLIO Settings		Users Resource sharing		
Q of the		Resource Sharing Requests		Create
		2 Results Found		
Item Type		TITLE	SUBTITLE	TITLEOFARTICLE
Serial		Americal Libraries	THE MAGAZINE OF THE AMERICAN LIBRARY ASSOCIATION	Terri Grief
Book		Wibble	Wobble	The wobblest Wubbles of the Ribble
				serial
				Book

Challenges to explore

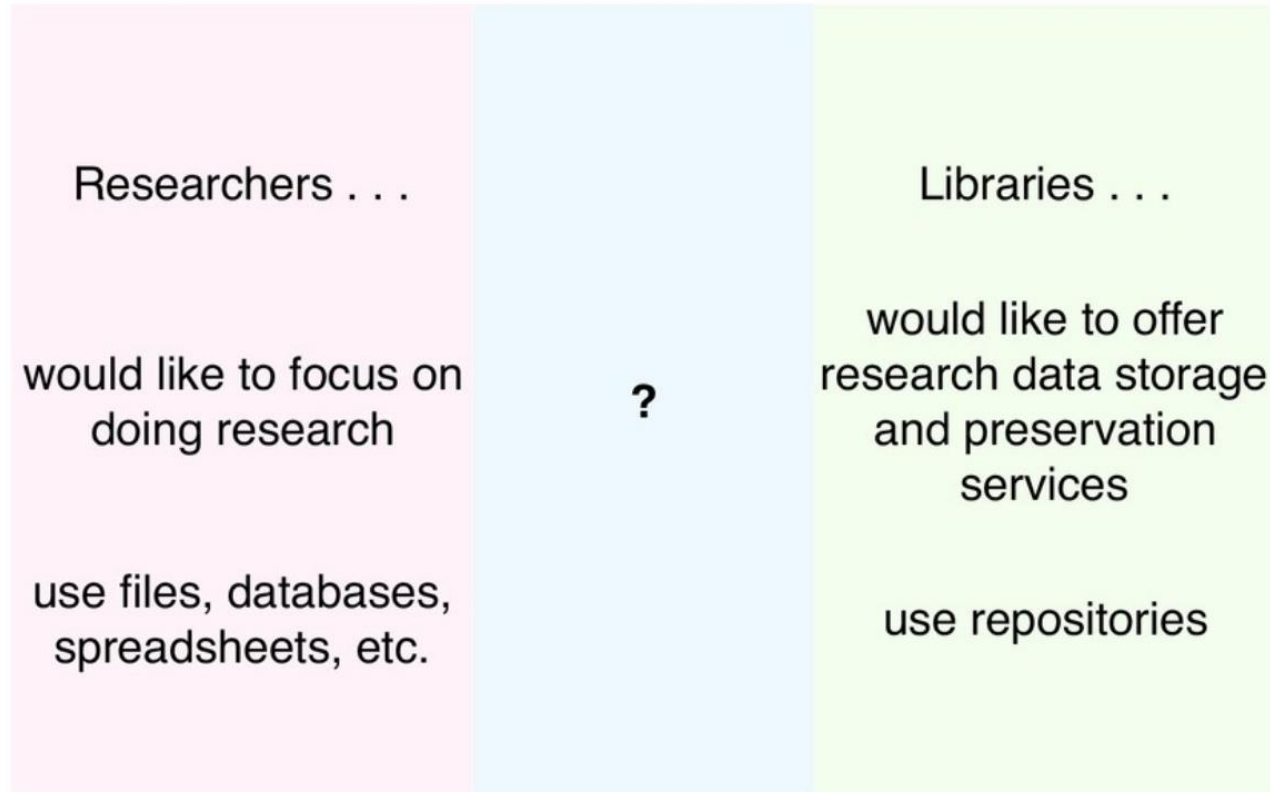
- Directory Services / Organisational Context / Hierarchical Policy DB
- Connection with discovery/catalog services
- Construction / Experiments in Service/Module Design
- Organization as a possible “sister” project to FOLIO



Research Data in FOLIO?



Managing data: research and libraries



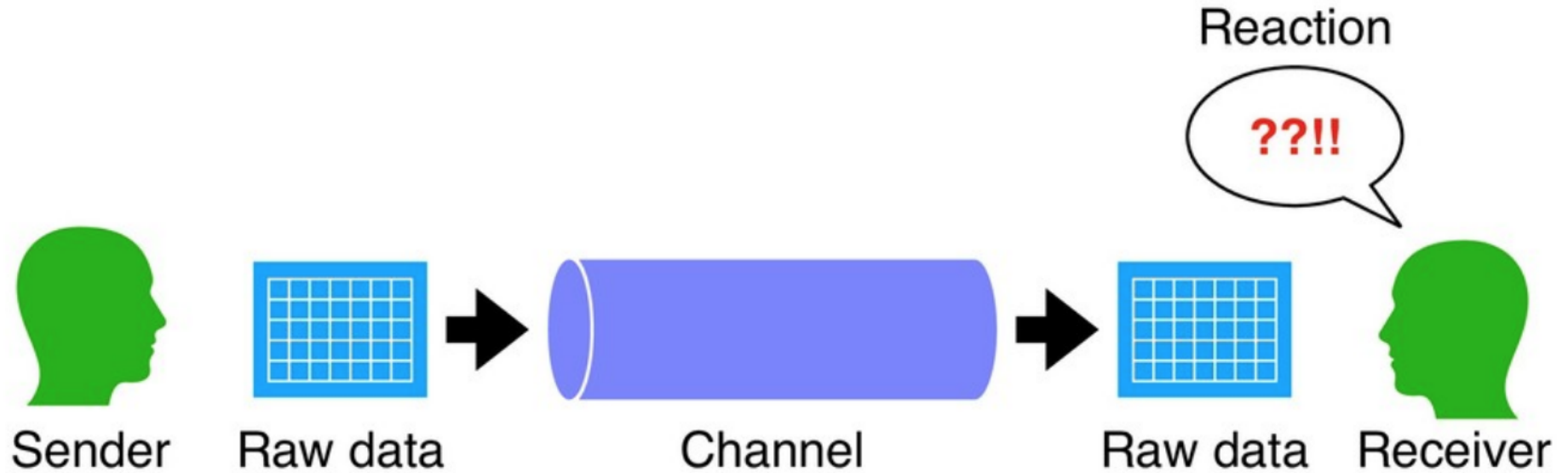
Focus in on data sharing



Sharing a data set

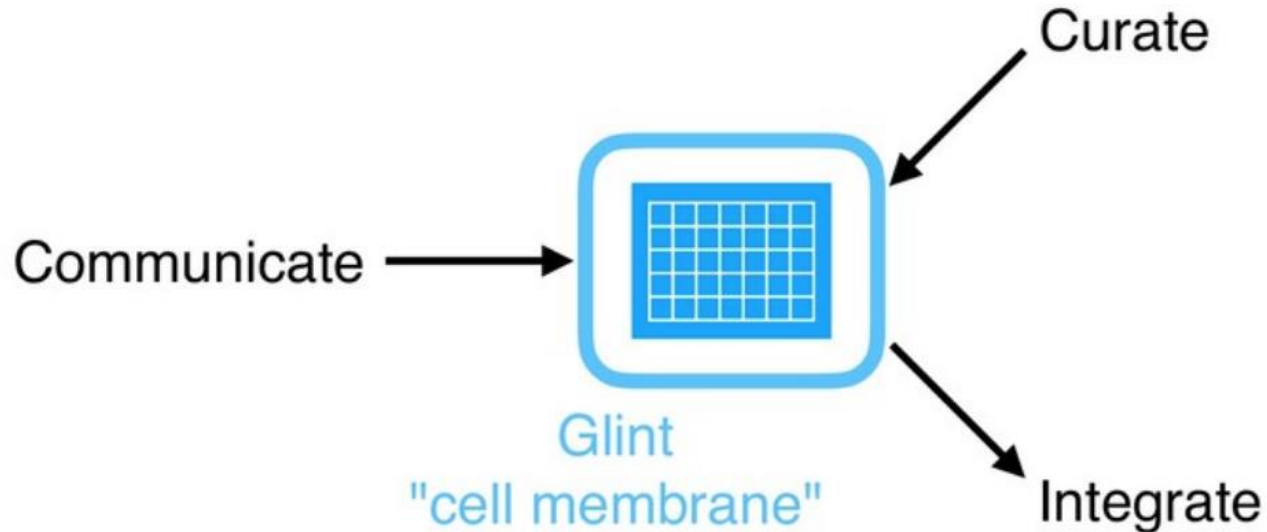


Sharing a data set

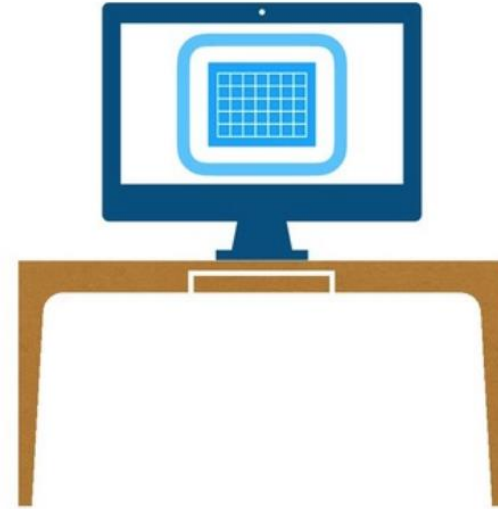
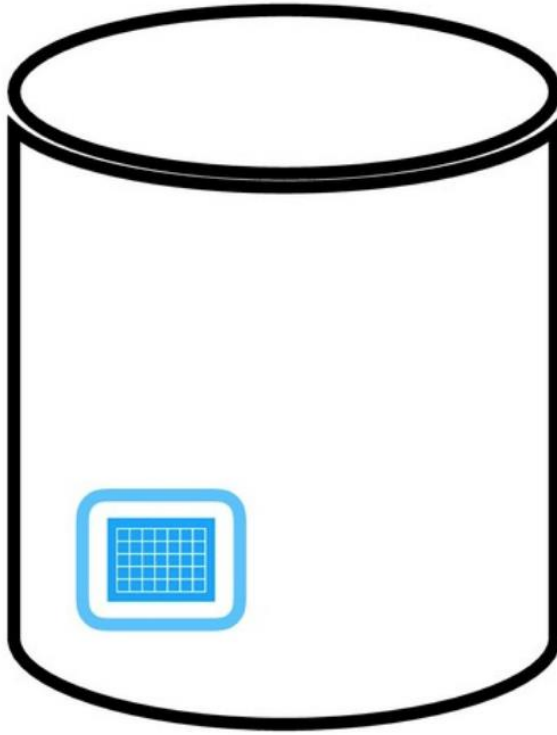


The receiver needs more information about the data

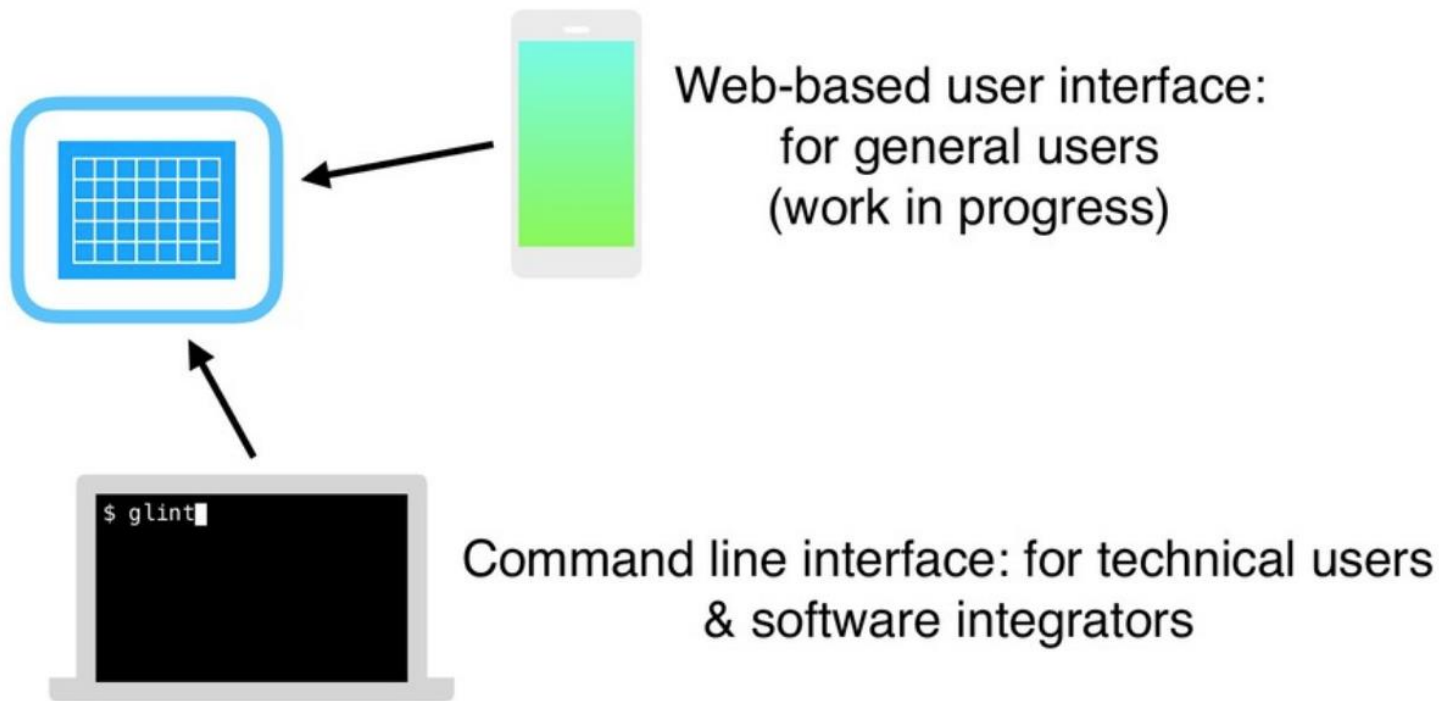
Glint is software that adds a thin layer of services to data



The data can reside in a repository, on a lab server, etc.

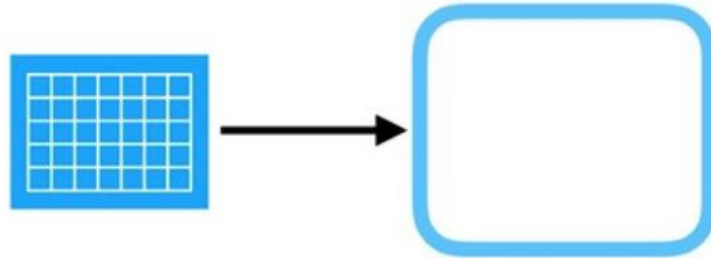


Using Glint



Posting data on a Glint server

```
$ glint post ocean.csv  
https://glintcore.net/izzy/ocean
```



Sharing data & retrieving it in a web browser

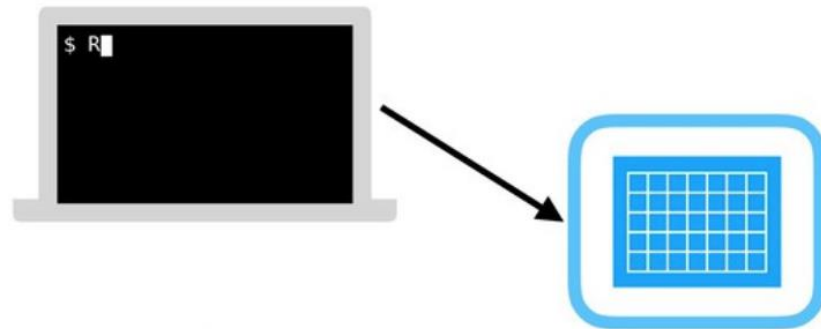


Sharing data & retrieving it in a web browser



id	t	record	site_id	air_temp_avg	baro_press_avg	rel_hum_avg	dew_pt_avg	vpr_
1	2016-12-19 17:04:00	8109	1		792.5	171.399993896484		
2	2016-12-19 17:34:00	8110	1		789	163.699996948242		
3	2016-12-19 18:04:00	8111	1		790.400024414062	169.699996948242		
4	2016-12-19 18:34:00	8112	1	12.6400003433228	1012	92.6999969482422	11.5	1.3550
5	2016-12-19 19:04:00	8113	1	13.2600002288818	1011	92.5	12.0799999237061	1.4079

Retrieving data in R



```
> ocean <- read.csv(  
  "https://glintcore.net/izzy/ocean" )
```

```
> ocean
```

	id	t	record	site_id	air_temp_avg	baro_press_avg	rel_hum_avg
1	1	2016-12-19 17:04:00	8109	1	NA	792.5	171.4
2	2	2016-12-19 17:34:00	8110	1	NA	789.0	163.7
3	3	2016-12-19 18:04:00	8111	1	NA	790.4	169.7
4	4	2016-12-19 18:34:00	8112	1	12.64	1012.0	92.7
5	5	2016-12-19 19:04:00	8113	1	13.26	1011.0	92.5

	dew_pt_avg	vpr_press_avg	wind_speed	wind_dir	stdev	wind_gust	wtr_lvl_avg	real
1	NA	NA	0.443	26.72	0.048	0.443	1.238093	
2	NA	NA	0.443	26.72	0.048	0.443	1.237691	
3	NA	NA	0.000	0.00	0.000	0.000	1.238556	
4	11.50	1.355	0.000	0.00	0.000	0.000	1.237252	
5	12.08	1.408	0.000	0.00	0.000	0.000	1.236872	

Changing how data are retrieved

[https://glintcore.net/izzy/ocean?show\(t,air_temp_avg\)as\(tsv\)](https://glintcore.net/izzy/ocean?show(t,air_temp_avg)as(tsv))

izzy / ocean

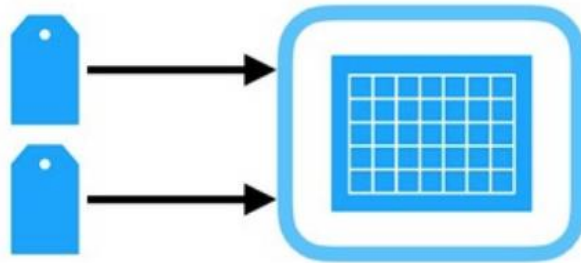


id	t	record	site_id	air_temp_avg	baro_press_avg	rel_hum_avg	dew_pt_avg	vpr_
1	2016-12-19 17:04:00	8109	1		792.5	171.399993896484		
2	2016-12-19 17:34:00	8110	1		789	163.699996948242		
3	2016-12-19 18:04:00	8111	1		790.400024414062	169.699996948242		
4	2016-12-19 18:34:00	8112	1	12.6400003433228	1012	92.6999969482422	11.5	1.3550
5	2016-12-19 19:04:00	8113	1	13.2600002288818	1011	92.5	12.0799999237061	1.4070

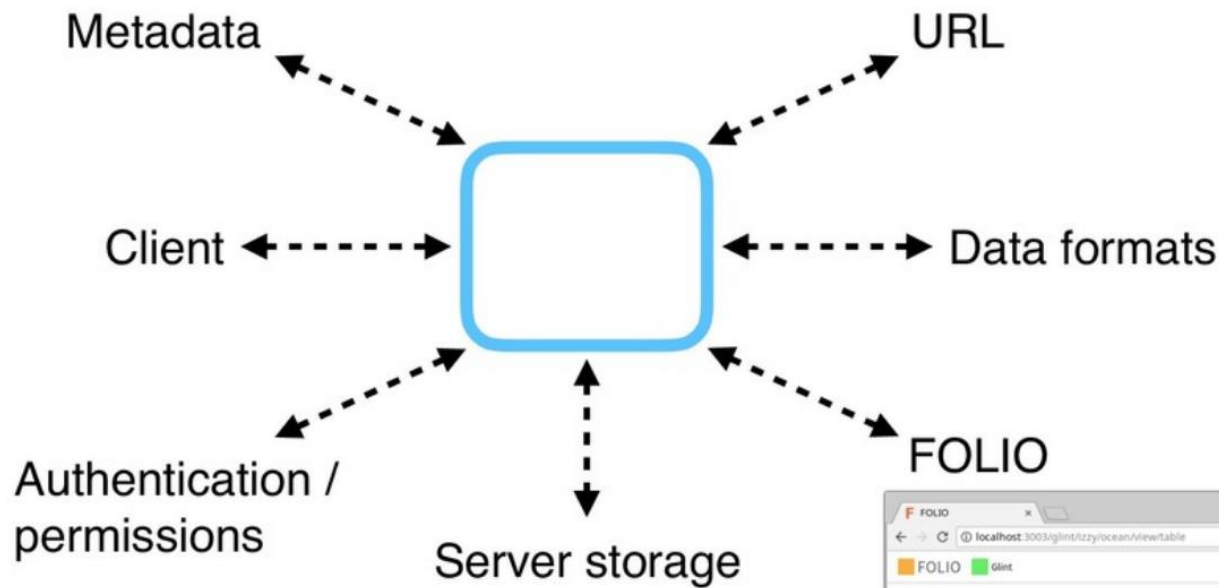
Adding metadata

```
$ glint md ocean.t dc:date
```

```
$ glint md ocean.wind_speed yamz:h3846
```



Integrations



Id	T	Record	Site_id	Air_temp_avg
810	2017-01-05 14:04:00	8918	1	10.64999996185303
811	2017-01-05 14:34:00	8919	1	10.4899997711182
812	2017-01-05 15:04:00	8920	1	9.9399995403833
813	2017-01-05 15:34:00	8921	1	10.3599996566772
814	2017-01-05 16:04:00	8922	1	11.6000003814697

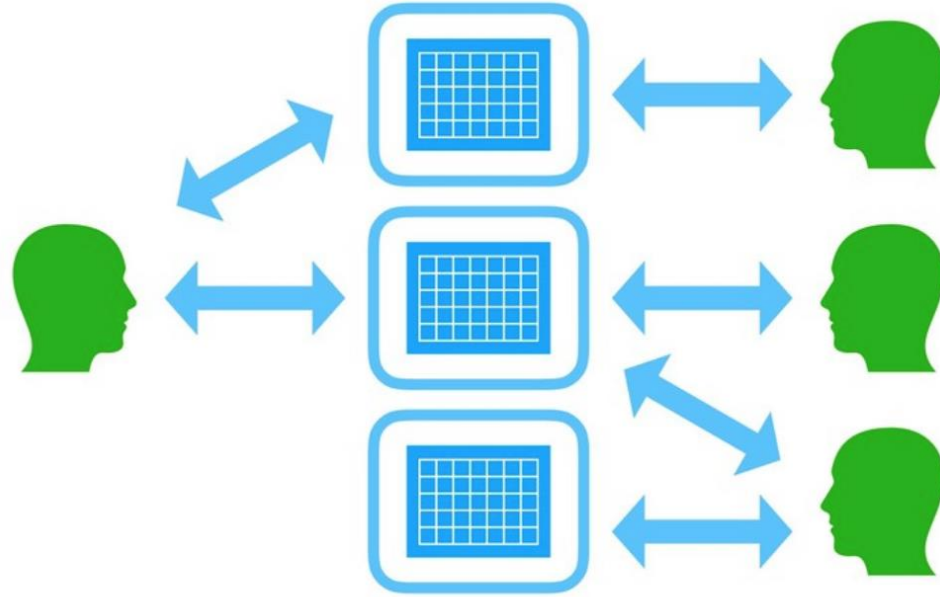
"The generation of most biomedical data is highly distributed and is accomplished mainly by individual scientists or relatively small groups of researchers. Moreover, data also exist in a wide variety of formats, which complicates the ability of researchers to find and use biomedical research data generated by others and creates the need for extensive data 'cleaning.' According to a 2016 survey, data scientists across a wide array of fields said they spend most of their work time (about 80 percent) doing what they least like to do: collecting existing data sets and organizing data. That leaves less than 20 percent of their time for creative tasks like mining data for patterns that lead to new research discoveries."

—Draft NIH Strategic Plan for Data Science (2018)

"The value of research data arises from its use, and the more it is used the greater the social benefits and the higher net welfare."

—Business models for sustainable research data repositories
(OECD report, Dec. 6, 2017)

Effective data sharing can accelerate cooperation around data



Suppose that we could share and cooperate around data—forming communities to discuss and understand data better—as easily as we share and discuss interesting articles today

<https://glintcore.net>



future of libraries is open



Questions?

quinn@indexdata.com

www.folio.org

indexdata.com/folio