

# Practical applications of IIF

As a building block towards a digital National Collection

*Webinar 2, 11 June 2021*

## IIF all the things

*What goes into providing IIF for millions of items? Or even a National Collection? Tom Crane looks at large-scale IIF implementation, with particular focus on Wellcome Collection.*

*Tom Crane*

*Technology Director, Digirati*

[cultural-heritage.digirati.com](http://cultural-heritage.digirati.com)

*@tomofthenehill*

# Most Manifests are built by machines

- There are 100s of millions of digital objects represented by Manifests.
- As most of these are books, there are **billions** of Canvases.

METS  
MARC  
CIDOC-CRM  
DUBLIN CORE  
Etc  
Etc  
Etc



EWART'S LINEN FACTORY, BELFAST, 24-08-1914

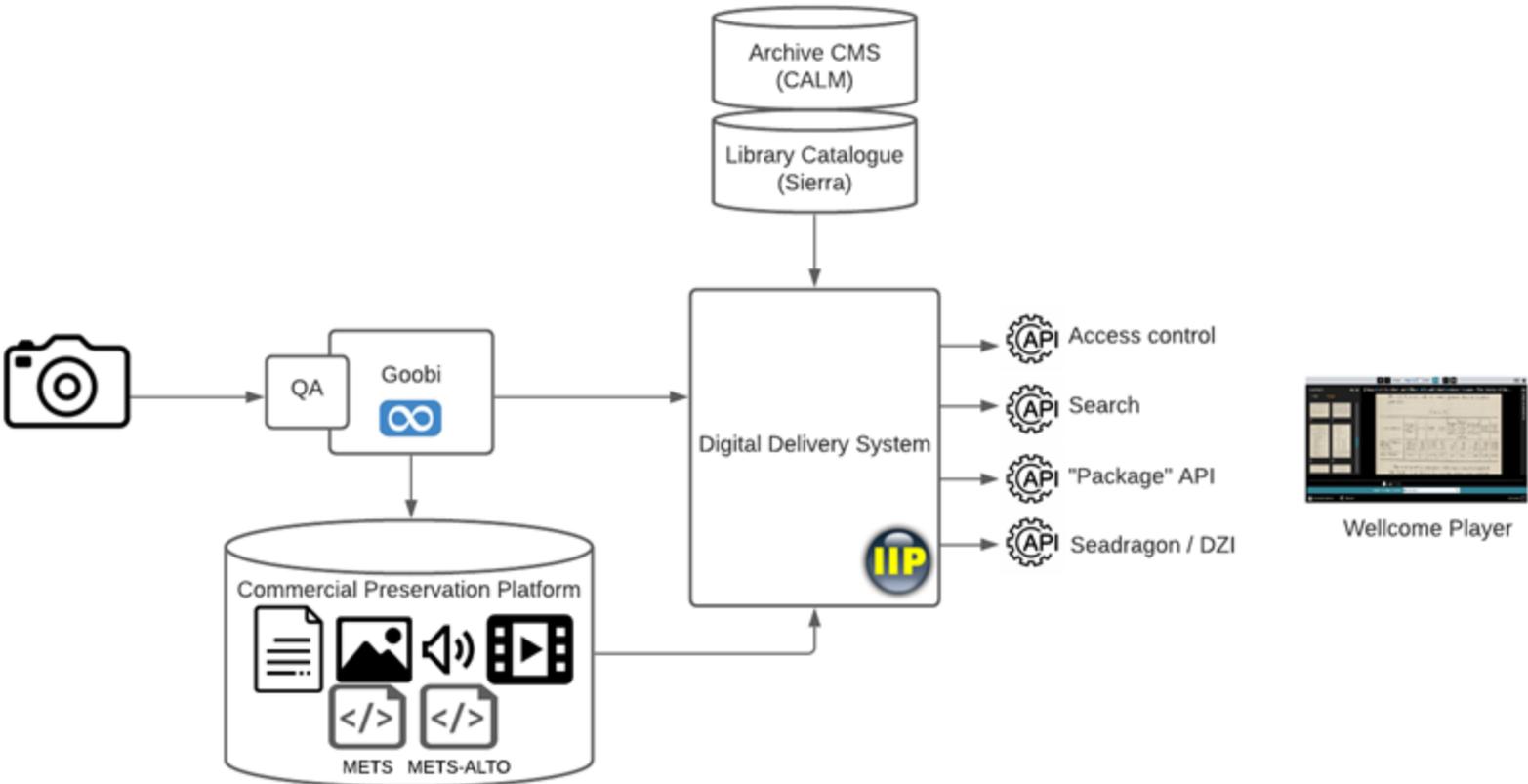


National Library of Ireland  
Public Domain

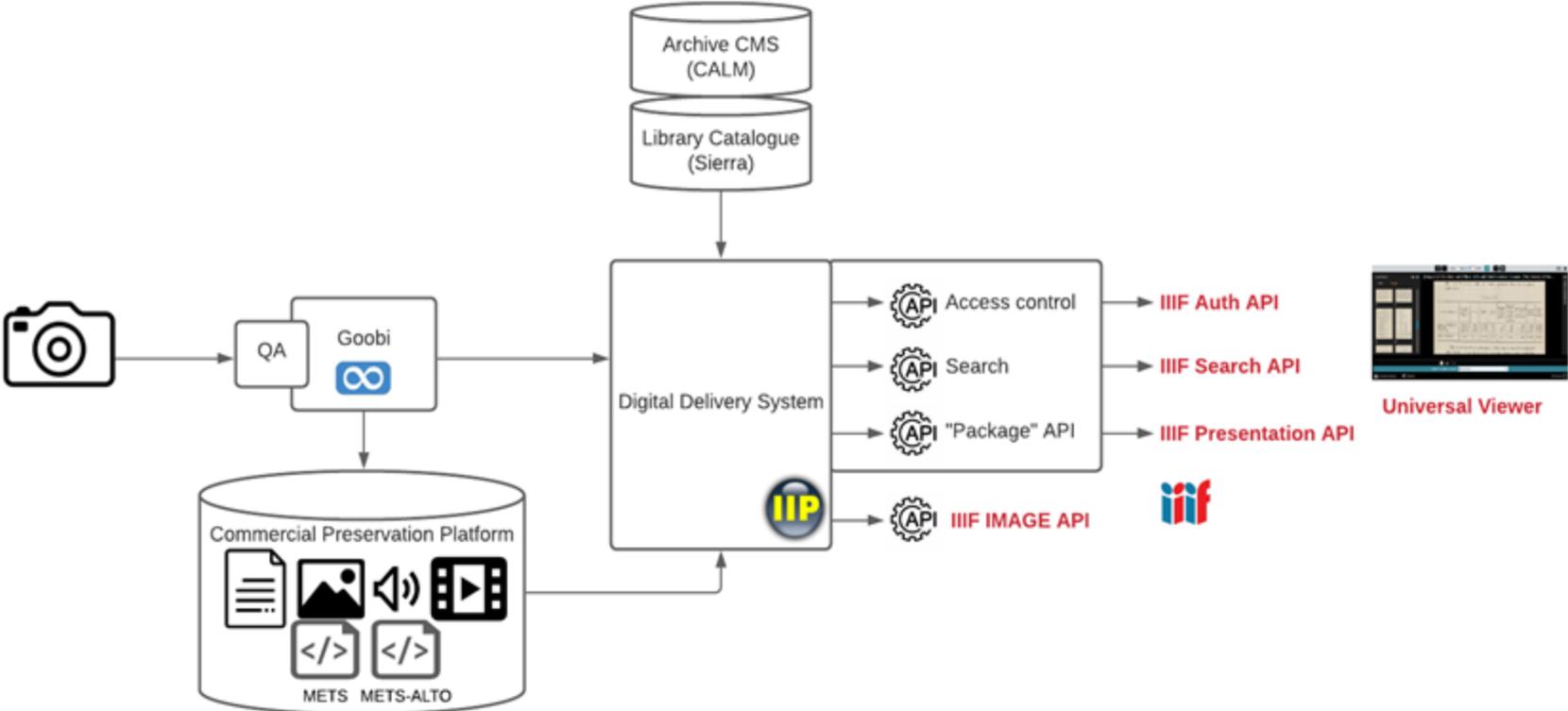


Photos: Christy Henshaw

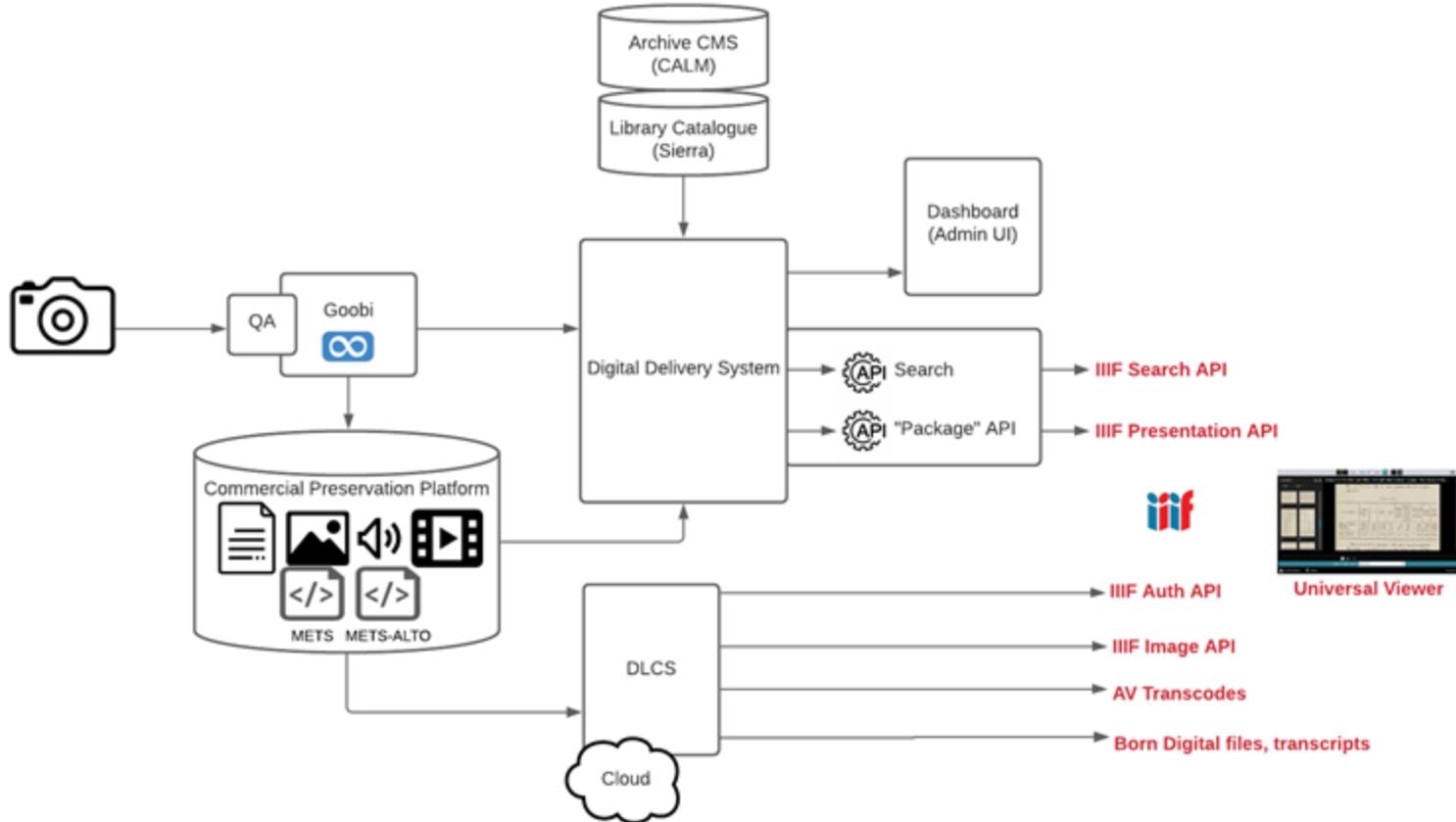
# The era before IIF... c. 2012



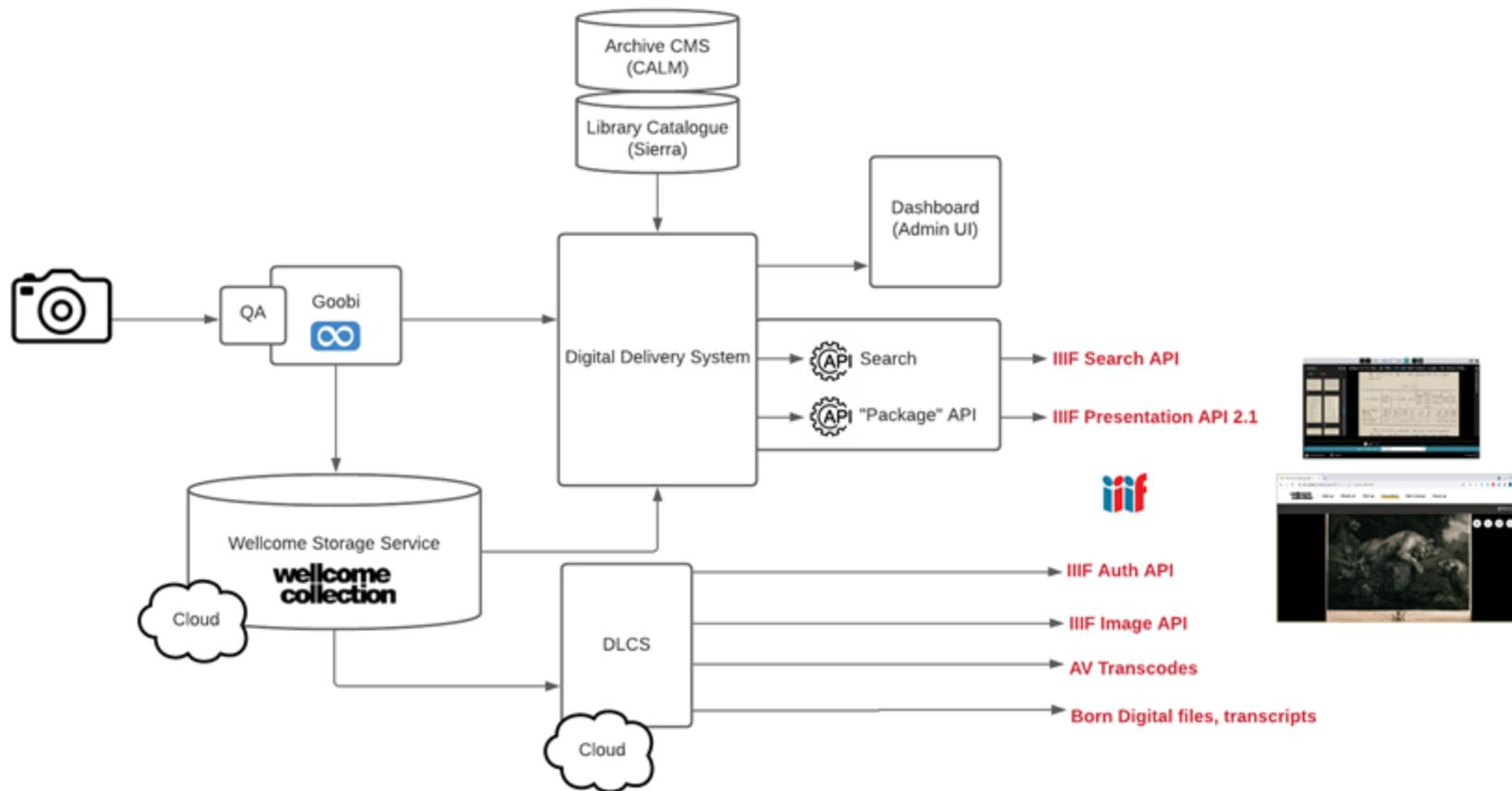
# Shiny IIF Overcoat



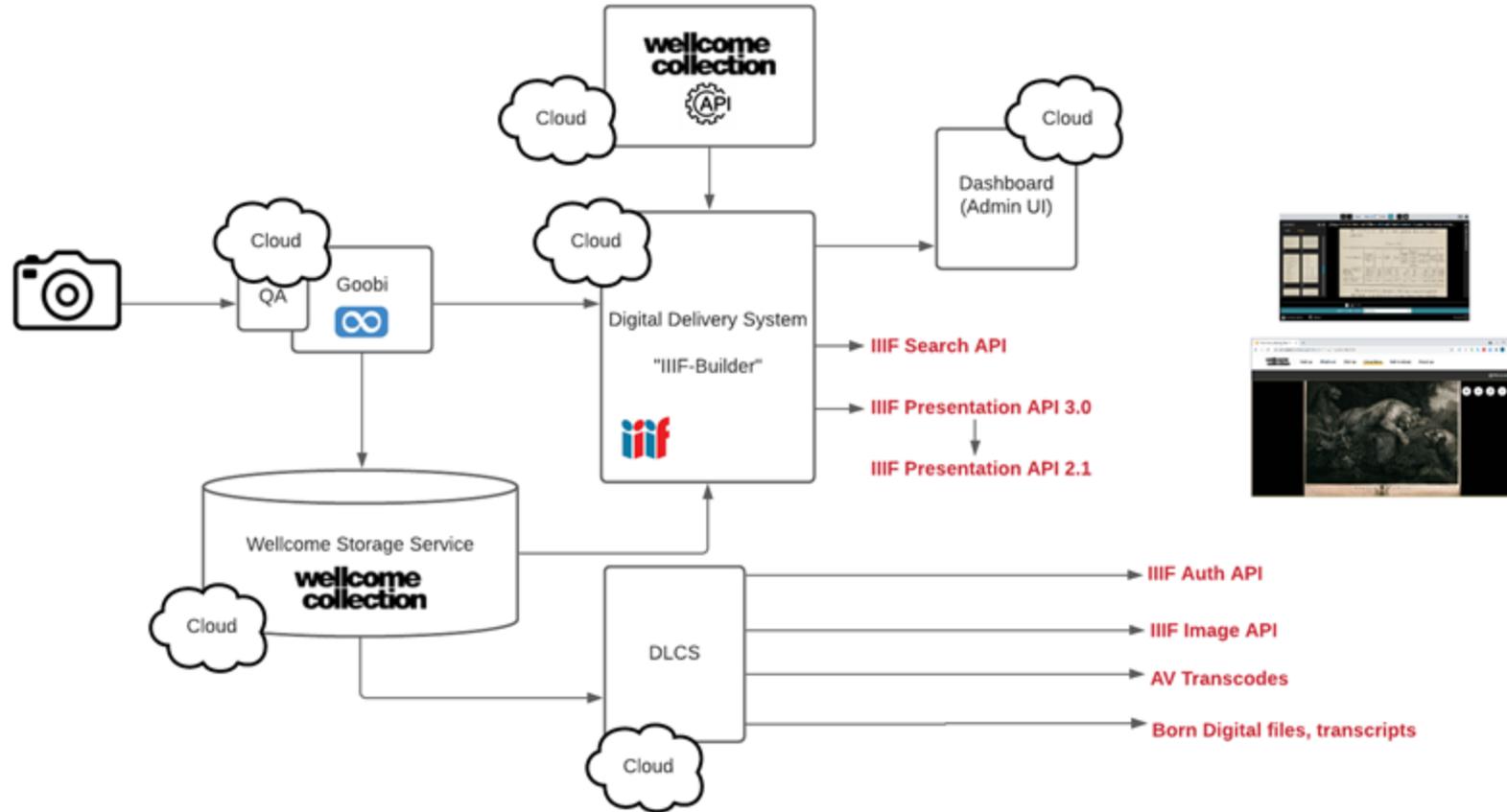
# DLCS - Asset Delivery as a commodity service



# New Storage Service



# Cloud everything, and IIF 3



## DLCS - Asset Delivery as a commodity service

- Tell me about an image and I will provide a IIIF Image API service for it
- Tell me about an AV resource and I will provide web-friendly derivatives for it
- I can provide the IIIF Authentication API for all these resources
- I can do this for other types of file too, where a derivative is not needed - like PDFs



Space 20: Dixons 1985 · D · x Universal Viewer x +

portal.dics.digitallio/spaces/details/20

The Portal Search Sign out

Home  
Queue  
Spaces  
Storage  
Origins  
Access control  
Named queries  
Users  
API Keys

## Space 20: Dixons 1985

Space is IIF Manifest

[IIF Manifest](#) [Universal Viewer](#)

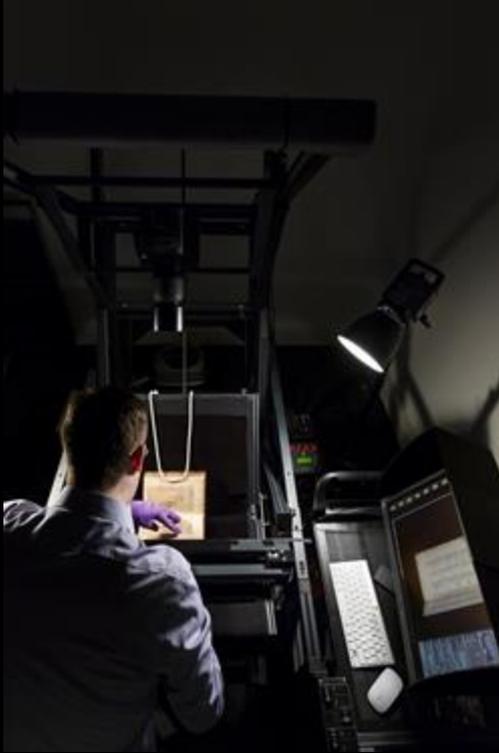
n1	Name
0	<a href="#">01.jpg</a>

Recent  
Home  
Desktop  
Documents  
Downloads  
Music  
Pictures  
Videos  
Rubbish Bin  
Other Locations

Home git tomcrane dixons1985 jpg

01.jpg 02.jpg 03.jpg 04.jpg  
05.jpg 06.jpg 07.jpg 08.jpg  
09.jpg 10.jpg 11.jpg 12.jpg  
13.jpg 14.jpg 15.jpg 16.jpg

# Isn't that an easier way to make a manifest?



The screenshot shows a web portal interface for 'Space 9: drop-test-1'. The page has a dark header with 'The Portal' and 'Sign out' options. A left sidebar contains navigation links: Home, Queue, Space, Storage, Origins, Access control, Named queries, Users, and API Keys. The main content area features a large empty box with the text 'Upload images by dropping them here'. Below this, there is a section for 'Space 9: drop-test-1' with a 'Space 9: Manifest' button and links for 'Universal Viewer' and 'Mirror'. A table lists image manifests with columns for 'id', 'Name', and 'Created'. A 'Table Order' button is located to the right of the table.

id	Name	Created	Table Order
0	<a href="#">00.jpg</a>	04/09/2021 16:43:16	⬅️ ➡️
1	<a href="#">13m7MAGu7uL.jpg</a>	04/04/2021 07:55:49	⬅️ ➡️
2	<a href="#">atb.jpg</a>	04/04/2021 07:40:06	⬅️ ➡️
3	<a href="#">BMC_20110214_144766.jpg</a>	04/04/2021 08:05:22	⬅️ ➡️



# Observability and instrumentation

Home Workflow Jobs Queue Status Types Stop DLCS Queue: 0

## b19991903 - [U.S. House Science and Astronautics Committee - International Science Policy]

**Archive (image/jpeg)**

- Work page
- View v2 in Library UV
- View v2 in Mirador
- View v3 in current UV
- View v3 in Mirador
- IIIF Validator

Catalogue API  
Encore record

DLCS Preview Manifest  
DLCS Preview Manifest in UV  
IIIF Manifest (preview)  
IIIF Manifest (live)

Permitted operations:  
- currentViewAs.jpg  
- wholeImageLowResAs.jpg  
- wholeImageHighResAs.jpg  
- entireDocumentAsPdf

Storage Manifest  
 Storage Map (versions)  
 METS file

Mods: Requires registration 1

### Jobs

- Goobi Call Info
- Simulate Goobi Call
- 04/08/2021 04:29:24 88
- Force Reingest

88 assets of type image/jpeg

Order	Label	Dimensions	Access	ALTO	DLCS	
1	-	2327 x 3567	Requires registration		b19991903_JDW_02_17_0027_001.jp2	
2	-	3255 x 2549	Requires registration		b19991903_JDW_02_17_0027_002.jp2	
3	-	3255 x 2549	Requires registration		b19991903_JDW_02_17_0027_003.jp2	
4	-	3255 x 2549	Requires registration		b19991903_JDW_02_17_0027_004.jp2	
5	-	3255 x 2549	Requires registration		b19991903_JDW_02_17_0027_005.jp2	
6	-	3255 x 2549	Requires registration		b19991903_JDW_02_17_0027_006.jp2	
7	-	3255 x 2549	Requires registration		b19991903_JDW_02_17_0027_007.jp2	
8	-	3256 x 2549	Requires registration		b19991903_JDW_02_17_0027_008.jp2	
9	-	3256 x 2549	Requires registration		b19991903_JDW_02_17_0027_009.jp2	
10	-	3256 x 2549	Requires registration		b19991903_JDW_02_17_0027_010.jp2	
11	-	3256 x 2549	Requires registration		b19991903_JDW_02_17_0027_011.jp2	
12	-	3256 x 2549	Requires registration		b19991903_JDW_02_17_0027_012.jp2	
13	-	3256 x 2549	Requires registration		b19991903_JDW_02_17_0027_013.jp2	
14	-	3256 x 2549	Requires registration		b19991903_JDW_02_17_0027_014.jp2	
15	-	3256 x 2549	Requires registration		b19991903_JDW_02_17_0027_015.jp2	
16	-	3256 x 2549	Requires registration		b19991903_JDW_02_17_0027_016.jp2	
17	-	3255 x 2549	Requires registration		b19991903_JDW_02_17_0027_017.jp2	
18	-	3255 x 2549	Requires registration		b19991903_JDW_02_17_0027_018.jp2	
19	-	3255 x 2549	Requires registration		b19991903_JDW_02_17_0027_019.jp2	
20	-	3255 x 2549	Requires registration		b19991903_JDW_02_17_0027_020.jp2	
21	-	3255 x 2549	Requires registration		b19991903_JDW_02_17_0027_021.jp2	
22	-	3255 x 2549	Requires registration		b19991903_JDW_02_17_0027_022.jp2	
23	-	3255 x 2549	Requires registration		b19991903_JDW_02_17_0027_023.jp2	
24	-	3255 x 2549	Requires registration		b19991903_JDW_02_17_0027_024.jp2	

# Why do all this?

Mainly for the publisher to use the material themselves

- Probably in one “canonical” way

- But then later, in more specific additional ways

Then for other people to use it, with or without the knowledge of the publisher

- By making derived presentations - mashups, visualisations, creative reuse, reinterpretation

- Or for taking it into other IIIF-compatible software

  - for crowdsourcing

  - for research purposes

And perhaps, contributing to aggregators like Europeana or DPLA; other environments for Discovery and exploration

And perhaps, a **National Collection**



## Advanced Search

Title

Creator

Year From:

Year To:



Publisher

Place of publication

Required formats

- Plain Text
- IIIF
- ALTO-XML
- PDF
- TEI

Search



## Advanced Search

[Edit search](#)

### [Piff! Paff! Pouf!: A Musical Cocktail](#)

Jean Schwartz , Stanislaus Stange , William Jerome Shapiro, Remick 1904

Internet Archive Books

Download: [PDF](#) [IIIF](#) [Plain-text](#)

### [The Cocktail Party December 1st-4th 19??](#)

Internet Archive Books

Download: [PDF](#) [IIIF](#) [Plain-text](#)

### [The cocktail book : a sideboard manual for gentlemen.](#)

Knowles, Frederic Lawrence John Macqueen London 1902

Wellcome Collection

Download: [PDF](#) [IIIF](#) [Plain-text](#)

### [Recipe book of the Wyche family containing culinary, medical and miscellaneous recipes](#)

National Library of Scotland

Download: [PDF](#) [IIIF](#)



The cocktail book : a sideboard manual for gentlemen.

Knowles, Frederic Lawrence, 1869-1905.

Date 1902

[Catalogue details](#) →

[Licence and credit](#) >

[Contents](#) >

Search within this item  
angostura bitters



60 results

2 instances found on image 21 / 80 (page 7)

...ing is necessary as regards the Bitters, in consequence of the unscrupulous way in which these have been imitated, [see also](#) the original Dr. Sager's [Angostura Bitters](#) ... [Angostura Bitters](#) that the delicious flavour and tonic properties of the well-made cocktail are due. Cocktails. "syrup" referred to in many of the "V" receipts is a...

1 instance found on image 23 / 80 (page 9)

... handy, as it saves the trouble of dissolving the sugar. It will keep good for any length of time. [About the Cocktail: Use Mixing Glass.](#) ["THREE dashes Angostura bitters; three V" dashes syrup; one pony absinthe. Fill with ice, mix well, and strain into a cocktail glass. Armour Cocktail. Use Mixing Glass. "THREE d...](#)

### Gin Cocktail—Tom.

*Use Mixing Glass.*

**T**HREE dashes [Angostura bitters](#); one small lump sugar; one portion Tom gin. Fill with ice, mix, and strain into a cocktail glass.

### Gin Cocktail—Old-fashioned Tom.

**M**AKE the same as an Old-fashioned Holland Gin Cocktail, using Tom in the place of Holland gin.

### Harvard Cocktail.

*Use Mixing Glass.*

**O**NE dash syrup; three dashes [Angostura bitters](#); one-half Italian vermouth; one-half brandy. Fill with ice, mix, and strain into a cocktail glass, then fill with seltzer and serve quickly.



# What does this all mean for a digital National Collection?

**Assumption:** IIF is the means by which National Collection objects are distributed to user interfaces

- Which means contributors have to provide it
- Some of this activity HAS to be specific to the publisher - it's their stuff, they have to arrange and describe it, link it to sensible descriptive metadata
- *Some* of it can use common tools, services, platforms, libraries

## Big IIIF costs money

- Institutions that have large digital workflows already can add bespoke and appropriate IIIF creation to those workflows.
- Organisations and individuals with a handful of objects can create manifests by hand, host them on GitHub.
- What's the answer for orgs with a few hundred or a few tens of thousands of things?

III F is only an answer to part of it

- Deep-zoom is nice, but...

III F is only an answer to part of it

- Deep-zoom is nice, but
- Having Manifests is more important than having deep-zoom, but...

IIIF is only an answer to part of it

- Deep-zoom is nice, but
- Having Manifests is more important than having deep-zoom, but
- Having Manifests is no good if a National Collection has no means of discovering them, and...

IIIF is only an answer to part of it

- Deep-zoom is nice, but
- Having Manifests is more important than having deep-zoom, but
- Having Manifests is no good if a National Collection has no means of discovering them, and
- A National Collection can't do much with those Manifests without a scheme to organise them by, and...

## IIIF is only an answer to part of it

- Deep-zoom is nice, but
- Having Manifests is more important than having deep-zoom, but
- Having Manifests is no good if a National Collection has no means of discovering them, and
- A National Collection can't do much with those Manifests without a scheme to organise them by, and
- It's no good to humans without a lot of user research and design, some of which informs what that scheme, or schemes, might be

# Thank you!

These slides: [bit.ly/tanc-tc2](https://bit.ly/tanc-tc2)

Tom Crane

Technology Director, Digirati  
[cultural-heritage.digirati.com](https://cultural-heritage.digirati.com)

[@tomofhernehill](#)

A bit more reading on the IIF Universe

[Beyond the Viewer: fragments and links in annotation space](#)