

Intro to IIF and Digital Collections

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What is IIIF?

IIIF is:

- The International Image Interoperability Framework
- An emerging new standard for displaying images online
- A great way to make digital collections more accessible and useful.
- Supported by a growing community of researchers and librarians
- A series of API specifications related to image hosting and sharing



Wait, back up...

What's an API?

API = Application Programming Interface

- Basically, an API is a tool for letting computers access data from a website
- Example - an app that syncs with a website.



IIIF has four APIs

Image API - Provides images from the IIIF-compatible digital collection

Presentation API - Structural metadata to go with a set of images

Search API - Allows searching of metadata within Presentation API

Authentication API - Limit access or degrade quality for certain users

(A fifth, **Change Discovery API**, is in development)

CONTENTdm = currently compatible with the first two only



So how does it work???



Base URL for IIIF Image API

{scheme}://{server}/{prefix}/{identifier}/{region}/{size}/{rotation}/{quality}.{format}

<https://digitalcollections.slu.edu/digital/iiif/photos/3283/full/full/0/default.jpg>

- Scheme
- Server
- Prefix
- Identifier
- Region
- Size
- Rotation
- Quality
- Format



Scheme/Server/Prefix

- **Scheme** = https:// or http://
- **Server** = URL of the file = digitalcollections.slu.edu
- **Prefix** = activates the IIIF API = digital/iiif/

Identifier

- Names the file you want from the API
- In CONTENTdm, **Identifier** = collection alias/file ID number
- <https://digitalcollections.slu.edu/digital/iiif/photos/3283/full/pct:75/0/default.jpg>





Region

- Can show an entire image or automatically cut it down to a specific part
- Options:
 - Full = show entire area
 - Square = crop center of image down to a square
 - coordinates = specify which part of the image you want
 - 4 numbers, 3 commas, 0 spaces
 - First = #of pixels from left margin
 - Second = # of pixels from top
 - Third = width of selection
 - Fourth = height of selection

Example of Region:

<https://digitalcollections.slu.edu/digital/iiif/photos/3283/full/pct:75/0/default.jpg>





Example of Region:

<https://digitalcollections.slu.edu/digital/iiif/photos/3283/1800,0,1000,900/full/0/default.jpg>





Size

Changes the size of the image or selection

Options:

- full = displays image at original size
- pct:n = percentage of original size
 - In CONTENTdm, seems to range from pct:10 to pct:200



Rotation

- Can turn and/or flip the image
- Options:
 - N (number between 0-360) = rotates image clockwise by that many degrees
 - $!n$ = supposed to flip to mirror image, then rotates clockwise by that many degrees



Quality

Can change the range of color in the image

Options:

- default - leaves quality as is.
- color - makes image full color
- gray - makes image grayscale
- bitonal - purely black and white only



Format

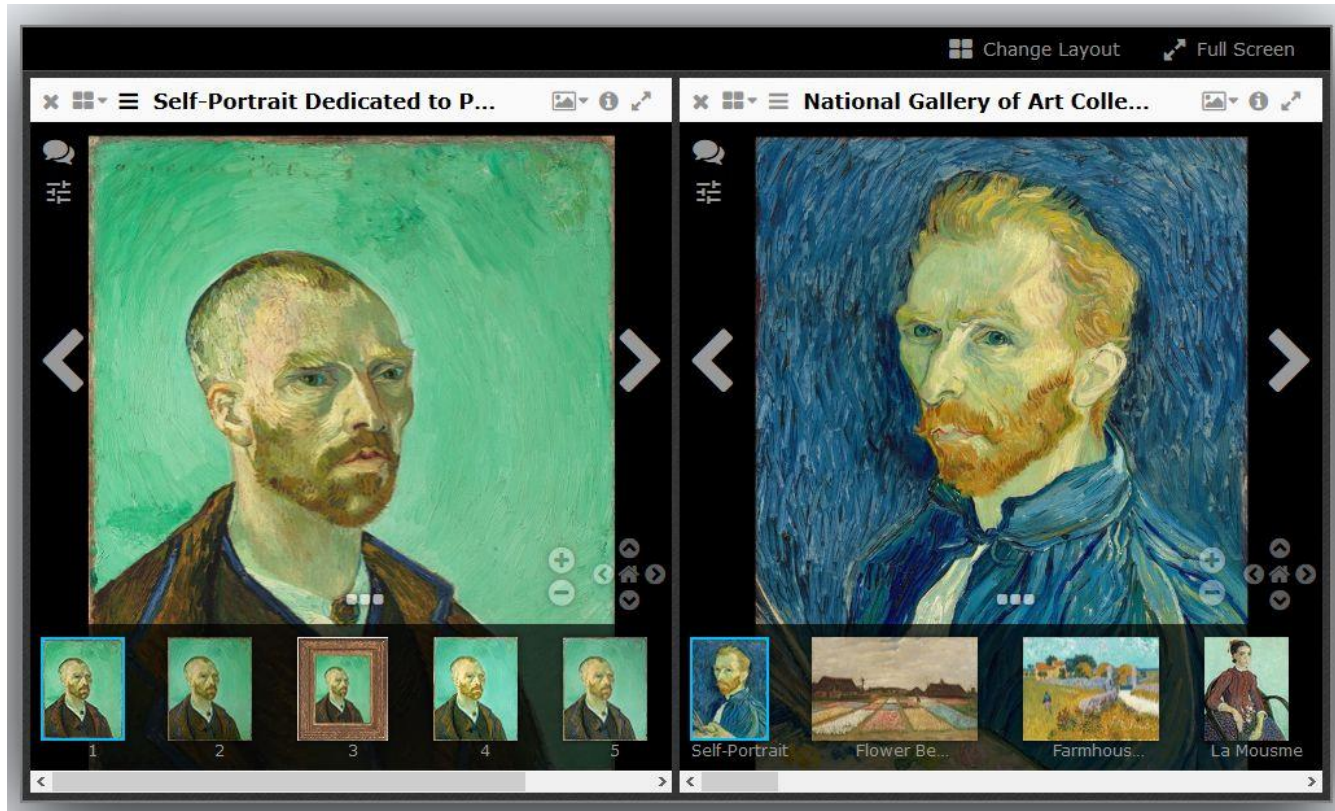
Can choose the file format of the image returned by the API

Options include:

- JPG
- TIF
- PNG
- GIF
- JP2
- PDF

NOTE: in CONTENTDM, only JPG seems to be supported

Mirador





For More Information:

IIIF Image API Specifications - <https://iiif.io/api/image/2.1/>

Learn IIIF (including image playground) - <https://www.learniiif.org/>

IIIF API - OCLC Support -

<https://www.oclc.org/support/services/contentdm/help/customizing-website-help/other-customizations/contentdm-api-reference.en.html>

“Limitless Access” (CONTENTdm webinar) - <https://vimeo.com/299892297/4e12a2c150>
Slides -

<https://www.oclc.org/content/dam/oclc/events/2018/Webinars/IncorporatingIIIFcontentinyourwebsite103018.pdf>

Mirador Viewer - <http://projectmirador.org/>

OpenSeadragon - <https://openseadragon.github.io/>