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Haute école de gestion
Genève

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INCIPIT: AN ARCHIVAL RESOURCE KEY (ARK) ALLOCATION SERVICE IN SWITZERLAND

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Presentation overview

1. Context and rationale
2. Archival Resource Key (ARK)
3. Infrastructure Nationale d'un Complément d'Identifiants Pérennes, Interopérables et Traçables (INCIPIT)

1. CONTEXT AND RATIONALE

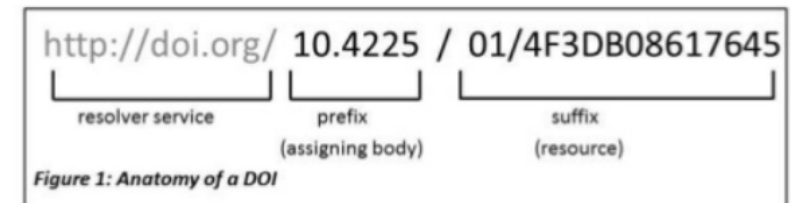
Persistent identifiers (PID)

A persistent identifier is a long-lasting and biunique reference to a digital resource.

It usually has two parts:

1. A unique identifier (to ensure the provenance of a digital resource)
2. A location for the resource over time (to ensure that the identifier resolves to the correct location)

How do DOIs work?



10 persistent myths about PIDs

1. PIDs guarantee access. Get real. All PID services run on evolving software/hardware that no vendor warranties.
2. PIDs rarely break. Nonsense. Millions of PIDs are broken. Updating redirection tables is real work for you and your successors.
3. ...

<https://n2t.net/ark:/13030/c7gb1xh09>

John Kunze @jakkbl

10 persistent myths about persistent identifiers (PIDs), whether ARK, DOI, Handle, URN, PURL, or "Cool URL" (from my experience running [EZID.cdlib.org](https://ezid.cdlib.org) and [N2T.net](https://n2t.net)).

[EZID Home](https://ezid.cdlib.org)
EZID service creates long-term identifiers and is a key component for keeping data and digital objects safe while ...
ezid.cdlib.org

8:30 PM · Aug 24, 2018 · [Twitter Web Client](#)

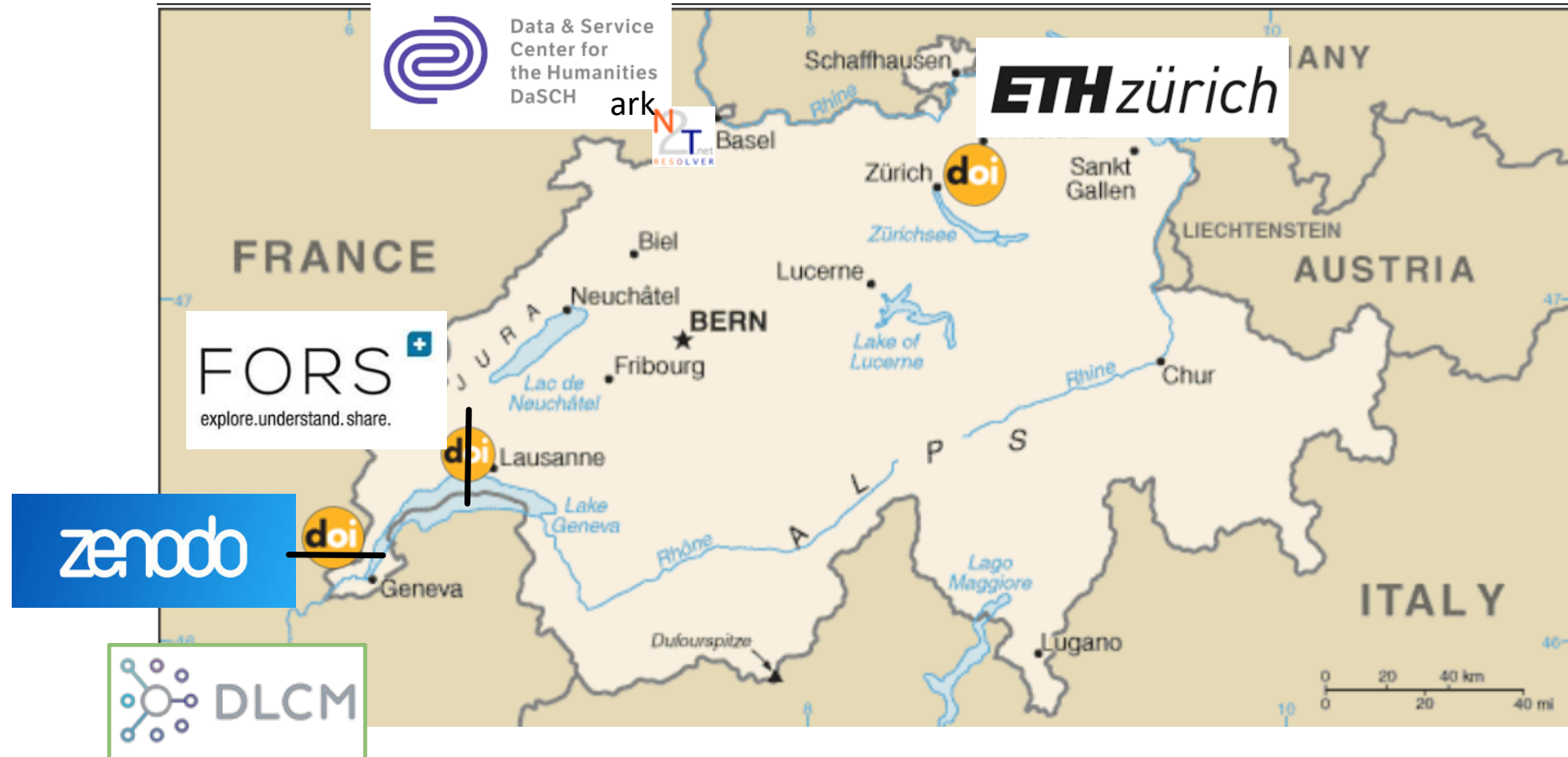
51 Retweets 90 Likes 8 Quotes

John Kunze @jakkbl · Aug 24, 2018
Replying to @jakkbl
Myth 1: PIDs guarantee access. Get real. All PID services run on evolving software/hardware that no vendor warranties. How could anyone, let alone poor non-profits, change that?

John Kunze @jakkbl · Aug 24, 2018
Myth 2: PIDs rarely break. Nonsense. Millions of PIDs are broken. Updating redirection tables is real work for you and your successors. (You do have a succession plan, right?)

John Kunze @jakkbl · Aug 24, 2018
Myth 3: PIDs must not be URLs. What a crock. PIDs not carried inside clickable URLs are irrelevant or only of academic interest.

Swiss PID Landscape





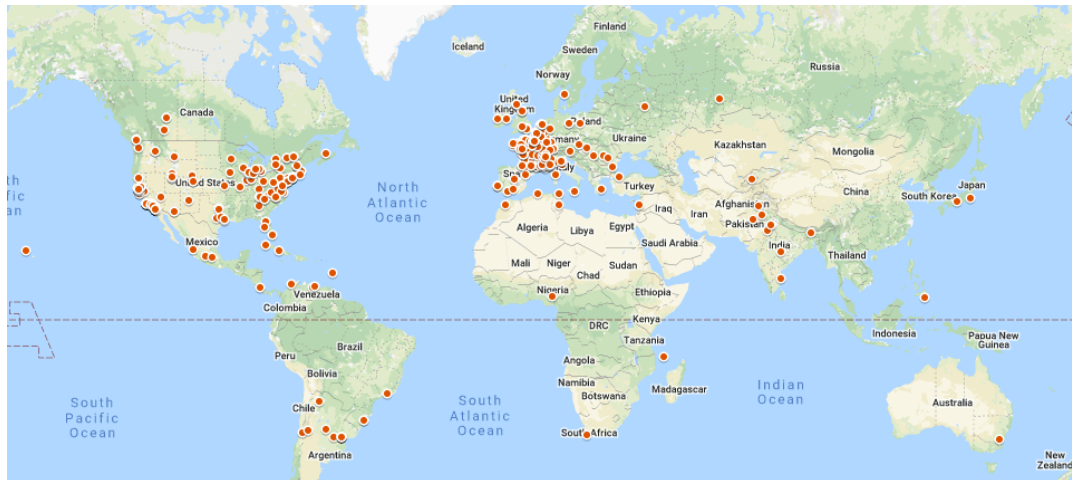
<https://arksintheopen.org>

<https://arks.org/>

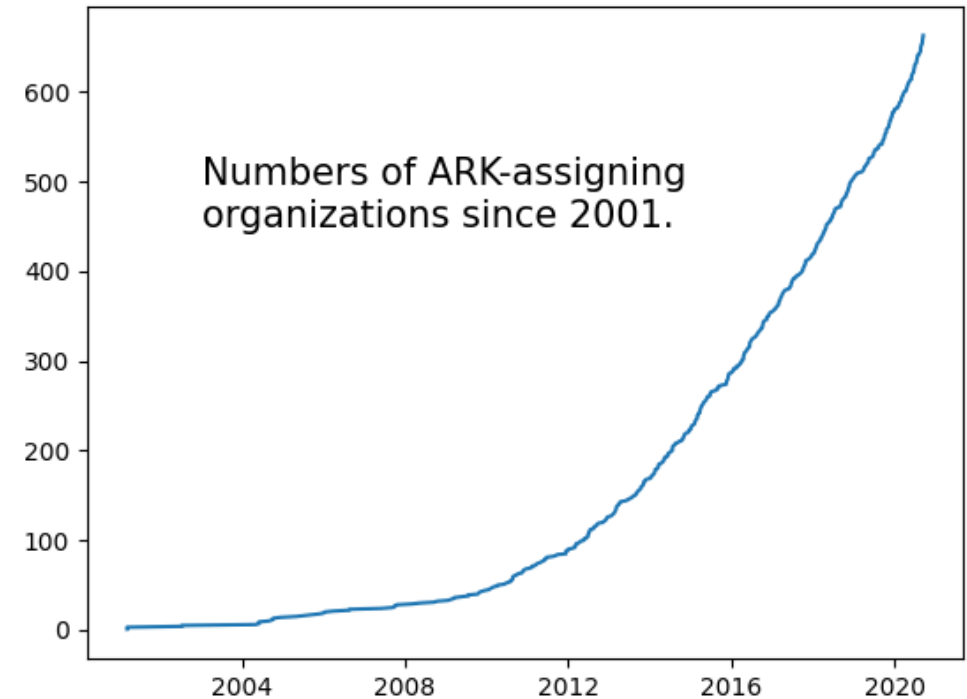
2. ARK

Archival Resource Key (ARK)

- PID scheme created in 2001 by the California Digital Library (CDL)



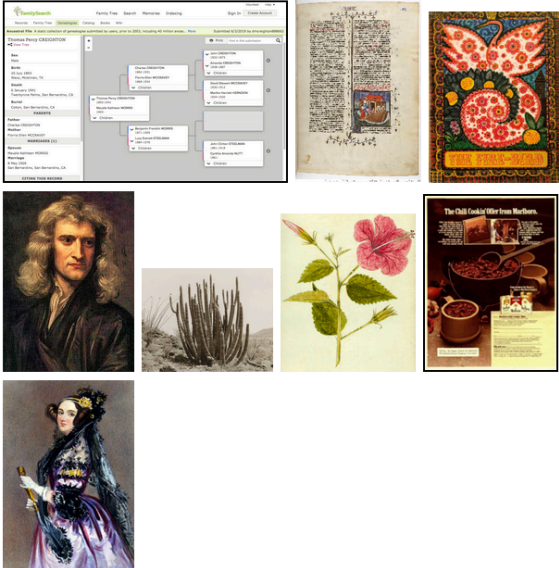
Global ARK Registrants



https://n2t.net/e/pub/naan_registry.txt

Archival Resource Key (ARK)

- Can be assigned to anything digital, physical, or abstract

Categories	Examples
<ul style="list-style-type: none">• genealogical records (8 billion FamilySearch)• publisher content (100 million Portico)• scientific records (22 million INIST)• scanned texts (20 million Internet Archive)• bibliographic records (15 million BnF main catalog)• museum specimens (11 million going on 100 million Smithsonian)• public health documents, many from legal discovery (15 million UCSF IDL)• digitized documents and objects (5 million BnF Gallica)• historical persons, families, and organizations (4 million SNAC)• finding aids and special collections (4 million Merritt)• resource maps (1.5 million RMap Hub)• educational resources (1.1 million University of Utah)• vocabulary terms (9,000 Periodo, YAMZ)• datasets, journals, archeological artifacts, living beings, and anything else you can think of!	

Archival Resource Key (ARK)

- Can be resolved by local resolvers and by Name-To-Thing (N2T), a global resolver

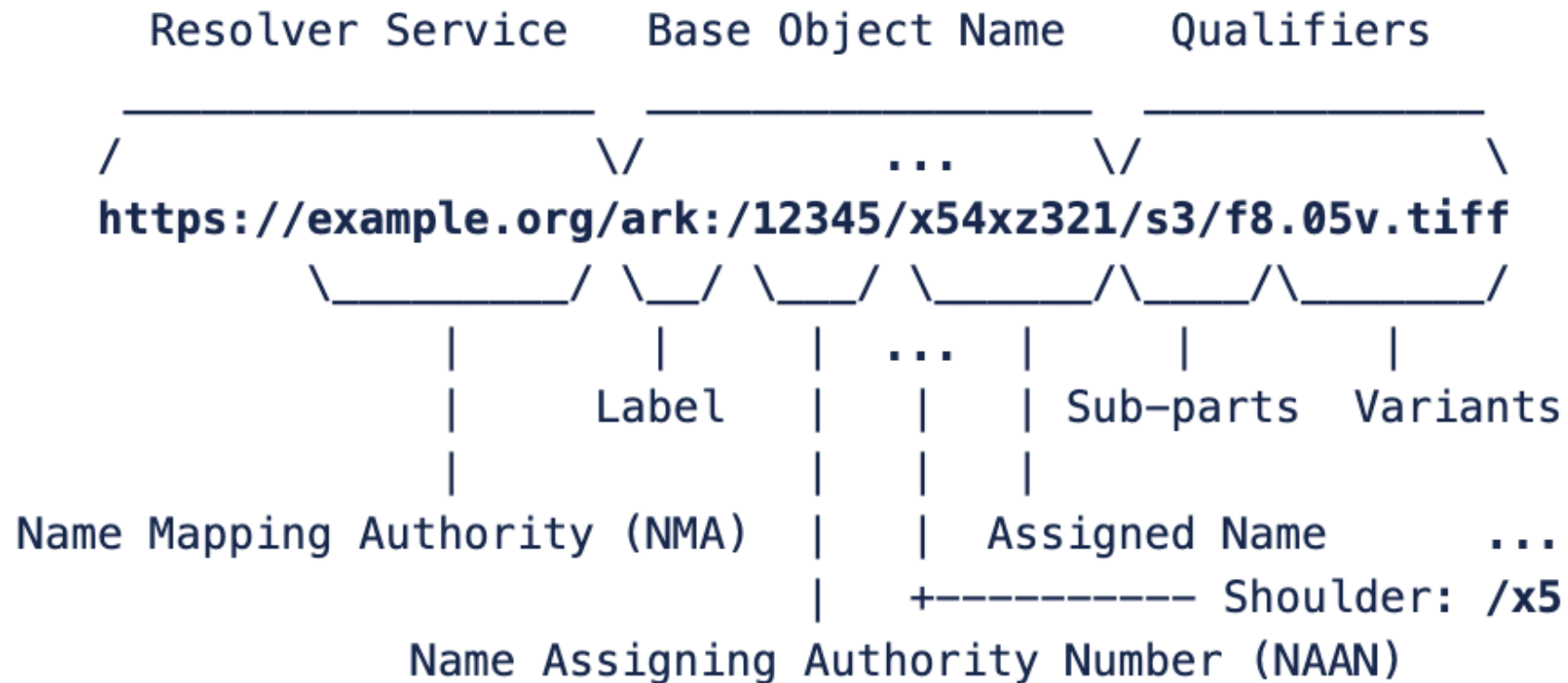
Core ARK identifier	<code>ark:/12148/btv1b8449691v/f29</code>
ARK that resolves through the BnF	<code>http://ark.bnf.fr/ark:/12148/btv1b8449691v/f29</code>
ARK that resolves through N2T	<code>https://n2t.net/ark:/12148/btv1b8449691v/f29</code>



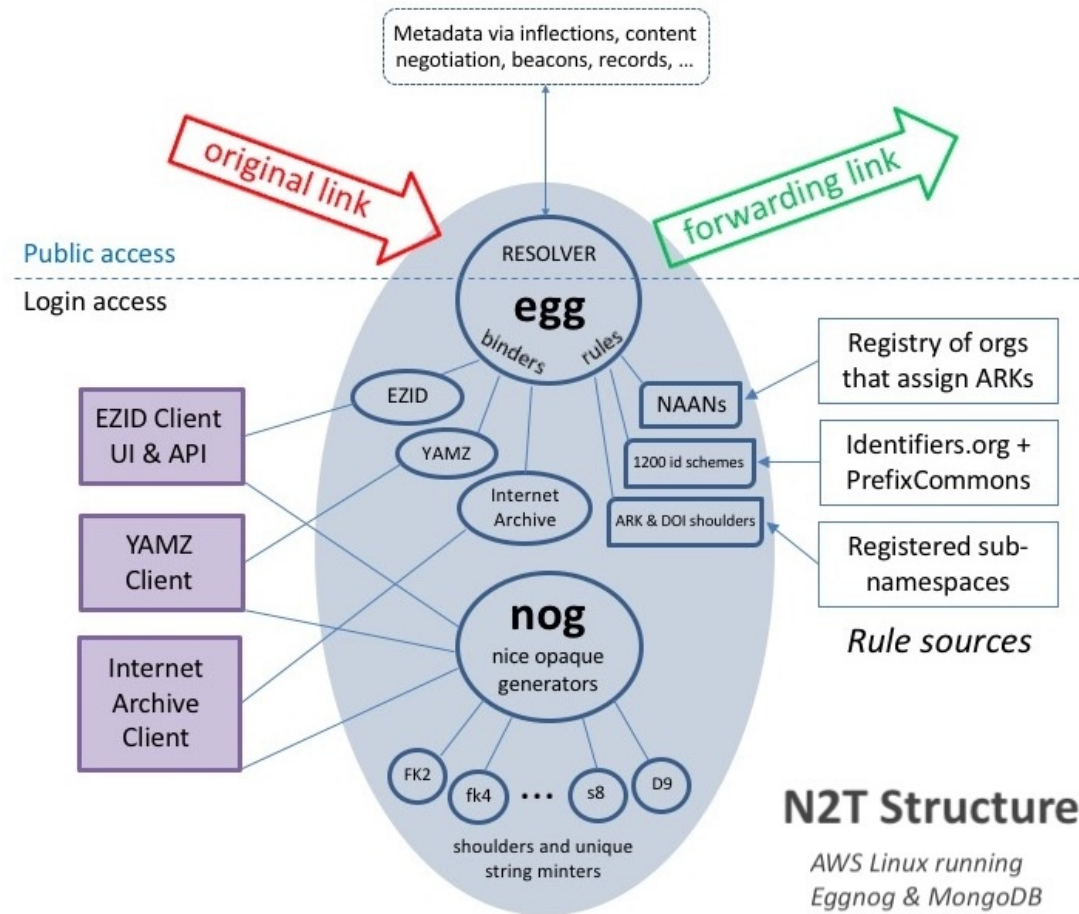
Bibliothèque nationale de France. Département des Manuscrits. Français 159

Structure

ARK ANATOMY



Name-To-Thing (N2T)



Advantages

- ARK identifiers are free
- ARKs are built using a completely different theoretical model, consisting of a decentral and domain (i.e. DNS) agnostic approach
- ARKs allow to use with ease LOD on top of them
- ARKs can effortlessly be combined with other specifications such as the International Image Interoperability Framework (IIF) canonical URI syntax

<https://iiif.io/api/image/3.0/#48-canonical-uri-syntax>



I NCIPIT

3. INCIPIT



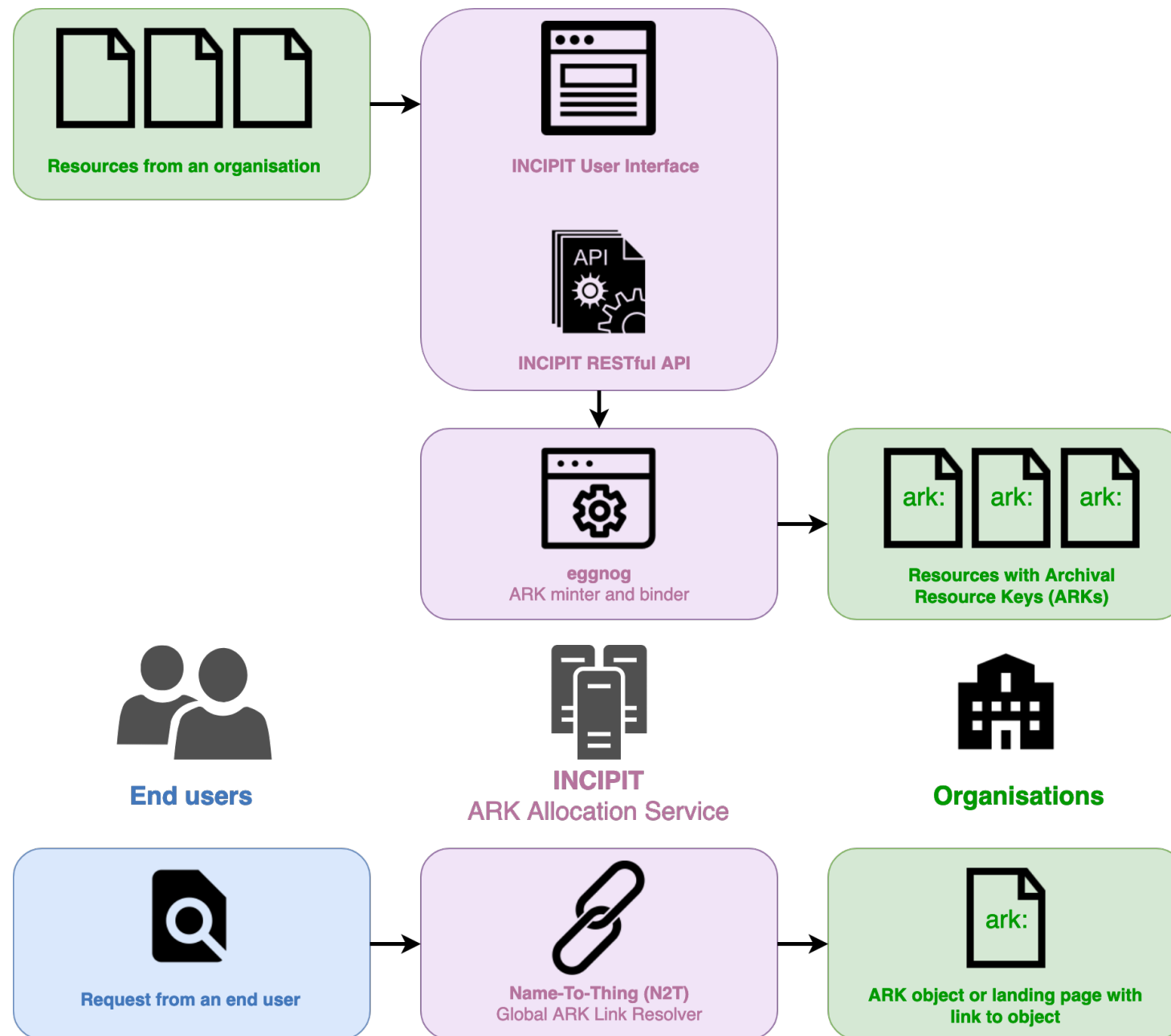
@incipit_ark

Project summary



- INCIPIT has been developing a complementary infrastructure for the low-cost attribution of PIDs (ARK allocation service)
- Funded by the swissuniversities P-5 programme (01.2020-12.2020) and led by the HEG-GE and the Swiss Institute of Bioinformatics (SIB)
- Collaboration with the CDL/EZID and ARKs in the Open initiative/ARK Alliance

<https://www.swissuniversities.ch/en/topics/digitalisation/p-5-scientific-information/projects/incipit>



User interface



INCIPIT Login

CREATE AN ADVANCED DEMO IDENTIFIER

To create a simple identifier [click here](#)

Choose an identifier type

ARK (ark:/99999/1k3/...)

Optional: Enter a custom remainder (suffix)

Recommended: Leave blank

Identifier Preview:

Decide

Make this identifier Public Reserved

Allow harvesting/indexing? Yes No

Describe the identified object using the profile

Location (URL)

Who

What

When

By clicking "Create" you will create a demo ID. Demo IDs are subject to deletion two weeks after creation and are only meant for testing purposes.

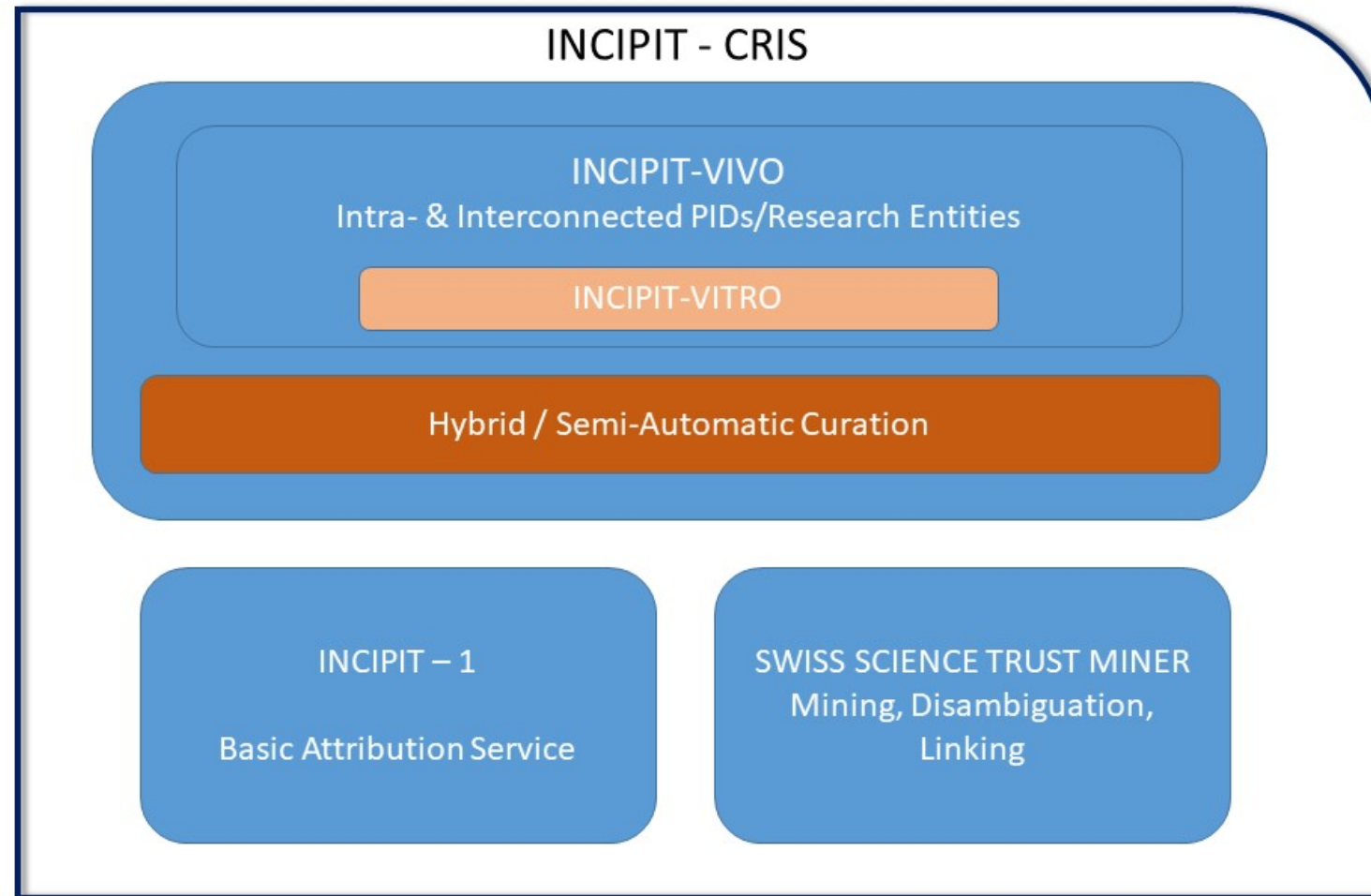
To create a real identifier, [request an account](#).

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[About Us](#)

LATEST NEWS FROM INCIPIT

Prototype based on the EZID UI (only ARKs and not DOIs will be minted) - <https://ezid.cdlib.org/>

Project extension: INCIPIT-CRIS



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ARKs in the Open
/ ARK Alliance

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