ARKs in the Open: community owned identifier infrastructure

twitter: "10 persistent myths about persistent identifiers"

"Cool URIs Don't Change"   Tim Berners-Lee, 1998

ARK anatomy

- A URL that might be "cool",
- A labelled URL with a globally unique identity inside

http://n2t.net/ark:/12345/fk1234

- Server name in front makes it actionable
- NAAN + Name is core globally unique identity

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ARK sociology

- 500+ organizations registered for a NAAN

- Estimated 175 million ARKs in the world

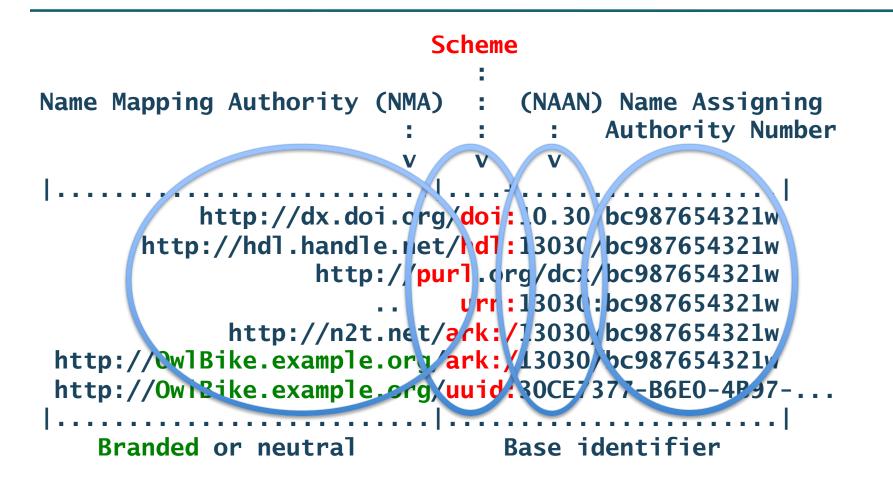- Flexible metadata

- Flexible lifetime

But can you tell if a URL *is* "cool"?

- No – unknowable for any kind of identifier

- Metadata should tell you about it and the archive's commitment

  - Use ARK inflections (preferred)
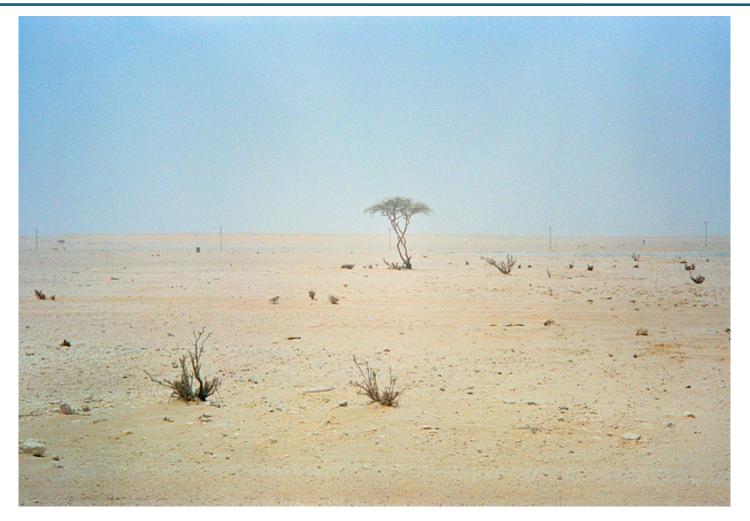
  - Or use content negotiation

Identifier schemes are highly similar

```
                         Scheme
                           :
Name Mapping Authority (NMA) :   (NAAN) Name Assigning
                     :     :    :   Authority Number
                     v     v    v
|.........................|.......................|
           http://dx.doi.org/doi:10.30/bc987654321w
       http://hdl.handle.net/hdl:13030/bc987654321w
               http://purl.org/dcx/bc987654321w
               ..       urn:13030:bc987654321w
           http://n2t.net/ark:/13030/bc987654321w
   http://OwlBike.example.org/ark:/13030/bc987654321w
   http://OwlBike.example.org/uuid:30CE7377-B6E0-4B97-...
|.........................|.......................|
     Branded or neutral          Base identifier
```

In the beginning

Then came the web

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Then came the link resolvers

Evolution of resolution

- Mail: letter "forwarding"

- Web: URL "redirection"

- DNS: hostname "resolution", example,

  my.domain.org *resolves* to 1.2.3.4

    today, but in 6 months to 2.2.3.4

- PID: purl.org, hdl.handle.net, dx.doi.org

Covenant of the ARK

The ARK scheme, uniquely,

  will not charge fees to create or use ARKs

  will not limit the number of ARKs you assign

  will not limit the kind of content you identify

  will not require metadata, nor even persistence

  will not mandate use of any particular resolver

n2t.net

N2T RESOLVER
NAMES ⇒ THINGS

Keeps names (identifiers) persistent, forwarding (resolving) them to the best known web addresses

Partners with EZID.cdlib.org, Identifiers.org, Archive.org, YAMZ.net metadictionary

Any kind of name – ARK, DOI, URN, Handle, PMID, PDB, Taxon, GRID, arxiv, ISSN, …

Any kind of thing – web pages, data, physical specimens, vocabulary terms, living beings, groups, …

N2T works with Identifiers.org to shorten and resolve over 700 kinds of schemes with Compact Identifiers

You can add your existing scheme (it's free)

N2T is also a global ARK resolver

ARKs in the Open: a first step…

… toward long-term sustainability of the ARK infrastructure

ARKsInTheOpen.org

A pilot project

What is ARK infrastructure?

- Open source software tools & systems
- Production-grade resolver: n2t.net
- Registry of institutions (NAANs)
- ARK specification

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Collaboration with DuraSpace

- Start-up help for community-building
- Experience with open-source software support
- Fiscal sponsor for small non-profits

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The ultimate goal

Community ownership of
ARK identifier assets

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Is CDL abandoning ARKs?

No!

CDL plans to be **a core member**
of the ARK community and invites anyone
with an interest in promoting long-term access
to information objects to join us.

ARKsInTheOpen.org

How can I get involved?

Explore the work so far: ARKsInTheOpen.org
- ARK mailing list
- Express your Interest: bit.ly/2C4fU8f
- Project roadmap, Advisory Group
- WGs: outreach, sustainability, technical

Questions?   arks@ucop.edu