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
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

<table>
<thead>
<tr>
<th>Scheme</th>
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<tbody>
<tr>
<td>Name Mapping Authority (NMA) : (NAAN) Name Assigning Authority Number</td>
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http://dx.doi.org/doi:10.30/bc987654321w
http://hdl.handle.net/hdl:13030/bc987654321w
http://purl.org/dcx/bc987654321w
... urn:13030:b
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
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
Keeps names (identifiers) persistent, forwarding (resolving) them to the best known web addresses.

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

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

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

ARKsInTheOpen.org
Collaboration with DuraSpace

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

ARKsInTheOpen.org
The ultimate goal

Community ownership of ARK identifier assets

ARKsInTheOpen.org
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