A DNS Based Approach to Persistent Identification

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**PURL
URN
Handle
ARK**

The 1990's

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THE 404 APOCALYPSE

WARNING

All problems in computer science can be solved by another level of indirection.

- David Wheeler

It is easier to move a problem around ... than it is to solve it.
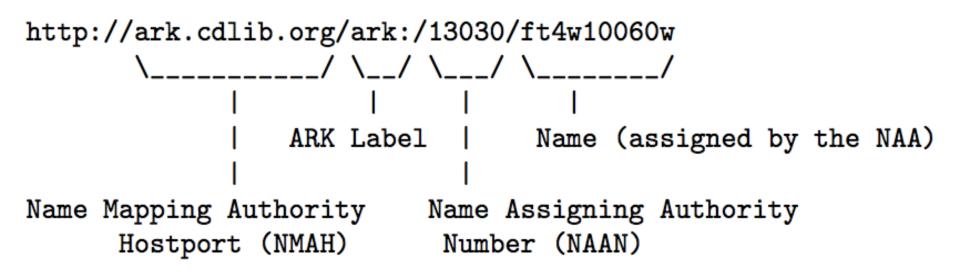
- RFC 1925, "Fundamental Truths of Networking"

Persistance is purely a matter of service, and is neither inherent in an object nor conferred on it by a particular naming syntax. The best an identifier can do is lead users to those services.

- John A. Kunze

```
http://ark.cdlib.org/ark:/13030/ft4w10060w
       _____/ \__/ \___/ _____/
            |           |     |       |
            |       ARK Label |    Name (assigned by the NAA)
            |                 |
Name Mapping Authority    Name Assigning Authority
    Hostport (NMAH)           Number (NAAN)
```

From Kunze, John A., Towards Electronic Persistence Using ARK Identifiers, 2003,

https://confluence.ucop.edu/download/attachments/16744455/arkcdl.pdf
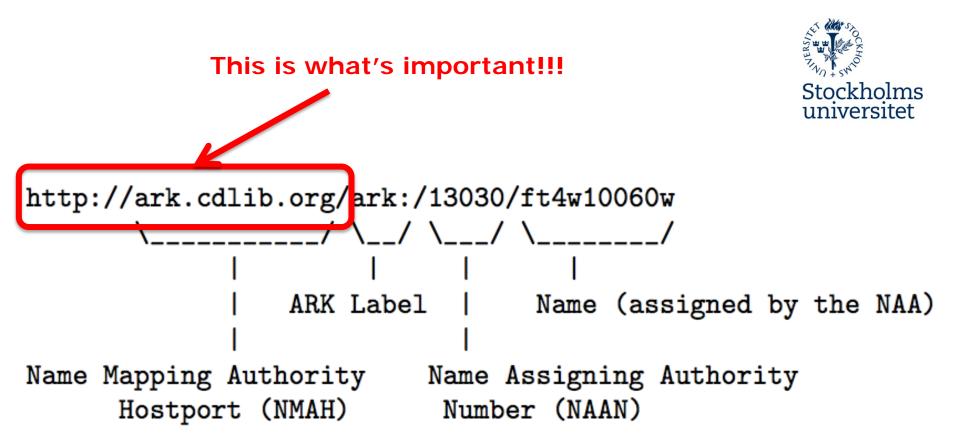
Excursion: The DOI

The DOI technology built on the CNRI handle system is only one piece of the persistence puzzle. An equally important piece is the social contract that all members agree to. Members must keep their content available and the URLs registered at CrossRef up to date.

\- http://www.crossref.org/10quarterly/quarterly_dec13.html

Persistence is a function of organizations, not of technology; a persistent identifier system requires a persistent organization and defined processes.

- http://www.doi.org/factsheets/DOIHandle.html

This is what's important!!!

```
http://ark.cdlib.org/ark:/13030/ft4w10060w
      _____/ \__/ \___/ _____/
            |          |     |       |
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If your pants fit, why use suspenders?

Recognize that http and DNS are fundamental parts of our ecosystem

Realize that DNS is sufficient to provide persistent, globally unique identifiers

Redirect our efforts to improve, rather than supplement, DNS

The real domain authorities are going to be selected by some political processes that are not identified well enough, in any of the drafts we have considered …
There just ain't no way that us techies are going to be allowed to dictate domain structures.

- Einar Stefferud, *namedroppers* list, May 1984