Resources and Value Statement

Problem

1. Long-term access to objects and items of interest to researchers, scholars, collectors, and others, is notoriously difficult to ensure. People and things move and links rot.
2. Persistent linking systems are available, but expensive.
3. And, those systems impose their own metadata and other requirements, instead of letting users supply their own.

Solution

1. ARKs provide long-term access to information objects.
2. ARKs are affordable: there are no fees to assign or use ARKs. And, you can host ARKs on your own web server for example, with help from the Noid (Nice Opaque Identifiers) open source software.
3. ARKs are flexible: In some ways, ARKs can be thought of as a “one-size-fits-all,” in that they perfectly fit simple as well as complex use cases.

    - ARKs let you supply whatever metadata you already have or no metadata at all!
    - ARKs help you avoid huge, long links for your registered objects
    - and ARKs have a number of features that advanced users enjoy, such as storing persistence statements

Key Metrics for Success

- Publish the ARK specification through the Informational RFC process
- Number of subscribers to ARK mailing list
- Process for assigning majority of ARK NAANs is automated
- Number of code contributors to N2T’s Eggnog (successor to Noid) and other tools
- Number of ARK integration projects for library and repository systems in GitHub
- Number of N2T clients in GitHub
- Number of N2T replicas maintained around the world

Resources Required

- Familiarity with specification review process (similar to scholarly peer review process)
- Experience with community outreach, ability to execute a communications plan and ensure continuous level of activity that promotes and involves the community while ensuring prompt response to issues
- Ability to analyze workflows and create scripts to automate routine system functions
- Software development skills in current N2T technologies (Perl, MongoDB, Bash)
- Ability to learn existing systems/architectures and add incremental improvements
- Financial or hardware support for the community from participating organizations/individuals

Contributor Profiles--Organizations

- Research Universities
- National Libraries
- Government Research Agencies
- Digital Preservation Repositories and Archives
- History and Genealogy Services

Contributor Profiles--Individuals

- Technical Leads/Managers
- Programmers/Developers
- Digital Preservation Experts
- Metadata Experts
- Genealogists
- Digital Librarians

Contributor Channels

- Expressions of Interest*
- Users
- Event networking
- Advisory Group
- Regular communication (outreach)
- Referrals

- EZID promotion

User Profiles

Target audience and early adopters

- anyone who needs to identify:
  - digital objects – documents, databases, images, software, websites, etc.
  - physical objects – books, bones, statues, etc.
  - living beings and groups – people, animals, companies, orchestras, etc.
  - intangible objects – places, chemicals, diseases, vocabulary terms, performances, etc.
- Who will your early adopters be?
  - libraries, archives, museums, publishers, research institutes, data centers, and educational institutions.

User Channels

- Event networking
- Regular communication (outreach)
- Referrals
- EZID promotion

Unique Value

ARK identifiers offer affordable, flexible long-term access to global cultural and scientific heritage.

Unique features:

- Implementations can consist mostly of off-the-shelf technologies.
- ARKs pioneered persistence statements that can reflect variations in persistence policy, including a limited lifespan.
- Open infrastructure: unlike other persistent identifiers, ARKs don't lock you into one specific, often fee-based, management and resolution infrastructure.
- ARK syntax uniquely supports relationship analyses of groups of ARKs, as might be conducted over search results to make collapsing or expanding them fast and powerful.
- “Inflections”: special characters (?, ??) at end of an ARK string will bring back an ARK’s metadata. This means you don’t need a programmer’s help.
- “Suffix passthrough”: a special technique that allows you to register one ARK to have usable persistent links to thousands of your objects. This means a huge savings in time and attention for you!

Footnote:
*The development of this statement was based on materials and instruction for the Open Canvas exercise published by the Mozilla Foundation: http://bit.ly/2ES416M