

ARKs @ CDL cost estimates

| | | FY1617 | | FY1718 | | FY1819 | |
|---------------------------------|-----|------------------|-------------|------------------|-------------|------------------|-------------|
| | Who | \$ | FTE | \$ | FTE | \$ | FTE |
| EXPENSE CATEGORIES | | | | | | | |
| | | | | | | | |
| ARK Specification work | JK | \$2,400 | 0.02 | \$2,400 | 0.02 | \$2,400 | 0.02 |
| | | | | | | | |
| NaaN Registry work | JK | \$6,000 | 0.05 | \$6,000 | 0.05 | \$6,000 | 0.05 |
| | | | | | | | |
| ARK Resolver (N2T) | | | | | | | |
| Infrastructure | | \$25,000 | | \$25,000 | | \$25,000 | |
| ARK Resolver (N2T) maintenance | JK | \$6,000 | 0.05 | \$6,000 | 0.05 | \$6,000 | 0.05 |
| ARK Resolver (N2T) enhancements | JK | \$30,000 | 0.25 | \$30,000 | 0.25 | \$30,000 | 0.25 |
| | | | | | | | |
| Subtotal | | \$69,400 | 0.37 | \$69,400 | 0.37 | \$69,400 | 0.37 |
| | | | | | | | |
| EZID Service | | | | | | | |
| Infrastructure | | \$40,000 | | \$20,000 | | \$20,000 | |
| EZID developer back-end) | JK | \$60,000 | 0.5 | \$12,000 | 0.1 | \$6,000 | 0.05 |
| EZID developer (front-end) | GJ | \$60,000 | 0.5 | \$60,000 | 0.5 | \$60,000 | 0.5 |
| EZID UI developer | AM | \$60,000 | 0.6 | \$10,000 | 0.1 | \$0 | 0 |
| EZID service manager | JS | \$120,000 | 1 | \$120,000 | 1 | \$120,000 | 1 |
| EZID project manager | KE | \$8,000 | 0.05 | \$8,000 | 0.05 | \$8,000 | 0.05 |
| EZID billing & admin | RE | \$6,000 | 0.1 | \$6,000 | 0.1 | \$6,000 | 0.1 |
| | | | | | | | |
| Subtotal | | \$314,000 | 2.75 | \$216,000 | 1.85 | \$200,000 | 1.7 |
| | | | | | | | |
| Total | | \$383,400 | 3.12 | \$285,400 | 2.22 | \$269,400 | 2.07 |

1. ARK specification

Estimate JAK .02 FTE for one year

This document has been stable since 2008, with pending changes greatly informed by [Notes from ARK "Experts" meetings, March 22 and June 11, 2018](#). The need is for a few volunteers to guide it through the Internet RFC process, a Technical WG task.

2. NAAN registry hosting and maintenance

Estimate JAK .02 FTE for one year, on-going volunteer .01 FTE per year

The registry is a text file in a human- and machine-readable format. Probably could use github for free hosting, and possibly change requests. The need is for transition away from CDL hosting and as volunteers to add and correct entries. New entries are received via a google form.

3. ARK resolver

Estimate, per year: \$25,000 in AWS fees, developer .05 FTE for maintenance, dev .23 FTE for enhancements

The ARK resolver is [N2T.net](#). One wrinkle is that also does compact identifiers (a bit more than ARKs estimate dev .02 FTE for maintenance), but that could be done by CDL.

Infrastructure that doesn't exist, but might exist

ARK brochure site (not started)

Estimate, per year: \$40 hosting? with on-going volunteers to maintain?

Unlike every other identifier scheme, ARKs have never had a brochure site, which might be a recommendation from the Outreach WG. Is this the same as the AITO wiki or is it different?

ARK resolver, next generation (not started)

Estimate, per year: \$25,000 in AWS fees ongoing; one-time developer costs -- 1.5 FTE (or 1 FTE for 18 months)

The resolver code could use a major rewrite, for maintainability and efficiency.

Incorporate EZID as resolver front end (not started)

Estimate, per year: \$25,000 in AWS fees; developer .10 FTE, plus ?? for billing, UI dev, project management

The idea is that the existing EZID front end might be a source of revenue for AITO, as it is currently for CDL. EZID provides lots of UI and API services, as well as link checking, search, download, and OAI-PMH for harvesting. A variety of income methods could be added (eg, micropayments) if this were run outside of CDL.