Member Node Description: GINA (Geographic Information Network of Alaska)

Version 1.0 1/12/17 Vanessa Raymond

General

Name of resource:	UAF-GINA
URL(s):	http://gina.alaska.edu http://catalog.northslope.org http://epscor.alaska.edu
Institutional affiliation(s):	University of Alaska Fairbanks, Geophysical Institute
Primary geographic location:	Fairbanks, AK USA
Project Director & contact info:	Tom Heinrichs, taheinrichs@alaska.edu
Technical Contact & contact info:	Will Fisher, whfisher@alaska.edu
Age of resource:	Since 2001
Funding support:	Grant-funding
Proposed Unique Identifier:	urn:node:UAF_GINA

Content

Content description/collection policy (1 paragraph, domain and spatial/temporal coverage, uniqueness of content, exclusions, as applicable):

Research datasets from across the State of Alaska and some Artic datasets. Specific focus on North Slope datasets for the North Slope Science Initiative catalog and a broader statewide catalog record focus for the EPSCoR data.

Types of data (complex objects, text, image, video, audio, other):
Text, image, geojson, ogc web services

Data and metadata availability (rights, licensing, restrictions):
varied

Option for embargo (yes/no, duration):
varied

Size of holdings (number and size of datasets, mean and median granules (files) per dataset):
3000 catalog records, with approximately 50GB of metatdata.
GINA hosts a much larger set of data that in the future may be integrated in to DataOne for distribution and archiving (apx. 100 TB).

Please describe recent usage statistics, if known, including information on annual data product downloads, annual number of users, annual number of data products used in publications:
Varies. Can provide if needed.

User interactions

How does a user contribute data? (what can be deposited, how are data prepared, are specific software required, documentation/support available)

User can submit data through our portal system gLynx. User must have an account. Support is available through UAF-GINA staff.

How does a user acquire / access data?

Our users are content-creators, they collect data for funded projects and store it in our catalog system. When users create catalog records they can determine the level of access to download / use /restrict access to the data.

What user support services are available (both for depositing and accessing/using data)?

Through project funding, user support for depositing and accessing data is available.

How does the resource curate data at the time of deposit?

It does not curate besides the granting of user accounts

Technical characteristics and policies

Software platform description, incl. data search and access API(s):

gLynx is UAF-GINA's custom developed geospatial catalog system. The gLynx platform is a custom Ruby On Rails web application backed by a Postgresql + PostGIS database and spatial engine. This is supported by Elastic Search for metadata and data record searching, and memcache for caching. gLynx is hosted on CENTOS6 VMs. The data hosted in gLynx is stored on a replicated network filesystem using Gluster.

Features:
The gLynx system is able to spawn background jobs on data record updates.

Service reliability (including recent uptime statistics, frequency of hardware refresh, if known):

99.5% uptime

Preservation reliability (including replication/backup, integrity checks, format migration, disaster planning):

The data hosted in gLynx is stored on a replicated network filesystem using Gluster.

User authentication technology (incl. level of create/modify/delete access by users):

The system uses secure account management using distributed identity services like Google, GINA::ID. These are built on OpenID and OpenAuth, we use a local role base authorization system. Roles includes global admin, editor, CMS editor, catalog editor, and member

Data identifier system and data citation policy, if available:

UAF-GINA's gLynx generates UUID for all data records. Externally this is an integer-based ID.

Metadata standards (including provenance):

A planned feature is to be able to export ISO-19115-2 metadata records if they pass a completeness test.

Capacity/services to DataONE

At what functional tier will you initially be operating? (see http://bit.ly/MNFactSheet for definitions)

- ☒ **Tier 1: Read only, public content**
- ☐ **Tier 2: Read only with access control**
- ☐ **Tier 3: Read/write using client tools**
- ☐ **Tier 4: Able to operate as a replication target**

If you can host data from other member nodes, what storage capacity is available?

While we have the capacity to do so we do not have the additional funding to offer such a service to other member nodes.

Can you provide computing capacity to the broader network? If so, please describe.

While we have the capacity to do so we do not have the additional funding to offer such a service to other member nodes.

Other Services

What other services or resources (such as expertise, software development capacity, educational/training resources, or software tools) can be provided of benefit to the broader network?

We can offer our chef cookbook for configuration management and testing to be used by other member nodes.