mdTranslator Project Objectives

• Help organizations become ISO compliance
• Eliminate the necessity developers and users to learn the ISO 19115 family of standards
• Make it easier for organizations to integrate ISO metadata functionality into local systems
• Make it easier for organizations to integrate ISO metadata functionality into custom web applications
• Provide an end-to-end online ISO metadata tool for small organizations and independent users
ADlwg Current Participants

Mission: “The Alaska Data Integration Working Group (ADlwg) was formed to examine and address the technical barriers to efficiently integrate and share data within and among participating organizations.”

- **Federal**
  - DOI: BLM, BOEM, NPS, USFS, USFWS, USGS

- **State of Alaska**
  - University of Alaska (UAF, UAS)
  - Geographic Information Network of Alaska (GINA)
  - International Arctic Research Center (IARC)

- **Non-Governmental Organizations (NGOs)**
  - Arctic Ocean Observing System (AOOS)
  - Arctic Research Mapping Application (ARMAP) - Nunatech Consulting
  - North Pacific Research Board (NPRB)
  - North Slope Science Initiative (NSSI)

- **Cooperatives/Joint-Ventures**
  - Arctic LCC
Others Following ADIwg Progress

- SAON – Sustaining Arctic Observing Networks
- ADCN – Arctic Data Coordination Network
- PGC – Polar Geospatial Center
- HDF Group
- ACADIS – Advanced Cooperative Arctic Data and Information Services
- IARC – International Arctic Research Center
- BAID – Barrow Area Information Database
- IASOA – International Arctic Systems for Observing the Atmosphere
- IARPC – Interagency Arctic Research Policy Council
  - Terrestrial Ecosystems Implementation Team (TEIT)
  - Arctic Data Implementation Team (ADIT)
- SEARCH – Study of Environmental Arctic Change
- NCCWSC – National Climate Change & Wildlife Science Centers
ADIwg 2012 Activity Timeline

- January
  - Alaska Interagency Working Group support
  - Decision to adopt ISO 19115 family of standards for data metadata
  - Analysis of data types and usage patterns within ADIwg
- December
  - Finished project metadata implementation
  - Analysis and strategy documents for working with ISO 19115-2 and 19110
  - Proposed subset of the full ISO standard for initial implementation
**ADlwg 2013 Activity Timeline**

- **January**
  - Approved ISO field subset for initial implementation
  - SAON, others request updates on project metadata standard development

- **Verified subset supports translation to non-ISO metadata standards**
  - Proposed joint development effort to implement ISO tools
  - Adopted JSON to ISO translation architecture
  - Received funding from NCCWSC for initial translator development

- **Split ADlwg into two working teams; ISO project metadata, ISO data metadata**

- **Decision to base new project metadata schema on ISO, share translator**

- **December**
  - Translator prototype completed & functional
Planned 2014 Activity Timeline

January

- Build new ADIwg website structure to support open sourcing of ADIwg metadata standards and tools
  - http://www.adiwg.org
- Online documentation of ADIwg ISO metadata standards and tools
- Finalize mapping of project metadata standard to ISO
- Support generation of ISO project metadata with mdTranslator

December

- Public hosting of mdTranslator tools
- Creation of web form for generating metadata from PI’s input
mdTranslator Development Milestones

- Package mdTranslator as Ruby Gem
- Return validation reports to requestor
- Determine Supported ISO Classes & Attributes
- Build Example ISO XML
- Verify Supported Fields List support for other standards
- Design Translator Architecture
- Build ISO JSON Standard
- Draft ISO JSON Standard
- Build JSON validator components
- Build reader and writer components (JSON->ISO XML)
- Host REST endpoint for mdTranslator
- Support ADIwg Project Metadata v2 standard
- Support ISO 19115-1
- Open REST endpoint to public
- Provide web form access and code to public
- 2015 milestones
- Milestones Reached
mdTranslator Primer

What you need to know to use mdTranslator

- ADIwg JSON schema
- Your metadata content

What you DON’T need to know
mdTranslator in Practice

1. Translator as: **Web Service**
mdTranslator in Practice

2. Translator as: **Integrated System Component**

![Diagram showing the relationship between database, Agency System, ADIwg Translator, and Ruby Gem with XML as output.]

- **Database**
- **ADlwg JSON**
- **Agency System**
- **Ruby Gem**

**ISO XML**
mdTranslator in Practice

3. Translator as: *Online Metadata Editor/Translator*

Hosted Web Form

Hosted Web Service

World Wide Web

ISO XML

ADIwg Translator

Metadata Writer

JSON Reader

Internal Format

Other

ISO

FGDC

Metadata Reader

JSON Writer

Metadata Editor
Discussion?