ARISTOTLE METADATA 2022
PRODUCT ROADMAP

Executive Summary

This document describes the 2022 development roadmap for the Aristotle Metadata suite of products, including:

- Aristotle Metadata Registry
- Aristotle Cloud Hosting
- Tablion Data Portal

Timelines within this document are indicative and may change as features are added or shifted.

Aristotle Metadata releases are coordinated to be feature-based and provide a cohesive set of functionality around a particular topic. This approach keeps releases limited in scope and reduces the number of changes to end-users of the system during each release.

This roadmap only includes major releases of new features. Ongoing minor improvements and enhancements to the tool will be delivered during the year.

Contents

Aristotle Metadata Registry feature roadmap

Quarter 1
Features planned for release during January to March 2022

Expanded data registry support – Summary Statistics
- To support how users understand data register with the Aristotle Metadata Registry, we are adding new metadata tools to record "Summary Statistics" about data fields to expand the information available to data users.

Metadata collections refresh
To support new use cases around how users categorise their metadata, we will be doing a refresh of the metadata collections tools, including:

- Cascading publication of collections to allow permissions to flow to child collections
- Display of collections in search pages and improving the browsing of collections
- Self-categorisation of content

Adding data profiles to support new standards
As the data landscape grows and changes, we are looking at ways to support a range of clients' data management requirements. We will be adding data profile capabilities to Datasets to allow for common metadata attributes to be recorded against and exported from the Aristotle Metadata Registry.

Registry administrators will be able to customise datasets by selecting profiles to add to editing and search interfaces.

Example data profiles we intend to add to Aristotle Metadata Registry during 2022 include:

- Office of the National Data Commissioner "Core Metadata Attributes" - https://datacommissioner.gov.au/media-hub/ondc-launches-pilot-project-australian-government-data-catalogue
- ISO 19115 geospatial data support and alignment with related ANZLIC standards

Quarter 2
Features planned for release during April to June 2022

Building a fully-federated metadata harvester
- To support metadata discovery and federation, we will be building a new product that adds harvester support for registries to implement the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PHM) API format
- This includes Adding a fully compliant Open Archives Initiative Protocol for Metadata Harvesting (OAI-PHM) API endpoint to share metadata using common formats, including:
  - RIF-CS
  - DataCite
  - Dublin Core
  - Data Documentation Initiative and more…

Expanded data registry support – Data lineage

- During 2022, we will be adding additional data lineage relations to Datasets and Distributions to capture the linkages and provenance of data. This will include the addition of visual tools and charts to visualise the relationships between data within the Aristotle Metadata Registry.

Expanded data registry support – Geospatial data profiles

- Following on from the addition of geospatial data profiles into the Aristotle Metadata Registry we will also be adding the ability to add geospatial bounding boxes and other metadata.

New dropdown metadata selector

To assist with users searching for metadata during editing and linkage, we will redevelop the metadata selection tool to help users find and link metadata easier.

Enhancements scheduled for the metadata selector 2022 include:

- Expanding the dropdown pane to allow users to add additional filters and previews.
- Adding the capability to create new metadata, directly from the dropdown to assist metadata creation during discovery.

Expanded interconnectivity between Aristotle Metadata Registry and Tablion Data Portal

Following the successful launch of the Tablion Data Portal, during the first half of 2022 we will be adding additional interconnectivity options between the Aristotle Metadata Registry and the Tablion Data Portal, including

- Integrating Aristotle Metadata search results within connected Tablion Data Portal.
- Displaying Aristotle Metadata metadata records within connected Tablion Data Portal.
- Adding metrics from Tablion Data Portal into Aristotle Metadata Executive Dashboard.
- Adding linkages from Aristotle Metadata Dataset to connected Tablion Data Portal.
- Syncing of Datasets and Distributions between Aristotle Metadata Registry and Tablion Data Portal.

Quarter 3

Features planned for release during July to September 2022

Expanded data registry support – Data Inventory Tools

Throughout 2021 we have seen expanded interest in user-friendly data inventory tools that help departments create, publish and export data inventories in an efficient way. To support new and

existing users implementing the Aristotle Metadata Registry as a data registry, we will be developing a data inventory tool that will allow for the import, creating and exporting of datasets.

This will include:

- Excel-like editing and importing of data inventories
- Exporting of data inventories in spreadsheet formats. This will specifically assist Australian Government departments comply with upcoming Data Accessibility and Transparency legislation.

"Alt+Q" – a new "Omnisearch" bar for the Aristotle Metadata Registry

Alt+Q is the shortcut users can use to quickly focus on and search for metadata.

As the functionality and scope of Aristotle Metadata Registry has grown, users now have access to more tools and vast amounts of information in their registries. To support this, during 2022 we will redevelop the search capability of the Aristotle Metadata Registry to support new use cases and allow for easier discovery of tools and content.

Similar to how search on sites like Facebook provides results of posts, comments, news and tools such as the Facebook Marketplace, the new Aristotle Metadata search will search for metadata, tools, data, pages, issues and help content all from a unified page.

This search engine rewrite will include:

- A new omnisearch bar that includes dropdown results to drive users to content faster.
- Adding issues and reviews to search results.
- Adding toolbox and Dashboard features to search results to drive users to features, as well as content.
- Providing a search history to help users access past search terms.
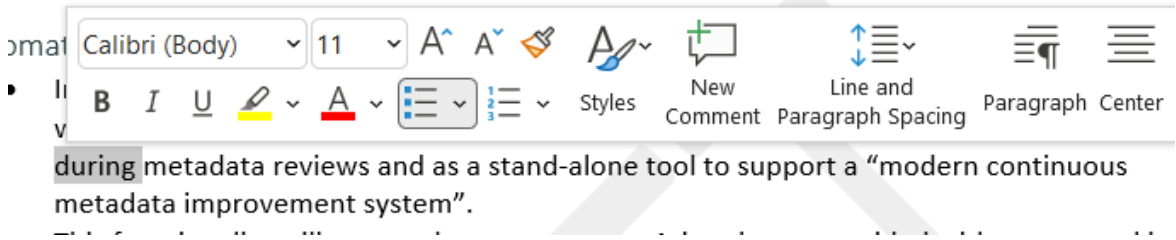- Faster, modern search engine results page to give users more information while searching.

Launching the Advanced Review Tool

- Last year, we released a beta version of a new Advanced Review Tool to make it faster and easier for governance teams to quickly review large amounts of content. We have received a lot of useful feedback about the new Advanced Review Tool
- The new Tool will be embedded directly into the existing Aristotle Metadata review to provide the ability to quickly review, recommend changes and comment against issues using a user experience common to users familiar with 'Track Changes' and 'Comment' functionality in office tools.
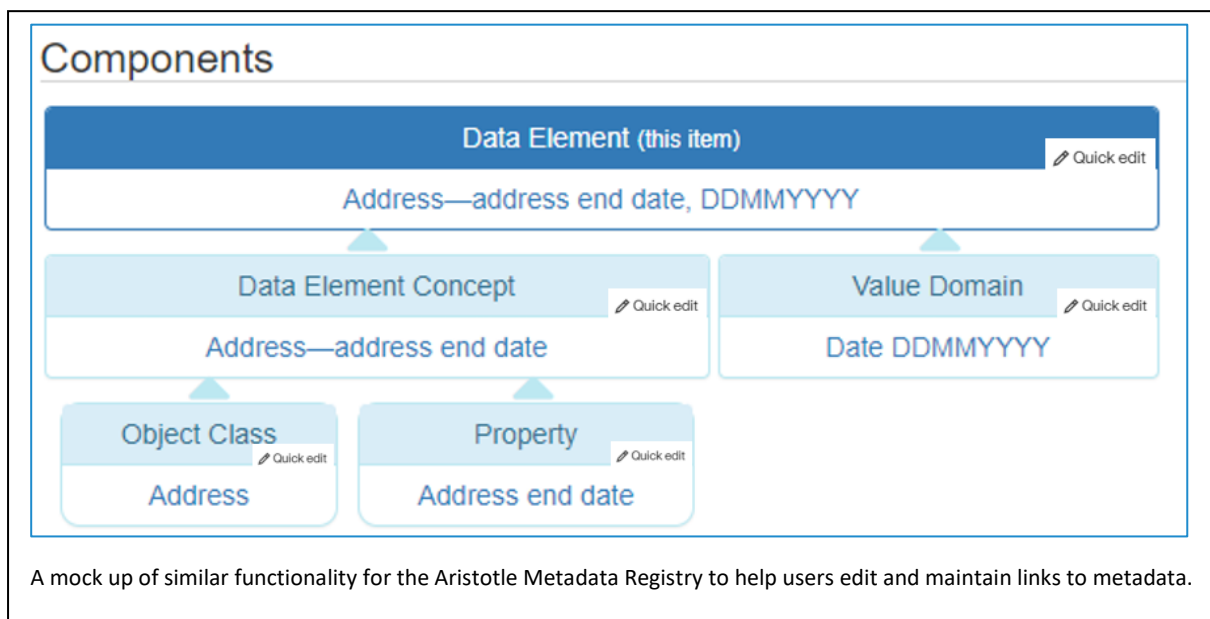
Metadata interaction toolbar

- To assist with metadata interaction, we will be adding expanded support to the Aristotle Metadata popover library to allow for additional tools to be used when interacting with metadata. This includes the ability to directly edit and preview metadata without jumping away from the metadata item page.
- This functionality will be added to our open Aristotle Tooltip library to add new features when embedding Aristotle Metadata into third-party tools - https://www.npmjs.com/package/@aristotle-metadata-enterprises/aristotle_tooltip

Example image of Microsoft Word toolbar where users can select text and hover to access quick tools.

A mock up of similar functionality for the Aristotle Metadata Registry to help users edit and maintain links to metadata.

Quarter 4

Features planned for release during October to December 2022

Metadata merging

- Common user feedback is the requirement to merge related metadata into a single record, while maintaining a record of lineage. In 2022 we will be adding features to support the discovery and merging of related metadata to assist with development of high-quality metadata records. Including:
    - New tools and functionality to find similar related metadata content.

- o Ability to merge metadata and update and relink related metadata items, for example, merging data elements and updating related records in Distributions and Data Set Specifications.

Secure data transfer using the Tablion Data Portal

During 2022 we will be adding additional data support to the Tablion Data Portal to provide a one-stop shop for shopping-cart based data requests. For clients using the Tablion Data Portal on Enterprise level plans we will be adding the ability for data extracts to be securely sent to researchers requesting data. This will include the ability to set disposal periods to ensure that data provided to researchers through the Tablion Data Portal is correctly disposed of within approval timelines.

This will ensure that every stage of the data request process is managed through a single tool and provides a secure cloud service for the management of data across the lifecycle of the request.

Automated Quality Control

- In 2021 we added additional APIs to perform "automated metadata validation". This year we will be adding new user interfaces to help surface this functionality to more users, both during metadata reviews and as a stand-alone tool to support a "modern continuous metadata improvement system".
- This functionality will ensure that users new to Aristotle are provided with automated in-app assistance to ensure they are able to produce high-quality metadata systems.

Registry-wide and Stewardship Organisation home page customisation

This release will introduce customisation options for an entire Aristotle Metadata Registry to allow a registry to reflect the Organisations' own branding requirements. Example features include:

- In-app page design templating system to allow administrators add new sections to the Registry home page, including:
  - o Images
  - o Lists of key metadata
  - o Links and banners

Front-end redevelopment

Quality-of-life improvements.

- We will be working with user experience designers and our clients to develop a new item page design to meet modern User Interface (UI)and functionality expectations.
- Update front-end UI Bootstrap framework. This will improve front-end security and responsiveness and provide improved support for modern browser software.

Additional Planned Features for 2022

These are backend or integration features and will be added during the year as resources allow.

- Configurable "Webhooks" to alert third-party systems of changes to content within a registry.
- Additional user account focused Application Programming Interface (API) development, including access to notifications and access to account management tools via the API.
- Adding new "see also" sections to pages to show other relevant data, similar to Amazon or other online shopping tools to show related meta data.

- Ongoing updates to support new releases of the Django Web Framework, which forms a major backend component of the Registry. New major releases of Django are planned for April 2022 and December 2022. We will upgrade Aristotle Metadata registry to support these releases within 1 month and will plan feature development around these updates.

Community updates

Throughout 2022, Aristotle Metadata will continue its commitment to clear and open communication with our community of users. This includes frequent user feedback and demonstration sessions, and ongoing moderation and promotion of the Aristotle Metadata Community forum.

Quarter 1

Aristotle Roadmap endorsement

In February 2022, we will be holding the annual Aristotle Roadmap meeting, bringing together representatives of the Aristotle Metadata community, to discuss and decide on the future direction of the Aristotle Metadata Registry. Prior to this meeting we will circulate a draft of this Roadmap to all Aristotle Cloud Services Australia clients.

The goal of this meeting will be to formalise and approve this roadmap as the feature and community development roadmap for 2022.

Quarter 2

Aristotle Metadata Certification Program

In the first half 2022, we will be doing a refresh and restructure of our training materials to provide a broader, more comprehensive suite of training. This new approach will provide both a theoretical and practical curriculum that will give participants experience in ISO data standards, metadata governance and metadata development.

Regular regional training courses

As the new client agencies come on to the Aristotle Metadata Registry platform, we are seeing an increased need for in-person training to familiarise new users with the system. By July 2022, Aristotle Metadata will begin offering regular regional training courses to fill this need. These training courses will be open to all clients, as well as members of the general public.

Rather than client agencies having to wait until staff have signed on their registry and requesting on-site training, regional training will allow agencies to skill up as few as one or two new staff in a group environment, with users across a range of agencies. As well as providing earlier access to up-to-date training, by running centralised training, users across agencies will have an increased opportunity to network and understandhow other organisations are using and optimising the Aristotle and Tablion platforms.