



ARISTOTLE

metadata registry

ARISTOTLE METADATA 2021
PRODUCT ROADMAP

Executive Summary

This document describes the 2021 development roadmap for the Aristotle Metadata Registry open-source library, and the Aristotle Cloud product. 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 bug fixes to the tool will be delivered during the year.

Contents

Executive Summary.....	1
Feature development roadmap.....	3
Continuing features from 2021.....	3
Metadata editor and creation improvements.....	3
Internationalization and multilingual support.....	3
Quarter 1.....	3
Support for alternative naming and conventions.....	3
Visualisation & Reporting.....	3
Quarter 2.....	3
Updated browse pages.....	3
New creation wizards.....	4
Quarter 3.....	4
Guided tours for new users.....	4
Security & Certification.....	4
Quarter 4.....	4
Integration.....	5
Automation & Notification.....	5
Registry-wide and Stewardship Organisation home page customisation.....	5
Front-end redevelopment.....	5
Additional Planned Features for 2021.....	5
Community update.....	6
Quarter 1.....	6
Aristotle Roadmap committee endorsement.....	6
Quarter 2.....	6
Online access to training material.....	6
Regular regional training courses.....	6

Aristotle Metadata Registry feature roadmap

Continuing features from 2021

Not all tasks on the 2021 were able to be released due to resource restrictions. These are currently being completed as a priority and will be released during quarter 1.

Metadata editor and creation improvements

- Re-write the metadata editor to use the new Aristotle API. This change will have limited impact on the front-end design of the editor, but will improve the speed of saving metadata, making updates and reduce the number of steps involved in creating metadata and improve general user experience.
- Simple content creation wizards make creating metadata easier and faster, while retaining the ability to identify potential duplication of content.
- New estimated delivery: March 2021

Internationalization and multilingual support

- New editing features to support multilingual definitions of metadata.
- Additional multilingual support across the user interface, with ongoing expanded language support.
- Improved support for user customisation of dates and times across the user interface.
- New estimated delivery: March 2021

Quarter 1

Features planned for release during January to March 2021

Support for alternative naming and conventions

- Add Stewardship Organisation level ability to define “alternate names” for metadata types to support on ISO 11179-3 7.3 Designations. For example: short names, synonymous names, technical names, and physical names for Data Elements and other metadata types.

Visualisation & Reporting

- To support metadata discovery, we are going to be expanding the ability for users to visualise metadata linkages from within Aristotle. This includes the ability to view metadata taxonomies and ontologies within Aristotle.

Quarter 2

Features planned for release during April to June 2021

Simple Data Dictionary Enhancements

- Added support for Aristotle Metadata Identifiers when uploading Data Dictionaries to identified existing metadata
- Export of metadata selections in SDDF Format
- Support for upload and export of all metadata types using Excel

Updated browse pages

- More consistent and customisable filtering across metadata lists, including Favourites, Workgroup and Stewardship Organisation lists
- Enhancements to browse pages for registry, stewardship organisation and workgroup browse pages to allow users to browse more effectively, including:
 - selecting the name to be displayed
 - filter by name, type, registration status or custom fields

- select the number of items to display per page
- Allow users to save custom browse pages, to create customised interactive lists of metadata.

New creation wizards

- Additional wizards to allow metadata to be created from associated items. For example:
 - Create a Data Element from an existing Data Element Concept
 - Create a Distribution from an existing Data Set Specification and vice versa

Quarter 3

Features planned for release during July to September 2021

“Executive Dashboard”

We will be developing an “Executive Dashboard” to support registry and stewardship administrators and help them communicate the impact and value of their registry to the leadership of their organisations. This new “Executive Dashboard” will allow administrators to quickly grab key information about the use of the registry to clearly communicate the how an organisation is using the Aristotle Metadata Registry. Over time, this Dashboard will give key metrics including:

Time series data (weekly / monthly)	Point-in-time lists
Active users	Most referenced metadata items
Total complete and failed searches	Most accessed metadata items
Total created & updated metadata	Metadata index scores (see below)

We will also be developing a range of index values to help provide aggregate snapshots of content in the registry. Two example indexes we are developing are the Data Asset Completeness Score (DAC) and Data Element Linkage Score (DEL) across the registry.

The Data Asset Completeness Score (DAC) will calculate the total count of completed data assets (data sets & distributions with fully formed data elements) as a percentage of total published data assets in the registry. The goal for any registry would be a DAC score of 100, with this being a high-level indicator of the complete description of data assets in the registry.

The Data Element Linkage Score (DEL) will be an average of the total number of links for all published or endorsed Data Elements as a percentage of total Data Elements within the registry. The goal for the DEL would be a positively growing number, with this giving an indication of the reuse and linkage across different data assets and indicators within the registry.

Guided tours for new users

- We will be building interactive “guided tours” into the Aristotle Metadata Registry to help new users become easily familiar with the functions of the Registry.
- This will include tours that cover the Dashboard, Reviews, Issues, and metadata creation.

Security & Certification

- In 2021, we delivered authentication improvements to support single sign on & multi-factor authentication. In 2021, we will be seeking independent security certification and technical assessment from Amazon Web Services to provide technical and security assurances to clients on the implementation of these innovative improvements to Aristotle.
- As a roadmap activity, this will allow us to provide regular security audit results to enterprise clients as part of their regular Aristotle subscription.

Quarter 4

Features planned for release during October to December 2021

Integration

To support the growing user base of clients interested in connecting their Aristotle Metadata Registry with other systems we will be delivering a generic Software Development Kit (SDK) to improve how clients can move information in and out of the Registry to make metadata available to third-party data profiling and visualisation tools.

- Throughout 2021, we will be delivering a range of supported integrations built using the Aristotle Metadata SDK to integrate with complementary data technologies including:
 - Amazon AppFlow
 - Azure Data Catalog
 - DDI/SDMX
 - Open government data platforms (eg. CKAN, data.gov.au)
 - PowerBI
 - Tableau

Automation & Notification

- Aristotle already includes “automated metadata validation”, this year we will be working to improve and expand this functionality 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 administration to have it meet their own branding requirements. Example features include:

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

Front-end redevelopment

Quality-of-life improvements

- Update front-end UI Bootstrap framework. This will improve front-end security and responsiveness and provide improved support for modern browsers.

Additional Planned Features for 2021

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 API development, including access to notifications and access to account management tools via the API.
- 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 2021 & December 2021. We will upgrade Aristotle Metadata registry to support these releases within 1 month of release and will plan feature development around these updates.

Community updates

Throughout 2021, 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 committee endorsement

In February 2021, we will be holding the annual Aristotle Roadmap Committee 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 draft versions of the Roadmap and Terms of Reference 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 2021.

Quarter 2

Online access to training material

In the first half 2021, we will be doing a refresh and restructure of our training materials to provide access to training material, including videos and presentations to clients of Aristotle Cloud Services Australia. This will allow client agencies to reuse these training packages in their own metadata training.

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 2021, Aristotle Cloud Service Australia 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 learn how other organisations are using the platform.

Roadmap Committee Meeting minutes

Attendee organisations:

- Department of Education, Skills and Employment
- Commonwealth Department of Social Services
- NSW Department of Community and Justice
- Swiss Bureau of Statistics (BFS)
- PotentialX
- Services Australia
- Workplace Gender Equality Agency

Meeting held at:

Virtually via Microsoft Teams

Chair: Samuel Spencer

Secretary: Lauren Eickhorst

Minutes:

- The Chair has opened the meeting, and a quorum was present
- Discussion and presentation on development and features implemented in the Aristotle Metadata Registry during 2020
- Technical report on Aristotle performance was presented, and the Client Accountability Report will be tabled independently.
- High level run through of the proposed 2021 Feature Development Roadmap
- High level run through of the proposed 2021 Community Roadmap
- The Chair has invited attendees to propose reprioritising the items in the 2021 Roadmap
 - Action: There were no objections to the prioritisation set out in the Roadmap, so the prioritisation laid out in the 2021 Roadmap will remain unchanged
- Discussion and run-through of all features proposed for Quarter 1 of the 2021 Roadmap
 - Action: Quarter 1 has been endorsed
- Discussion and run-through of all features proposed for Quarter 2 of the 2021 Roadmap
 - Action: Quarter 2 has been endorsed
- Discussion and run-through of all features proposed for Quarter 3 of the 2021 Roadmap
 - Action: Quarter 3 has been endorsed
- Discussion and run-through of all features proposed for Quarter 4 of the 2021 Roadmap
 - Action: Quarter 4 has been endorsed
- Discussion and run-through of the Community updates proposed for the 2021 Roadmap
 - Action: Community updates have been endorsed
- There are no further business or questions from attendees

- With the Aristotle 2021 Roadmap fully endorsed, The Chair has closed the Roadmap Committee meeting and has thanked everyone for their input/participation and for attending the meeting
- Meeting closed

