

# ARISTOTLE

## cloud services

## ARISTOTLE CLOUD 2020 PRODUCT ROADMAP

Endorsed 21 February 2020



### **Executive Summary**

This roadmap document describes the 2020 development roadmap for the Aristotle Metadata Registry open-source library, and the Aristotle Cloud product. Major releases are coordinated to provide new features and functionality for a single 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 covers major releases of new features, however ongoing improvements and to the tool can be expected during the year.

This roadmap only covers major releases of new features. Regular minor releases to provide ongoing improvements and bug fixes to the tool can be expected during the year.

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### Feature development roadmap

#### Quarter 1

Features planned for release during January to March 2020

#### Integration of ISO11179 part 7, edition 3

Part 7 of the ISO 11179 metadata registry standard was published in December 2019. This new component title "Metamodel for data set registration" covers the including of Data Set, Data Set Specifications and Data Provenance records.

Many of these metadata types are already available in Aristotle in the Aristotle Dataset Extensions package and are based on related standards, however we intent to do a thorough audit against the new component to ensure ongoing compliance with the standard that underpins the Aristotle Metadata Registry.

Metadata reporting and visualisation

- Visualisation tools to show the lifecycle of versions of metadata
- Visualisation tools to show the linkages of metadata, including both standard 11179 linkages and custom relationships
- Permissions-based metadata reporting tools to produce tabular reports showing how metadata is viewed, linked or registered over time. This may potentially include graphing options to produce visual graphs alongside tabular reports.

#### Metadata toolbox

As new metadata tools are built into Aristotle, we are planning a "Metadata toolbox" page in the Dashboard that groups these for easy access. This will be the central point for current and future tools, including the following which are currently in the system or planned for release during Quarter 1:

- Metadata Compare tool
- Metadata Reporting tool
- Metadata Component checker

#### Quarter 2

Features planned for release during April to June 2020

#### 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.
- Simply content creation wizards make creating metadata easier and faster, while retaining the ability to identify potential duplication of content.

#### Improved cloning of content

- Improvements to metadata cloning to allow users to select the depth of a clone, so that all appropriate associated metadata can be updated within a single step.
- Additional wizards to allow metadata to be created from associated items. For example, creating Data Elements from existing Data Element Concepts or Value Domains from existing Conceptual Domains.



#### Support for simple data dictionary imports

- Development of an ISO-11179 compliant format for developing data dictionaries using standard formats such as Excel and CSV spreadsheets.
- Development of import functionality that enables to bulk import Simple Data Dictionaries into Aristotle, to reduce the effort needed to bulk import new content into Aristotle

#### Support for longitudinal data records

- Identify existing widely adopted standard data structures for the recording of longitudinal datasets
- Provide database & API level support to allow the description of longitudinal datasets using ISO 11179 standardised structures

#### Quarter 3

Features planned for release during July to September 2020

#### Federation, import and export

- Improved API support, to support permissions-based access to the API to allow users to create and update metadata via the API.
- Optional automatic expiration dates for API tokens to improve security of API access
- Wider-support for API-based metadata federation to allow registries to connect registries in a networked hub-like fashion. This will allow registry administrators to:
  - $\circ\quad$  describe eligible registries to copy metadata from
  - specifying exactly which metadata types to allow
  - $\circ$  ~ allow registries to show other registries where metadata was copied to

#### Workflow management

- Improvements to workgroups to support email-based workgroup invitations. When enabled by administrators, this will allow workgroup managers to quickly add new members and create new accounts.
- Optional self-service workgroup creation. If enabled at a Registry or Organisation level, this will allow any user to create a new workgroup for metadata management.

#### Enhanced support for hierarchical classifications

- Provide database & API level support to allow the description of hierarchical classification structures in a standardised format that can be linked back to Value Domains and Data Elements
- Additional editing interfaces to allow the drag-and-drop reordering of classification hierarchies
- Enhanced support for concordances and correspondences to map values between classifications, value domains and conceptual domains



#### Quarter 4

Features planned for release during October to December 2020

#### 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.

#### Registry-wide 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:

- Administrator-driven site customisation, allowing end-users of a registry to alter logos, headers, footers.
- Home page improvements and customisation to improve how anonymous users interact with a metadata registry.

#### Improvements to Issues and Change Management

- Improved visibility of Issue numbers to allow users to communicate issues to other users outside of Aristotle.
- Additional notifications to alter users of new or updated issues raised for metadata items.
- Track the versions of metadata that issues were raised against to track if a change request is outof-date

#### 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.
- Update front-end icon set to Font Awesome 5. This will provide fast page load times and additional icon types to display new information.

#### Additional Planned Features for 2020

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

- Standalone javascript libraries to enable embedding of content from an Aristotle Metadata Registry into third-party webpages.
- Configurable "Webhooks" to alert third-party systems of changes to content within a registry.
- Addition 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 Aristotle. New major releases of Django are planned for December 2019 & August 2020. We plan to upgrade Aristotle to support these releases within 1 month of release and will plan feature development around these updates.
- Registry Administrator configurable Multi-factor authentication (MFA) support to improve security within the system.



## Community update

#### Quarter 1 – Aristotle Roadmap Committee endorsement

In February 2020, we will be holding the first Aristotle Roadmap Committee meeting, bringing together representatives of the Aristotle Cloud 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 2020.

#### Quarter 1 – Aristotle Community Forum

To help bring together users of the Aristotle Metadata Registry, we will be hosting and maintaining an online community to bring together metadata users across government and the private sector. This forum will allow users to discuss best practices, collaborate and share different approaches to metadata management and integration of the Aristotle Metadata Registry in their own workflows.

#### Quarter 2 – Online access to training material

In the first half 2020, 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.

#### Quarter 3 – 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 2020, 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:

- Australian Bureau of Statistics
- Commonwealth Department of Human Services
- Commonwealth Department of Social Services
- NSW Family and Community Services
- PotentialX

#### Apologies:

• Department of Education

#### Meeting held at:

Level 6 Boardroom, Aristotle Cloud Services Australia offices 490 Northbourne Avenue, Dickson 2602 ACT

#### Chair: Lynton Norris

#### 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 2019
- Technical report on Aristotle performance
- High level run through of the proposed 2020 Feature Development Roadmap
- High level run through of the proposed 2020 Community Roadmap
- The Chair has invited attendees to propose reprioritising the items in the 2020 Roadmap
  - Action: There were no objections to the prioritisation set out in the Roadmap, so the prioritisation laid out in the 2020 Roadmap will remain unchanged
- Discussion and run-through of all features proposed for Quarter 1 of the 2020 Roadmap

   Action: Quarter 1 has been endorsed
- Discussion and run-through of all features proposed for Quarter 2 of the 2020 Roadmap

   Action: Quarter 2 has been endorsed
- Discussion and run-through of all features proposed for Quarter 3 of the 2020 Roadmap
  - Action: Quarter 3 has been endorsed
- Discussion and run-through of all features proposed for Quarter 4 of the 2020 Roadmap

   Action: Quarter 4 has been endorsed
- Discussion and run-through of the Community updates proposed for the 2020 Roadmap
  - Action: Community updates have been endorsed
- There are no further business or questions from attendees
- With the Aristotle 2020 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

