Data Standards Body
Technical Working Group

Decision 002 – URI Structure

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Decision Approved By Chairman: <to be determined>

Context

Each end point within the API standards will have a defined resource URI. These end points will be accessible from a base path that will have a separate structure used to separate different APIs and potentially industries. This document proposes this URI structure.

Decision To Be Made

Determine the overall URI structure to be used for the API Standards.

Feedback Provided

The original proposal and the associated feedback can be found at:
https://github.com/ConsumerDataStandardsAustralia/open-banking/issues/2

There was a lot of constructive feedback for this decision from a range of sources.

The key contentious point in the feedback related to the use of a static URI structure versus a more flexible model where specific end points were locatable using a file containing end point references. The latter position relates to making the API end points more "discoverable" rather than using a uniform structure across providers to allow clients to find capability.

While a discoverable model would support extensibility and potentially give more flexibility to providers on how they implement the standards it would create complexity. There is also no well-defined protocol or approach to discoverability that can be leveraged.

On balance the recommended approach for resolving this issue is to:
1. Adopt a static URI structure for the draft standard for implementation by July 1st 2019
2. Register a decision proposal to be created to specifically address discoverability so that this discussion can continue
3. Depending on the outcome of the discoverability proposal either adopt the draft standards immediately or look to adoption of a discoverability model in a later version of the standards

The decision for approval has been formulated accordingly.

Decision For Approval

URI Structure

The recommended URI structure is as follows:

<provider path> / **cds-au** / **<version>** / **<industry>** / **<resource>**

Some examples:
http://www.bank.com.au/api/cds-au/v1/banking/accounts
http://www.bank.com.au/api/cds-au/v1/banking/products
http://www.energyretailer.com.au/api/cds-au/v1/energy/usage

An explanation of the constitution components of the URI structure is provided below:

- **Provider Path**
  The provider path is a base path set by the provider of the APIs. It can be any URI desired by the provider but should not be too long as this will reduce the characters available in the URI for the resource path and query string parameters.

- **"cds-au"**
  This is a static string representing the end points defined by the Consumer Data Standards for Australia. This static string allows for separation from other APIs available at the same base provider path and also allows for extension if the standards are adopted by another jurisdiction in whole or in part.

- **Version**
  The version of the high level CDS standards. This is not the version of the endpoint or the payload being requested but the version of the overall standards being applied. This version number will be "v" followed by a the version as a positive integer (e.g. v1, v12 or v76).

- **Industry**
  A static string used to separate APIs for a specific industry. As standards for new industries are defined the list of industry strings will be extended. Currently the accepted values for this component of the base path will be:
  - *banking* – for APIs related to banking and potentially wider financial services data
  - *energy* – for APIs related to the energy distribution industry
  - *telco* – for APIs related to telecommunications
  - *common* – for APIs that potentially span industries

- **Resource**
  The URI for the specific resource requested. This end point URI will be defined as part of the end point definitions for each API group.

Discoverability

The issue of discoverability was raised during the feedback period for this decision. A subsequent decision proposal focused on this topic has been scheduled. Depending on the outcome of that decision proposal discoverability may be added alongside the first draft of the standards or be adopted in a later iteration.

It should be noted that the value of discoverability is acknowledged, especially in light of the desire for standard extensibility. Discoverability does not solely apply to URI structure, however, with discoverability as a concept potentially impacting other decisions that have already been scheduled such as pagination. Discoverability concepts will be given due consideration during the formulation of those decision proposals.