Brief Guide of DOI Content Negotiation CSL-JSON via http API for Reference Managers who wish to Incorporate JaLC Metadata

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Introduction

- You might be interested in

  ingesting and incorporating the metadata from non-Crossref RAs such as JaLC

- You might be concerned

  the API request syntax and output tag names differ for each RA, and you are reluctant to deal with that.

- This technology could help you solve your concerns

  since it could *kill some birds with one stone*
  if its output meets your requirement

DOI Content Negotiation CSL-JSON via http API

- Provided by the DOI Foundation

- Characteristics
  - ➢**Unified** invocation across various RAs
  - ➢**Normalized** the tag names at the outputs across various Ras

- Despite some restriction it has,
  this could be the first choice to metadata consumers
  considering the benefits described above.

*: This presentation will hereafter refer to "DOI Content Negotiation CSL-JSON via http API" as "ConNeg CSL-JSON".

Invocation: very simple and a single implementation method for various RAs

- JaLC DOI
  *https://citation.doi.org/metadata?doi=*10.1241/johokanri.58.763
- Crossref DOI
  *https://citation.doi.org/metadata?doi=*10.1145/2783446.2783605
- DataCite DOI
  *https://citation.doi.org/metadata?doi=*10.5281/zenodo.5105674
- mEDRA DOI
  *https://citation.doi.org/metadata?doi=*10.17471/2499-4324/1442

and **four more** RAs shown at https://citation.doi.org/

With this unified invocation,
metadata consumers **do not have to** study and follow each RA's API request syntax.

Output: normalization for tag names

For example, tag names on authors are normalized as shown below

RA	Native REST API	ConNeg CSL JSON
Crossref	author / given / family	author given Family
JaLC	creator / last_name / first_name	
DataCite	creator / familyName / givenName	
mEDRA	Contributor / NamesBeforeKey / KeyNames	

With this normalization, metadata consumers **do not have to** be bothered by the varied tag names of each RA schema.

Output: simplification with some removal

- Simplification is achieved by removing some items.
  - ✓For example, when you compare the output from
    - JaLC API https://api.japanlinkcenter.org/dois/10.51094/jxiv.917
      ConNeg CSL-JSON https://citation.doi.org/metadata?doi=10.51094/jxiv.917
    - DataCite API https://api.datacite.org/dois/10.17596/0000002
      ConNeg CSL-JSON https://citation.doi.org/metadata?doi=10.17596/0000002

    you will observe *affiliation and ORCID for author* are **not responded.**

  - ✓Spec. of CSL-JSON does not define affiliation and ORCID for authors.

  - ✓This makes sense since CSL-JSON focuses on References.

  - ✓Outputs still have enough information as reference information.

  - ✓Since your product and service is Reference Manager, ConNeg CSL-JSON works well.

Output: some extra info

- Extra information to be ignored
  - ✓Outputs from ConNeg CSL-JSON from some RAs may have some extra information such as member-ids and license information.
  - ✓At most cases, they are extraneous information to be ignored at your ingesting outputs from ConNeg CSL-JSON.

Conclusion

- Benefits
  1. Simplified and unified invocation
     ➔you **do not have to** study and follow each RA's API request syntax.
  2. Normalized tag names at outputs
     ➔you **do not have to** be bothered by the varied tag names of each RA schema.

  Programs ingesting metadata from various RAs will be **kept simple**,

  because ConNeg CSL-JSON could kill some birds with one stone
  if the outputs meet their requirements.

- Suggested actions to metadata consumers
  1. Try ConNeg CSL-JSON and ensure outputs from ConNeg CSL-JSON include what you need
  2. Pick up what you need from outputs and ignore extraneous information

Materials and Misc. Info

- Materials
  - ✓DOI Citation Formatter HTTP API
    https://citation.doi.org/api-docs.html
  - ✓DOI CITATION FORMATTER
    https://citation.doi.org/
  - ✓Explanatory Documentation
    https://citation.doi.org/docs.html
  - ✓CSL-JSON schema
    - ➢ https://github.com/citation-style-language/schema/blob/master/schemas/input/csl-data.json
    - ➢ https://docs.citationstyles.org/en/stable/specification.html

- Misc. Information
  - ✓If you are comfortable with Unstructured text, you can invoke "format" API. An example is shown below.
    https://citation.doi.org/format?doi=10.1145/2783446.2783605&style=apa&lang=en-US

End of the brief guide

Thank you !