

## Introducing Trove API v3 Beta

Funded by the [Australian Research Data Commons](#) (ARDC), Trove released the [Trove API version 3.0 Beta](#) in March and completed a 2<sup>nd</sup> release in May and a 3<sup>rd</sup> release in June. It has new content, new functionality, and some changes in the way you make calls. This introduction outlines what we've changed in the Trove API v3 Beta and why.

We would like to invite our current API users, to have a first look at the new Trove API v3 Beta. If you are able, spend some time trying it out seeing how it integrates with your projects.

If you find any bugs or issues, please [get in touch](#). We are keen for feedback on the Beta as we continue to develop the API for its final iteration in mid-2023. We will promote the new API to Trove researchers and provide new help content at this time.

We will continue to provide access to the existing v2 Trove API and Trove People & Organisations APIs until January 2024. We will provide an exact date ahead of time before ceasing access to the existing v2 API Trove API and Trove People & Organisations APIs.

## Key changes to the way you interact with the API - 1<sup>st</sup> release

**Updated:** Versioning of the API to v3

The Trove API has updated versioning so you can rely on the calls you're making, and the data returned while we make iterative improvements. This means the base URL for accessing version 3 of the Trove API has an additional 'v3' at the end.

From <https://api.trove.nla.gov.au/v2> to <https://api.trove.nla.gov.au/v3>

**Added:** Standardised the API to OpenAPI Specification (OAS) 3.0.3

The OpenAPI Specification (OAS) defines a standard, language-agnostic interface to HTTP APIs which allows both humans and computers to discover and understand the capabilities of the service without access to source code and documentation. It can help API users to understand and interact with the API service with a minimal amount of implementation and be used by documentation generation tools to explore the API and interact to display, query, and return API results.

A Trove API Open API specification file is available at:

<https://api.trove.nla.gov.au/v3/trove-api-v3.yaml>

**Added:** Try the Trove API using the API Explorer – Swagger

Swagger is a documentation tool which works with the OpenAPI Specification (OAS 3.03) to allow users to explore the Trove API and interact to display, query and return API results.

The Trove API Swagger UI is available at:

<https://api.trove.nla.gov.au/v3/>

**Changed:** API parameter 'zone=' is now 'category=' to better match the categories visible in Trove  
The Trove API v3 has deprecated the parameter 'zone=' in favour of the new parameter 'category=' to better match the categories visible in the Trove user interface (UI). During the modernisation of Trove in 2020, the Trove UI was updated to change how you could search in Trove. Previously you could search across Trove using 'zones' which were updated in 2020 to Trove 'categories'. Since 2020, the Trove API has been out of step with the updated Trove UI. The Trove API has now been changed, to reflect the use of categories and make it easier to conduct a search in the Trove UI and replicate the same search in the Trove API. This change aligns the Trove API and Trove user interface.

During the Beta period you need to use the old 'zone' parameter in v2 queries, and the new 'category' parameter in v3 queries.

v2 Trove API 'zone' parameter values include: all, book, picture, article, music, map, collection, newspaper, gazette, list

v3 Trove API 'category' parameter values include: all, newspaper, magazine, image, research, book, diary, music, people, list

**Added:** Data from 'People & Organisations' category

The Trove API v3 now includes results for the 'People & Organisations' category using the 'category=all' and 'category=people' parameter. Previously data from the Trove 'People & Organisations' category was available through one of three separate People APIs (OAI-PMH, SRU and OpenSearch). This rich set of linked data is now accessible to all users through the Trove API, which will allow the eventual decommission of the three separate People & Organisations API's.

**Changed:** Standardised interlinked data

Previously, the Trove API returned partial or relative URL identifiers in responses. This has been changed so that the Trove API now returns complete or absolute URL identifiers in responses i.e.

Trove API v2 response: <work id="202917488" url="/work/202917488">

Trove API v3 response: <work id="202917488" url="https://api.trove.nla.gov.au/v3/work/202917488">

This is to make it easier for users to make follow-up API calls for related items without having to work out the full URL structure

**Changed:** 'callback' parameter

The Trove API v2 included a 'callback' parameter to cater for cross domain requests, allowing an API user to use Javascript to request data from a host other than trove.nla.gov.au, in a process called JSONP. It enabled an API user to specify a name of a function to process the response & the API would wrap the JSON response with the function name. JSONP has been deprecated and replaced with CORS, and as a result the 'callback' parameter has also been deprecated in Trove API v3.

**Added:** 'Aust Language' facet

This new facet allows you to limit your results to items in First Australians languages using the [Austlang](#) language name and/or code. For example: Warlpiri C15 i.e.

`https://api.trove.nla.gov.au/v3/result?key=<YOUR KEY>&category=book&q=australian&l-austlanguage=Warlpiri%20C15&s=*&n=20&sortBy=relevance&bulkHarvest=true&reclevel=full&encoding=xml`

**Added:** 'Cultural Sensitivity' facet

This new facet allows you to limit your results to items that have been flagged that may be [culturally sensitive](#) particularly in respect to First Australians i.e.

`https://api.trove.nla.gov.au/v3/result?key=<YOUR KEY>&category=book&q=australian&l-culturalSensitivity=y&s=*&n=20&sortBy=relevance&bulkHarvest=true&reclevel=full&encoding=xml`

**Added:** 'Contributing Collection' facet

This new facet allows you to limit your results to items that come from a single collection. It is especially useful for manuscript collections in the 'Diaries, Letters & Archives' category which have a hierarchical structure, including manuscripts and personal papers, to help return all items in a specific manuscript collection. e.g. 'Papers of Sir John Monash' i.e.

`https://api.trove.nla.gov.au/v3/result?key=<YOURKEY>&category=diary&q=monash&l-contribcollection=%20Papers%20of%20Sir%20John%20Monash&s=*&n=20&sortBy=relevance&bulkHarvest=false&reclevel=full&include=all&encoding=xml`

**Added:** 'First Australians' facet

This new facet allows you to limit your results to items that include content relating to [First Australian](#) peoples, cultures, and languages i.e.

`https://api.trove.nla.gov.au/v3/result?key=<YOUR KEY>&category=book&q=australian&l-firstAustralians=y&s=*&n=20&sortBy=relevance&bulkHarvest=false&reclevel=full&encoding=xml`

**Added:** 'Partner NUC' facet

This new facet allows you to limit your results to items contributed to Trove by a specific partner organisation using their unique 'NUC' id identifier. You can look up NUC ids in the [Australian Libraries Gateway](#) (ALG) e.g. [NUC] AIAS for Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS) i.e.

`https://api.trove.nla.gov.au/v3/result?key=<YOUR KEY>&category=book&q=australian&l-partnerNuc=AIAS&s=*&n=20&sortBy=relevance&bulkHarvest=false&reclevel=full&encoding=xml`

## Key changes to the way you interact with the API - 2<sup>nd</sup> release

**Changed:** API Keys

The standard quota (calls per minute) has been increased from 100/min to 200/min. Users who already had customised quotas will remain unchanged. This change enables users to make more requests to the API per minute.

**Added:** API Keys

API keys will automatically expire 12 months after activation. This is to ensure the inactive users are not holding an active API key. Users will receive two notifications via email before their API key expired, one email at one month before the expiration and one email upon expiration. Users will have the options to renew their existing key, or delete it and create a new key, or let their key expire.

Users can also delete their API key if they no longer need it.

API keys can be provided either via a URL parameter (&key=<your key>) or as a Request Header (X-API-KEY=<your key>). The Request Header is the recommended option moving forward because it is a more secure option.

**Added:** Magazines and Newsletters

Two new API operations have been added to allow Newspaper-like exploration of Magazine and Newsletter Titles.

**Changed:** Search

The q parameter i.e. the search term is changed from compulsory to optional. This change enables users to build queries that do not require a keyword search.

**Added:** Bulk harvest

The All category can be used with the Bulk Harvest parameter to retrieve a single collection of all Trove items without the category grouping. This added function will save users performing individual searches in each category to form a collection.

**Key changes to the way you interact with the API – 3<sup>rd</sup> release**

**Added:** Anonymous access

Users can experiment with the Trove API, in accordance with the [Trove API Terms of Use](#), without needing to register for an API Key. Access is limited to 10 calls per minute and is intended to only be used while exploring the API. Once familiar with the API, users are required to register for a Trove account and request an API key (which will increase the quote to 200 calls per minute).

**Fixed:** Magazine and Newsletter Titles

The Magazine and Newsletter Titles feature introduced in Release 2 has been completed and will now show all available titles.

**Added:** Download search results

Trove users with an active API key now have an option to download their search results as a CSV from the Trove Discovery interface.

**Added:** More citation options

All Trove users can now export the contents of a List as a set of citation statements from the Trove Discovery interface. Formats include all of the existing formats available when citing individual records (APA, Harvard, Wikipedia, EndNote, BibTex and MLA), as well as a new RIS option.

Individual Archived Websites can now be cited using EndNote, BibTex and Harvard formats from the Trove

Web Archive Delivery interface.

**Changed:** Sorting Lists

Trove users can now sort items in Lists by Title and Date in addition to the 'default' order defined by the List owner from the Trove Discovery interface.

**Added:** Tag type-ahead

Logged-in Trove users will be presented with a "type ahead" list of their existing Tags when tagging a record to assist with consistent tag naming from the Trove Discovery interface.

**Changed:** API Keys

Trove users with API Keys can now edit the "Purpose" field describing what they are using the API Key for from their Trove user profile in the Trove Delivery interface.

**Why all the changes?**

The National Library of Australia was pleased to receive funding from the Australian Research Data Commons (ARDC) in 2023 to update the Trove API which has not had any significant changes since 2020. The purpose of the upgrade is to enhance the experience for both new users to engage with the Trove API and improve the experience for existing highly engaged and technically proficient users of the Trove API to undertake big data analysis.

v3.0 - In mid-March Trove upgraded the Trove API with a Beta release to version 3.0. It has new content, new functionality, and some changes in the way you make calls. Then in mid-May and mid-June Trove developed the API further and completed #2 & #3 releases of Trove API v3 Beta.

v2.2 - In October 2020 we updated the API to v2.2 - we added additional data fields, providing richer data from records that entered Trove in MARC format (language - Austlang, language - non Austlang, spatial, subject, rights, isPartOf type='series', extent, type, format).

v.2.1 - In October 2019 we updated the API to v2.1 - we added functionality to support new facets (Place, Title, Word count, Illustration type) and indexes (Austlang, Full text indicator, Funder, Image indicator, Rights, Place of Publication, Full text data (from digitised journal articles)).

v2 - In August 2018 we transitioned the Trove API to an updated version - v2 - onto new infrastructure – including an upgrade from Solr3 to SolrCloud. This means the Trove API was more stable with quicker response times and fewer error messages. It also meant the Trove API v2 was now using the same index as the Trove UI – so any updates or changes to Trove were immediately visible in the Trove API v2.

v1 - The Trove API was first made available in April 2012 and did not have any significant changes until 2018.

### **What Trove's API v3 changes mean for you?**

If you have created any apps, tools, interfaces or visualisations using the existing [v2 Trove API](#) or one of the three existing [Trove People & Organisations APIs \(OAI-PMH, SRU, OpenSearch\)](#) you will need to update your code to work with the new Trove API v3. You'll have plenty of time to do this as we'll continue to provide access to the existing v2 Trove API and Trove People & Organisations API's for at least the next 6 months (to January 2024). Access to the existing v2 API Trove API and Trove People & Organisations API's will cease sometime after that, we don't have an exact date yet.

If you want to see more basic documentation or prefer to learn by doing? [Try our API Search](#).

For detailed specifications please refer to our [Trove API v3 Technical Guide](#).

### **Feedback**

As always, we'd love your feedback on the changes we've made to the Trove API v3 Beta or to receive any suggestions for changes you'd like in future versions. [Contact us](#) at Trove Support to send a message to Trove.