

# Dataverse APIs

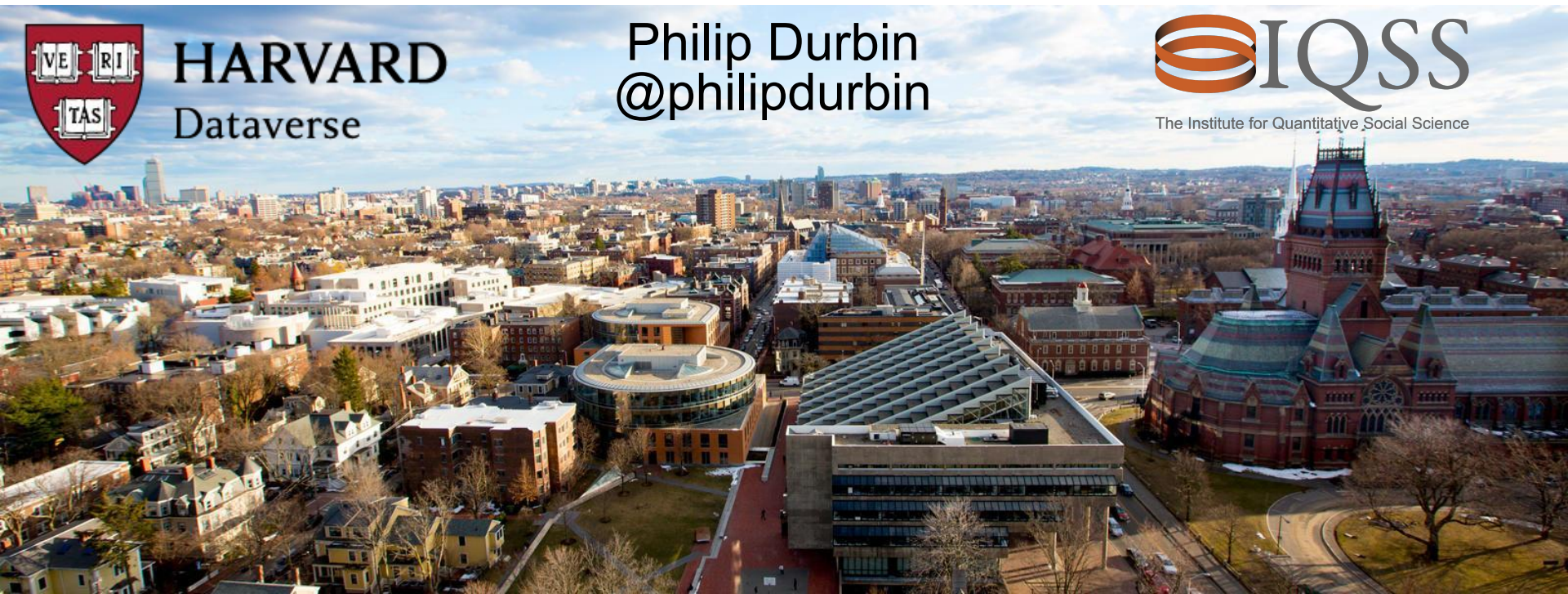
The  
**Dataverse**<sup>®</sup>  
Project 



**HARVARD**  
Dataverse

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 **IQSS**  
The Institute for Quantitative Social Science



# Lots of Dataverse APIs



Just the headings from  
<https://guides.dataverse.org/en/latest/api>

Let's pick a few and tell some stories

## Headers:

Header	Description
--------	-------------

Range	Download a specified byte range. Examples:
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- `bytes=0-9` gets the first 10 bytes.
- `bytes=10-19` gets 10 bytes from the middle.
- `bytes=-10` gets the last 10 bytes.
- `bytes=9-` gets all bytes except the first 10.

Only a single range is supported. The "If-Range" header is not supported. For more on the "Range" header, see

[https://developer.mozilla.org/en-US/docs/Web/HTTP/Range\\_requests](https://developer.mozilla.org/en-US/docs/Web/HTTP/Range_requests)

# The most important APIs power integrations

- Getting Data In
  - GitHub
  - Dropbox
  - Open Science Framework (OSF)
  - RSpace
  - Open Journal Systems (OJS)
  - Renku
  - Amnesia
  - SampleDB
- Embedding Data on Websites
  - OpenScholar
- Analysis and Computation
  - Data Explorer
  - Compute Button
  - Whole Tale
  - Binder
  - Renku
  - Avgidea Data Search
- Discoverability
  - OAI-PMH (Harvesting)
  - SHARE
  - Geodisy
- Research Data Preservation
  - Archivemata
  - RDA BagIt (BagPack) Archiving



**GitHub**



OSF

OJS

OPEN  
JOURNAL  
SYSTEMS



RSpace



**binder**



WHOLE TALE



archivemata

<https://guides.dataverse.org/en/5.13/admin/integrations.html>

# Client libraries

- [C/C++](#)
- [Java](#)
- [Javascript](#)
- [Julia](#)
- [PHP](#)
- [Python](#)
- [R](#)
- [Ruby](#)

pyDataverse 0.3.1

```
pip install pyDataverse
```

[Readme](#)

## Dataverse.jl

pkg documentation DOI 10.5281/zenodo.7332331

## dataverse-client-javascript

npm v1.0.49

A JavaScript/TypeScript client for **Dataverse**.

### NPM

Module available as `js-dataverse` at <https://www.npmjs.com/package/js-dataverse>

### dataverse: Client for Dataverse 4+ Repositories

Provides access to Dataverse APIs [<https://dataverse.org/>](https://dataverse.org/) (versions 4-5), enabling data search, retrieval, and deposit. For Dataverse versions  $\leq 3.0$ , use the archived 'dvn' package [<https://cran.r-project.org/package=dvn>](https://cran.r-project.org/package=dvn).

Version: 0.3.12

**dataverse** 0.1.8

Dataverse.org API wrapper.

<https://guides.dataverse.org/en/5.13/api/client-libraries.html>

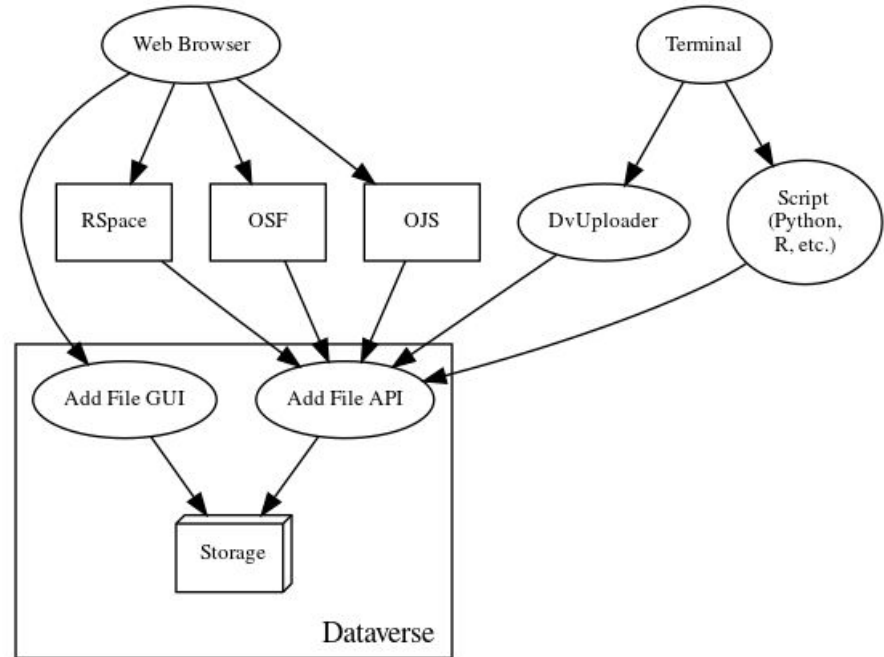
# Intro to Dataverse APIs

## API Users Within a Single Dataverse Installation

- Users of Integrations and Apps
- Power Users
- Support Teams and Superusers
- Sysadmins
- In House Developers

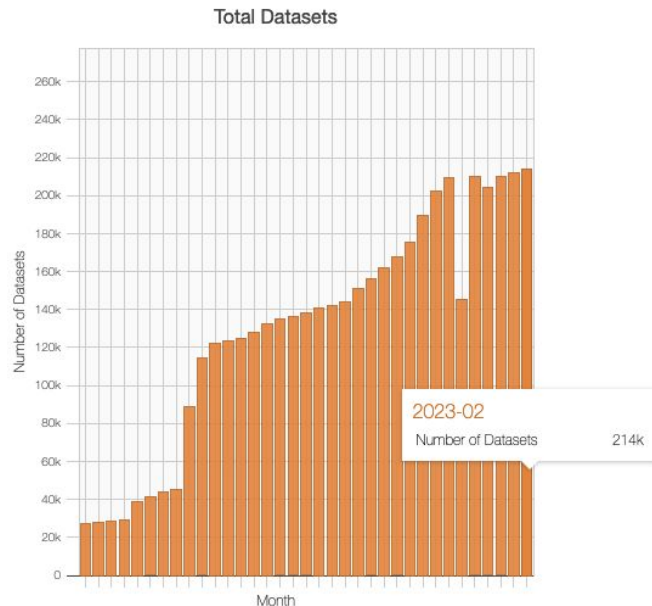
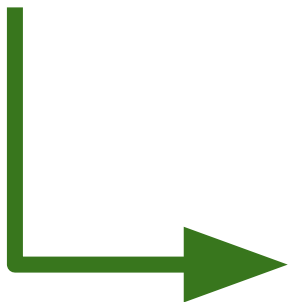
## API Users Across the Dataverse Project

- Developers of Integrations, External Tools, and Apps
- Developers of Dataverse Software API Client Libraries
- Developers of The Dataverse Software Itself



# Metrics API

The Metrics API provides counts of downloads, datasets created, files uploaded, and more, as described below. The Dataverse Software also includes aggregate counts of Make Data Count metrics (described in the [Make Data Count](#) section of the Admin Guide and available per-Dataset through the [Native API](#)). A table of all the endpoints is listed below.



Datasets by Most Common Subject

Total: 229k (96% of 239k)



<https://dataverse.org/metrics>

## API Guide

Introduction

Getting Started with APIs

API Tokens and Authentication

Search API

Data Access API

Native API

Metrics API

SWORD API

Client Libraries

## Headers:

### Header Description

#### Range

Download a specified byte range. Examples:

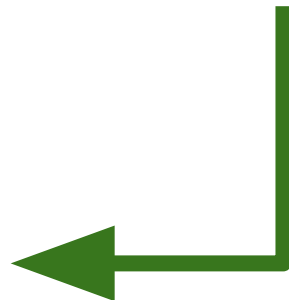
- `bytes=0-9` gets the first 10 bytes.
- `bytes=10-19` gets 10 bytes from the middle.
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Only a single range is supported. The “if-Range” header is not supported. For more on the “Range” header, see [https://developer.mozilla.org/en-US/docs/Web/HTTP/Range\\_requests](https://developer.mozilla.org/en-US/docs/Web/HTTP/Range_requests)

The screenshot shows a file management interface. At the top, there is a dark blue bar with the text "Access File" and a dropdown arrow. Below this, there are two buttons: "Contact Owner" and "Share". To the right of the "Share" button, a dropdown menu is open, listing several options: "File Access" (with a document icon), "Public" (with a globe icon), "Download Options" (with a download icon), "ZIP Archive" (highlighted in grey), "Download Metadata" (with a download icon), and "Data File Citation" (with a right-pointing arrow). Below the "Share" button, there is a section for "File Metrics" with a help icon, showing "3 Downloads" with another help icon. Below that, there are three buttons: "Preview", "Metadata", and "Versions". At the bottom of this section, there is a button "Open in New Window" with a refresh icon.

To download the complete zip file, please use the **Access File** button above.

✓	📁 Balsac4HtmlHelp		
	📄 Balsac4_0000.htm	13.49 kB	↓
	📄 Balsac4_0100.htm	18.11 kB	↓
	📄 Balsac4_0110.htm	13.19 kB	↓



# Linked Data Notification API

Dataverse has a limited, experimental API implementing a Linked Data Notification inbox allowing it to receive messages indicating a link between an external resource and a Dataverse dataset. The motivating use case is to support a use case where Dataverse administrators may wish to create back-links to the remote resource (e.g. as a Related Publication, Related Material, etc.).

Upon receipt of a relevant message, Dataverse will create Announcement Received notifications for superusers, who can edit the dataset involved. (In the motivating use case, these users may then add an appropriate relationship and use the Update Current Version publishing option to add it to the most recently published version of the dataset.)

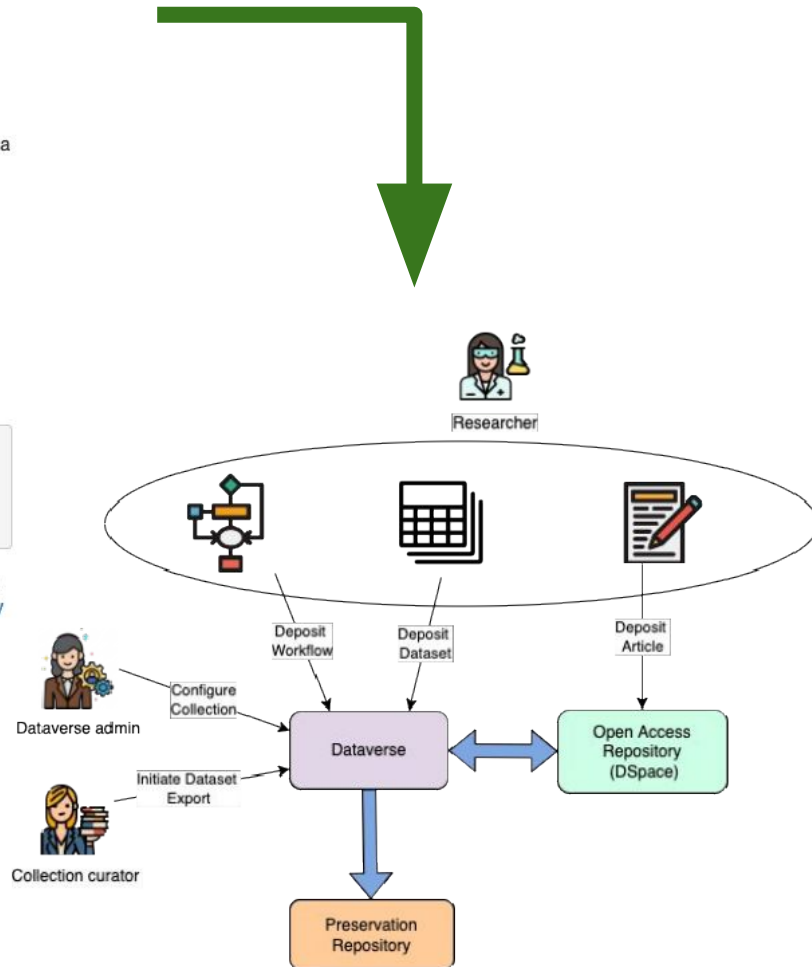
The `:LDNMessageHosts` setting is a comma-separated whitelist of hosts from which Dataverse will accept and process messages. By default, no hosts are allowed. `*` can be used in testing to indicate all hosts are allowed.

Messages can be sent via POST, using the application/ld+json Content Type:

```
export SERVER_URL=https://demo.dataverse.org

curl -X POST -H 'ContentType:application/ld+json' $SERVER_URL/api/inbox --upload-file message.jsonld
```

The supported message format is described by [our preliminary specification](#). The format is expected to change in the near future to match the standard for relationship announcements being developed as part of [the COAR Notify Project](#).





How do you want to extend Dataverse?