DocMaps

A community-endorsed framework for capturing valuable context about the processes used to create documents in a machine-readable way.
Agenda

Brief Background
Where We Are Now
Demos
Next Steps
Q&As/Breakouts?
Possible Topic Areas

Publishers/Reviewers: Add DocMaps to your works and have them aggregated

Developers: Implement DocMaps on your platform

Researchers: Discuss use-cases for researching preprint review

Brainstorm reader-facing visualizations/displays

Brainstorm extensions and other possible uses
Background
<table>
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<tr>
<th>Article</th>
<th>Version</th>
<th>Diff</th>
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<td>Senior Commander in South Yemen Is Assassinated (NYT)</td>
<td>June 18, 2012, 5:07 p.m.</td>
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<tr>
<td>By LAURA KASINOF</td>
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<td>(Compare)</td>
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<td>June 18, 2012, 1:38 p.m.</td>
<td>(Compare)</td>
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<td>No Relief Rally on Greek Vote (NYT)</td>
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<td>(Compare)</td>
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<td>By STEPHEN CASTLE and CHRISTINE HAUSER</td>
<td>June 18, 2012, 4:23 p.m.</td>
<td>(Compare)</td>
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<td></td>
<td>June 18, 2012, 4:05 p.m.</td>
<td>(Compare)</td>
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<td>June 18, 2012, 3:05 p.m.</td>
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<td>June 18, 2012, 1:26 p.m.</td>
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<td>June 18, 2012, 3:49 a.m.</td>
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<td>G-20 nations must 'do what's necessary' to boost world economy, Obama says (CNN)</td>
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<td>Adam Aigner-Treworgy and Dan Lothian, CNN</td>
<td>June 18, 2012, 2:03 p.m.</td>
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<td>June 18, 2012, 11:42 a.m.</td>
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<td>June 18, 2012, 6:24 a.m.</td>
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<td>The Body's Protein Cleaning Machine (NYT)</td>
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<td>the CNN Wire Staff</td>
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IRAQ WAR ENDS

Troops to Return Immediately

WASHINGTON — Operation Iraqi Freedom and Operation Enduring Freedom came to an end today with a quiet ceremony in which the Department of Defense announced that American troops would be returning home. Today, we can finally say that the United States has completed its mission in Iraq.

The ceremony was held at Joint Base Andrews, where the first American troops arrived in Iraq in 2003. The last American soldier arrived in Iraq in 2007. Since then, American forces have been working to train and advise the Iraqi government, and to help it build up its armed forces.

President Donald Trump has said that the United States has made good on its promise to withdraw its troops from Iraq. The withdrawal is part of the strategy that was outlined in the Iraq War Resolution, which was passed by Congress in 2002.

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Peer review and preprint policies are unclear at most major journals.
Thomas Klebel, Stefan Reichmann, Jessica Polka, Gary McDowell, Naomi Penfold, Samantha Hindle, Tony Ross-Hellauer
PLoS One 2020; doi: https://doi.org/10.1371/journal.pone.0239518

https://transpose-publishing.github.io/
Technical Committee

Stewardship
Jessica Polka, ASAPBio
Tony Ross-Hellauer, TU Graz
Gary McDowell, Lightoller
Gabriel Stein, Knowledge Futures

Committee
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Tony Alves, Chair, NISO Manuscript Exchange Common Approach Standing Committee
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Patricia Feeney, Head of Metadata, Crossref
Joris van Rossum, Project Director, International Association of Scientific, Technical, and Medical Publishers
Kathleen Shearer, Executive Director, Confederation of Open Access Repositories (COAR)
Caroline Webber, Aries Systems Corporation
Bhavani Shekhawat, Software Engineering Team Lead, Elsevier
Paul Shannon, eLife
Bahar Mehmani, Reviewer Experience Lead, Elsevier
Damian Pattinson, eLife

Support

hhmi
Howard Hughes Medical Institute
Extensibility

Reviews of "Unusual Features of the SARS-CoV-2 Genome Suggesting Sophisticated Laboratory Modification Rather Than Natural Evolution and Delineation of Its Probable Synthetic Route"

Published: Sep 24, 2020

This manuscript does not demonstrate sufficient scientific evidence to support its claims. Claims are at times baseless and are not supported by the data and methods used. Decision-makers should consider the author’s claims in this study misleading.

Peer reviews for this paper

This paper is included in a peer review pilot project in which participating organizations post peer reviews of manuscripts they are evaluating. Only content provided by the reviewing organization is shown. The reviews are made visible to all readers by default via the the hypothes.is annotation tool but registered hypothes.is users may sign in using the login button. Readers who wish to make publicly visible comments on this paper should use the bioRxiv comment section below the article.

Transparent Peer Review

Download the complete Review Process [PDF] including:

- reviews
- authors’ reply
- editorial decisions

You have endorsed this work.
PREreview of "Development and Evaluation of A CRISPR-based Diagnostic For 2019-novel Coronavirus"

Tatiana Hillman
Tatiana Hillman
PLOS
5/10/20
Development and Evaluation of A CRISPR-based Diagnostic For 2019-novel Coronavirus

(Hou et al., 2020)
PLOS Discussion

The CRISPR-nCoV assay is convenient and greatly needed in the laboratory and in the clinical setting. Because the CRISPR-nCoV assay does not require thermal cyclers, the time of the testing is decreased, and this assay can operate in a setting with minimal resources. Presently, there is a demand for more testing of the 2019-nCoV virus. In some states and counties testing is limited. Also, the current tests take a long time to produce results. The fastidious and rapid diagnosis of 2019-nCoV may help many quarantine earlier before the symptoms become too intense. The CRISPR-nCoV is exceptional because less instruments as thermal cyclers are required, which could help transfer the CRISPR-nCoV into the clinical setting. However, nMGG, a metagenomic test, is still needed to track any signs of genetic drift in the 2019-nCoV viral genome.

CRISPR detection of 2019-nCoV is an extremely promising assay with much potential
Discoverability
Core Concept

DocMaps are immutable assertions that describe the editorial context of a published document.
Core Concept

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Core Concept

DocMaps are immutable assertions that describe the editorial context of a published document.

Implications

- DocMaps can describe multiple types of documents — a published paper, a preprint, a single referee report, an aggregate report, a recommendation, etc.
- DocMaps are asserted by the publisher of the document
- DocMaps exist independently from each other, but can reference other DocMaps, allowing, e.g., review services to curate evaluations from multiple sources in their reviews.
Guest Post – Putting Publications into Context with the DocMaps Framework for Editorial Metadata

Scholarly Kitchen Post

DocMaps

A community-endorsed framework for representing research object-level (e.g. journal article, preprint, or dataset) review/editorial processes in a machine-readable, discoverable, and extensible format.

More info: https://docmaps.knowledgfutures.org

About This Repo

This repo defines a basic initial schema using JSON schema, a validation tool, and two example schemas for a review and author response based on 


Initial Demo Version and Validator

Preprint

The DocMaps Framework for representing assertions on research products in an extensible, machine-readable, and discoverable format

Gary S. McDowell, Jessica K. Polka, Tony Ross-Hellauer and Gabriel Stein

1. Lightoller LLC, Chicago, IL, USA
2. ASA/Phis, San Francisco, CA, USA
3. Graz University of Technology & Know Center GmbH, Graz, Austria
4. Knowledge Futures Group, Cambridge, MA, USA

Abstract

Peer review of a research product varies widely depending on the publishers and platforms involved in the process. As scholarly publishing is disrupted by new innovations, peer review processes become more heterogeneous, placing an increasing burden on the researcher in understanding how they can

Preprint

EMBO Early Evidence Base Live Demo
Current Status
Pilot Working Group

Paul Shannon, eLife
Chris Wilkinson, eLife
Ted Roeder, CSHL Press
Richard Sever, CSHL Press
Thomas Lemberge, EMBO Press
Gabriel Stein, Knowledge Futures
DocMaps Are:

- Immutable assertions that describe the processes used to create a document (e.g. the peer review process used to evaluate a scientific article, or the process used to create an overlay review article).

- Asserted by or on behalf of the publisher of the document, e.g. Sciety, on behalf of Rapid Reviews: COVID-19.

- Capable of describing a single event or a complex, multi-event process.

- Able to contain links to other documents, including other DocMaps.
DocMaps Are Not:

- Representations of the documents whose contexts they describe (though they could embed representations or link to representations of those documents).
- Representations of a document’s current state (though aggregators can use them to produce views of these states).
- Notifications that an event took place (though they can be used as the payload for such notifications).
- Assertions of the subjective result of any given process (though they may contain the DocMap provider’s subjective result, which DocMap consumers can choose to use).
DocMaps As Convention

A set of agreed-upon conventions for aligning editorial processes against the Publishing Status Ontology (PSO), Publishing Workflow Ontology (PWO) and other ontologies.

DocMap
  pwo:Workflow

Provider Metadata

Series of Steps
DocMaps As Convention

A set of agreed-upon conventions for aligning editorial processes against the Publishing Status Ontology (PSO), Publishing Workflow Ontology (PWO) and other ontologies.
DocMaps As Convention

A set of agreed-upon conventions for aligning editorial processes against the Publishing Status Ontology (PSO), Publishing Workflow Ontology (PWO) and other ontologies.
DocMaps As Convention

A set of agreed-upon conventions for aligning editorial processes against the Publishing Status Ontology (PSO), Publishing Workflow Ontology (PWO) and other ontologies.
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              participants: [  
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                  },  
                  role: "peer-reviewer"  
                }  
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  ]  
}
Allows docmaps to be consumed as a JSON-LD graph (can also be consumed as raw JSON)
Who created the docmap, on whose behalf, when, where they can be found, etc.
First Step
No assertions for now; we’ll talk why in a moment.
We're talking about a bioRxiv preprint.
Actions (only one in this case, but there could be multiple if, e.g., multiple reviews were produced)
One person participated, as a peer reviewer.
They produced a review article that can be found on this website.
DocMaps Framework Overview

Work-in-progress documentation for DocMaps, a framework for describing the processes used to create a document in a machine-readable way.

Summary

DocMaps is a framework for describing the processes used to create a document in a machine-readable way. The framework is designed to be interpreted in multiple formats depending on the use-case of the consumer of the DocMap. It can extend to capture any amount of contextual data about any kind of document — from a minimum assertion that a process took place.

Documentation

Sciety API

BioRxiv API

EMBO Early Evidence Base API
Demo
Next Steps
### Align With Community Efforts

#### Developing a taxonomy to describe preprint review processes

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<th>Description</th>
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<th>Sciety Name</th>
<th>Docmap Term</th>
<th>Docmap Alias</th>
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<td>major-revision, minor-revision, accept evaluation</td>
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<td>pso:peerReviewed</td>
<td>TBD</td>
</tr>
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<td>An evaluation that does not result in a recommendation</td>
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<td>evaluation</td>
<td>pso:reviewed</td>
<td>TBD</td>
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<td>Text of an individual evaluator’s evaluation</td>
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<td>review</td>
<td>fabio:ProductReview</td>
<td>review</td>
</tr>
<tr>
<td>An author’s response to evaluations</td>
<td>author-comment</td>
<td>author response</td>
<td>fabio:Reply</td>
<td>author-response</td>
</tr>
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<td>A summary of an entire round of evaluations</td>
<td>aggregate</td>
<td>evaluation summary</td>
<td>fabio:ExecutiveSummary</td>
<td>evaluation summary</td>
</tr>
<tr>
<td>A letter sent to authors describing the results of the evaluation</td>
<td>editor-report</td>
<td>decision letter</td>
<td>fabio:Letter</td>
<td>decision-letter</td>
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### Peer Review Taxonomy Standardization

**Overview**

- Home / Standards Committees

---

- ASAPbio
- NISO
Help Push Community Ideas Upstream

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<td>IRI: <a href="http://purl.org/psio/PublicationStatus">http://purl.org/psio/PublicationStatus</a></td>
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<td>A state or condition that a document may have that relates to the publication of such document.</td>
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Support Ecosystem Development

Infrastructure

Community

Aggregation

Discovery
Support Ecosystem Development

Infrastrucure

PubPub

Kotahi

You?

Review Commons

P

RR:C19

PREVIEW

PCI Evol Biol

PeerJ Life & Environment

Review Commons

You?

Aggregation

sciety

You?

EMBO

Early Evidence Base
Navigating and Assessing Preprints

Discovery

bioRxiv

You?

Europe PMC
Questions?
Thank You!

https://docmaps.knowledgefutures.org

gabe@knowledgefutures.org
Possible Topic Areas

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Developers: Implement DocMaps on your platform

Researchers: Discuss use-cases for researching preprint review

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