Interagency **Data ID Service** FAQs

Office of Scientific and Technical Information

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For detailed information, please review the IAD Application Programming Interface (API) or the DataCite Metadata Schema Version 4.3.

1. **What is the Interagency Data ID Service (IAD)?**

   The Interagency Data ID Service (IAD) is a service provided by OSTI to other U.S. Federal Agencies who would like to make their data more discoverable and available for citation. OSTI assigns DOIs to datasets and registers the DOIs with DataCite to aid in citation, discovery, retrieval, and reuse. OSTI assigns and registers DOIs for datasets for IAD clients on a cost-reimbursable basis.

2. **How is OSTI able to provide DOIs for data objects?**

   DOE OSTI is a member of DataCite, which gives us the ability to assign DOIs to data objects. DataCite employs a metadata schema that allows for the accurate description of data objects. DOE OSTI collects relevant metadata required to obtain a DOI and passes that metadata on to DataCite allowing for a DOI to be minted by DataCite and registered globally through the International DOI Foundation.

   DataCite is an international organization that supports data visibility, ease of data citation in scholarly publications, data preservation and future re-use, and data access and retrievability. DataCite members help achieve these goals by assigning persistent identifiers such as DOIs to data objects.

   DataCite is a registration agency of the International DOI Foundation. Through International DOI Foundation membership, DataCite DOIs are register internationally, giving them globally recognition and persistence. The DOI system created by the International DOI Foundation was adopted as International Standard ISO 26324.

3. **How can I get a DOI for my data through the IAD Service?**

   OSTI provides the IAD Upload Request or the IAD Application Programming Interface (API) where IAD users can submit metadata describing the object for which they'd like a DOI. The API is HTTP-based and can be accessed using a wide variety of clients (Postman; HTTP Requestor; Restlet API, </>RESTED, etc); most examples are illustrated using the cURL command to demonstrate basic use cases.

4. **What are the minimum steps to get a DOI?**

With signed 7600 forms A & B and payment, work with OSTI Liaison to:
- acquire a DOI prefix to your DOIs
- obtain Test IAD Account to test submissions
- obtain Prod IAD Account

Submit minimal required fields to IAD to obtain a DOI

IAD Minimum Require Fields:

- Product Type
- Resource Type – details about the Product Type
- Title
- Author/Contributor
- Publication Date
- Site URL

5. **What metadata describing your data objects is required for obtaining a DOI?**

IAD Minimum Require Fields:

- **Product Type** – The general type of a resource. <u>Controlled List Values:</u> Audiovisual, Collection, Data Paper, Dataset, Event, Image, Interactive Resource, Model, Physical Object, Service, Software, Sound, Text, Workflow, Other.
- **Resource Type** – A description of the resource. The format is open, but the preferred format is a single term. Examples: 'Dataset' is Product Type value and 'Census Data' is Resource Type value.
- **Title** – Full title of the dataset, with version numbers and date ranges if applicable.
- **Author/Contributor** - A listing of the authors/contributors to the dataset. Affiliations and ORCIDs can be added if known. If a contributor is listed, the contributor type must be specified.
- **Publication Date** – The dataset publication date, in mm/dd/yyyy, yyyy, or yyyy Month format.
- **Site URL** – Full URL to the landing page for this dataset.

6. **After submission, how long does it take to receive a DOI?**

Once an OSTI IAD account is set up and a successful metadata record is submitted, a DOI will be assigned and registered within 24-hours.

7. **How do you designate time stamping or versioning?**

When a major version change or update occurs, OSTI recommends a new DOI be registered. It is helpful to include a version number or time stamp as a part of the data object's title. This will allow data users and third party indexers (i.e. Google Dataset Search) to correctly index and cite the data object.

We recommend using the Related Identifier metadata field to reference previous versions, as well as express other relationships to a related source (including journal articles associated with the data object, data sets, figures, software, etc).

8.   Do I have to make my data public to get a DOI?

No, the data does not need to be accessible to the public. But, a publicly available landing page providing a metadata about the data objects and describing the data availability is required.

9.   Is there a limit on number of DOIs that can be requested?

At this time, DOIs are unlimited.

10.   Can the DOI link directly to the data?

No, DOIs should link to a landing page, which is a webpage that provides additional information describing the data. On the landing page, a link to the data should be provided.

If the data becomes deprecated, a landing page is important because a tombstone landing page can state why the data is no longer available.

11.   Can a data object with an assigned DOI or metadata describing the data object be updated?

Yes, a DOI is persistent, but the data object itself and the metadata describing the data object may be updated at any time. The only metadata field that cannot be updated is the infix, which is a part of the DOI. Once assigned, the DOI number itself cannot be updated.

12.   Can a DOI be deleted (error, duplicate)?

A DOI is persistent. Once registered and made public with DataCite, it cannot be deleted. However, OSTI can "hide" a DOI so it will not appear in OSTI's database or DataCite's search. However, if you or someone else knows the exact DOI, it will resolve to the original landing page.

Please refer to the [IAD Application Programming Interface (API): Deactivating DOIs](#) for more information.

13.   If a dataset is no longer available, what should I do?

When a data object is no longer available for whatever reason, a "tombstone" page needs to be created with information on why the dataset is no longer available. This provides the required persistence of a DOI.

14.   How do I use the related identifier metadata field?

Related identifiers are a way to connect data objects with other research objects (journal articles, technical reports, datasets, instruments, experiments, awards, etc). OSTI currently has 31 different Relation Types (Describes/IsDescribedBy, HasVersion/IsVersionOf, etc.).

Records may contain arrays of related identifier information; in JSON, these are object arrays defined below. In XML format, these are returned as <related_identifier> elements wrapped in a <related_identifiers> container.

Related Identifier Fields:

Field Name	Description
identifier_value	The DOI or URL value of the related identifier
identifier_type	One of "DOI" or "URL" to identify the type of content
relation_type	One of the recognized relation types description this identifier's relation to the record

JSON Example:

```
"related_identifiers": [
        { "identifier_value":"10.5072/23432",
          "identifier_type":"DOI",
          "relation_type":"Cites"
        }
    ]
```

Please refer to the IAD Application Programming Interface (API) for more information.

15. **Does OSTI provide a data repository to store my data indefinitely?**

No, OSTI does not provide data repository services. OSTI only hosts a metadata repository. OSTI hosts the metadata record for data objects that obtain a DOI, but OSTI does not provide a repository to store the actual data.

Typically, IAD Data ID Service data objects are hosted by the associated agency repository.

16. **Why would I want to reserve a DOI?**

Reserved DOIs give the researcher the ability to obtain a DOI before a dataset is final or before publication. Reserved DOIs are placeholders within the OSTI IAD ingest system but are not yet registered at DataCite. Once a dataset is finalized/published, use your DOI or OSTI ID to update the metadata appropriately without the reserved xml tag. This will trigger the DOI to be released to DataCite for registration.

Please refer to the [IAD Application Programming Interface (API): Reserving a DOI](#) for more information.

17. **How can I reserve a DOI?**

In the API, post all required metadata fields (use placeholder information for what is not yet known) and add the metadata field </set_reserved>.

Once you are ready to submit your finalized record and make your DOI public, use the OSTI ID and resubmit the API request with the correct metadata and removing the set_reserved field from the submission.

18. **Can I reserve a DOI if I do not know all of the required metadata?**

Yes, you can enter "placeholder" information until accurate information is available.

19. **What best practices exist (if any) in terms of the format, structure, and/or style to use for dataset citations?**

DataCite provides a recommended data citation format for authors to use:

Creator (PublicationYear). Title. Publisher. Identifier

It may also be desirable to include information about two optional properties, Version and ResourceType (as appropriate). If so, the recommended form is as follows:

Creator (PublicationYear). Title. Version. Publisher. ResourceType. Identifier

For citation formatting based on a specific journal or publisher, see the DOI Citation Formatter. Select a professional society, a scientific journal publisher, etc. and see exactly how that particular group formats a citation and what to include in it.

FORCE11 has a Joint Declaration of Data Citation Principles that provide data citation best practices.

20.   How can I search for my datasets?

Using the API, use a GET function.

For example, GET - https://test.osti.gov/iad2/api/records?id=#######.

Please refer to the IAD Application Programming Interface (API): Getting Records from IAD for more information.