

How can we support DTS as a FAIR API for publishing digital text collections?

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What's DTS?

DTS = **D**istributed **T**ext **S**ervices

DTS provides a **standard way** for clients to interact with collections of **TEI documents**. A standard API allows users to **access** many text collections using the **same client software**. It also allows editors to **publish** text collections in a usable way that existing clients can use.

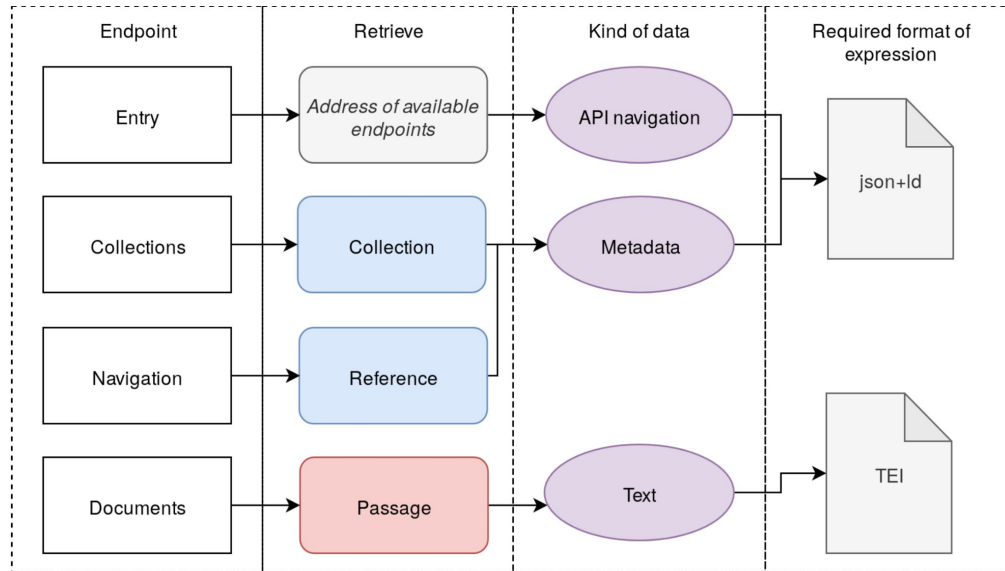
DTS strives for genericity:

- No requirements on collection structure
- No requirements on how the texts are structured
- No requirements on identifiers
- Metadata as you wish

DTS at a glance

DTS allows to:

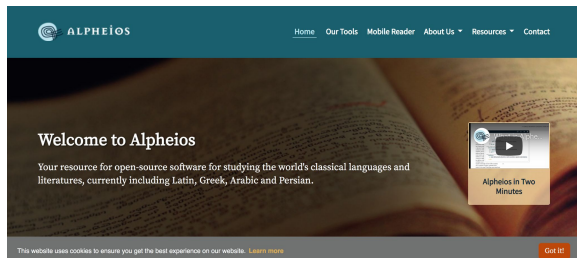
1. Navigate inside text collections
2. Fetch metadata for a collection/text
3. Discovery the citation structure of a document + navigate it
4. Access a representation of the text itself



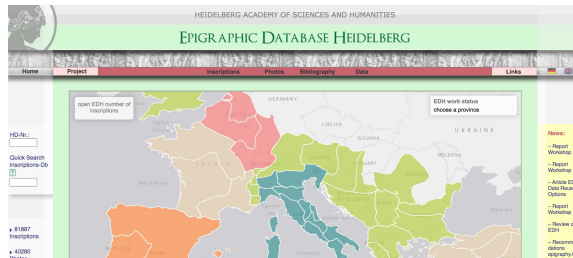
Documentation: <https://w3id.org/dts>

jTEI paper: <https://doi.org/10.4000/jtei.4352>

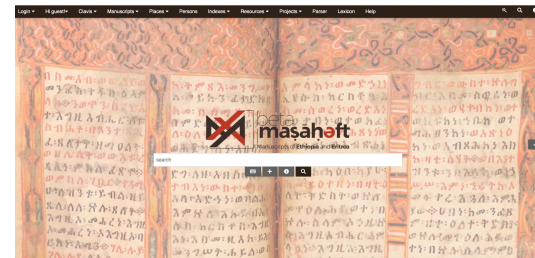
Corpora with a DTS API



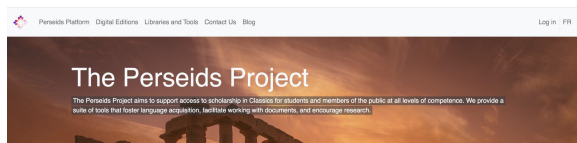
<http://alpheios.net/>



<https://edh-www.adw.uni-heidelberg.de/>



<http://betamasaheft.eu/>



Perseids Platform

The Perseids Platform is a free and open online environment for producing data-driven editions of ancient documents. The Platform allows users to collaborate on editing and publishing documentary materials from the ancient world.

[Read more -](#)

Digital Editions

Our aim with the Perseids Project is to support a wide range of publication types for the texts and data, from micro-publications to full-fledged digital editions. To develop our publications, we collaborate with students, scholars at other institutions, and researchers across disciplines.

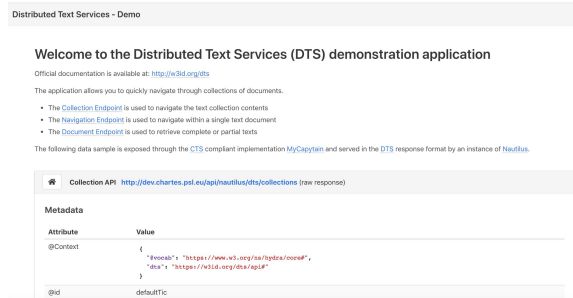
[Explore digital editions -](#)

Libraries and Tools

As part of our work we often write tools, libraries, and APIs. Since one of our goals with the Perseids Project is to make all of our data and code open, we release our programs as free software for anyone to use or modify.

[Learn more -](#)

<https://www.perseids.org/>



Collection API <http://dev.chartes.psl.eu/api/nautilus/dts/collections> (raw response)

Metadata

| Attribute | Value |
|-----------|--|
| @Context | { "iri": "https://www.w3.org/ns/iana/iri", "id": "https://www.w3.org/ns/iana/iri" } |
| @id | defaultTTC |

<https://dev.chartes.psl.eu/dts-demo/>



TEI Publisher instances*

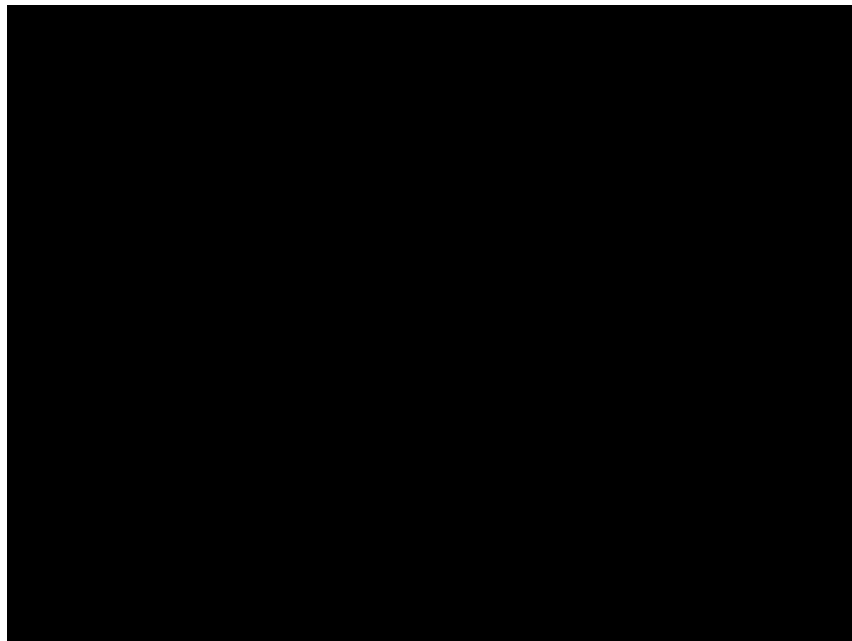
How's DTS FAIR? Findable

F1. (Meta)data are assigned a globally unique and persistent identifier

- Collections and documents have their *unique* identifiers
- Granularity of access: down to the passage level
- Definition of identifiers as broad as possible (essentially any URI)
 - Retrocompatible with e.g., CTS URNs
 - Wikidata URIs can be used as identifiers for DTS collections/documents

How's DTS FAIR? Findable

F4. (Meta)data are registered or indexed in a searchable resource



How's DTS FAIR? Accessible

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
<?xml version="1.0" encoding="UTF-8" standalone="no" xmlns:tei="http://www.tei-c.org/ns/1.0" xmlns:dts="https://w3id.org/dts/api#">
  <teiHeader>
    <fileDesc>
      <titleStmt>
        <title>Carmagnole</title>
        <author>anonyme</author>
      </titleStmt>
    </fileDesc>
  </teiHeader>
  <dts:fragment>
    <text>
      <body>
        <l n="1">Madam' Veto avait promis (bis)</l>
        <l n="2">De faire égorger tout Paris (bis)</l>
        <l n="3">Mais son coup a manqué</l>
        <l n="4">Grâce à nos canonnières.</l>
        <l n="5">Dansons la Carmagnole</l>
        <l n="6">Vive le son (bis)</l>
        <l n="7">Dansons la Carmagnole</l>
        <l n="8">Vive le son du canon !</l>
        <l n="9">Dansons la Carmagnole</l>
        <l n="10">Vive le son (bis)</l>
        <l n="11">Dansons la Carmagnole</l>
        <l n="12">Vive le son du canon !</l>
        <l n="13">Ah ! ça ira, ça ira, ça ira</l>
        <l n="14">Les aristocrat's à la lanterne</l>
        <l n="15">Ah ! ça ira, ça ira, ça ira</l>
        <l n="16">Les aristocrat's on les pendra</l>
        <l n="17">Monsieur Veto avait promis (bis)</l>
        <l n="18">D'être fidèle à son pays (bis)</l>
        <l n="19">Mais il y a manqué,</l>
        <l n="20">Ne faisons pas de quartier.</l>
        <l n="21">Antoinette avait résolu (bis)</l>
        <l n="22">De nous faire tomber sur le cul (bis)</l>
        <l n="23">mais son coup a manqué,</l>
        <l n="24">Ne faisons pas de quartier.</l>
        <l n="25">Amis, restons unis (bis)</l>
        <l n="26">Ne craignons pas nos ennemis (bis)</l>
        <l n="27">S'ils viennent nous attaquer,</l>
        <l n="28">Nous les ferons sauter.</l>
        <l n="29">Oui, nous nous souviendrons toujours (bis)</l>
        <l n="30">Des sans-culottes des faubourgs (bis)</l>
        <l n="31">A leur santé buvons,</l>
        <l n="32">Vivent ces francs lurons.</l>
      </body>
    </text>
  </dts:fragment>
</xml>
```

- Access to texts via the *documents* endpoint
- Serialization format for textual data is TEI/XML
- No support for authentication

<http://tnah.chartes.psl.eu/2019/dts/document?id=https://wikidata.org/wiki/Q1043500>

How's DTS FAIR?

Interoperable

Reusable

Interoperability

- API → Hydra API specification
- Metadata → JSON-LD
- Data → TEI/XML

Reusable

- Dublin Core terms for metadata descriptions
- Other vocabularies can be used inside the *dts:extensions* property

How to grow DTS' support and adoption?

The last 5 years:

- 1st DTS workshop (2019)
- First public draft (2020)
- Online DTS Hackathon (2021)
- jTEI paper (2023)
- First public version (spring 2024)

Resources are needed for:

- update/maintain specifications
- develop/update reference implementations
- Run dissemination activities

Future of DTS?

- How to unlock adoption by institutions (universities, libraries, publishers)?
- Is a DTS Consortium the way to go?
- Can existing national/international associations help?