

# Package ‘dtreg’

December 2, 2024

**Title** Interact with Data Type Registries and Create Machine-Readable Data

**Version** 1.1.0

**Description** You can load a schema from a DTR (data type registry) as an R object. Use this schema to write your data in JSON-LD (JavaScript Object Notation for Linked Data) format to make it machine readable.

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**URL** <https://gitlab.com/TIBHannover/orkg/dtreg-r>

**BugReports** <https://gitlab.com/TIBHannover/orkg/dtreg-r/-/issues>

**Imports** httr2, jsonlite, methods, R6, stringr

**Suggests** knitr, rmarkdown, sets, stats, testthat (>= 3.0.0)

**VignetteBuilder** knitr

**Config/testthat/edition** 3

**Encoding** UTF-8

**RoxygenNote** 7.2.3

**NeedsCompilation** no

**Author** Olga Lezhnina [aut, cre] (<<https://orcid.org/0000-0003-2237-7725>>),  
Manuel Prinz [aut] (<<https://orcid.org/0000-0003-2151-4556>>),  
Markus Stocker [aut] (<<https://orcid.org/0000-0001-5492-3212>>),  
Open Research Knowledge Graph Project and Contributors [cph]

**Maintainer** Olga Lezhnina <[olga.lezhnina@tib.eu](mailto:olga.lezhnina@tib.eu)>

**Repository** CRAN

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## Contents

load_datatype . . . . .	2
show_fields . . . . .	2
to_jsonld . . . . .	3

<b>Index</b>	<b>4</b>
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load_datatype	<i>Load classes for a schema with the known identifier</i>
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**Description**

Load a list of R6 classes for a schema identifier, such as an ePIC datatype DOI or an ORKG template URL. The classes contain information of the requested schema and nested schemata.

**Usage**

```
load_datatype(datatype_id)
```

**Arguments**

datatype\_id     A schema identifier, such as a DOI or a URL

**Value**

A list of R6 classes

**Examples**

```
dt <- dtreg::load_datatype("https://doi.org/21.T11969/1ea0e148d9bbe08335cd")
```

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show_fields	<i>Show schema fields</i>
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**Description**

Show which fields of a schema can be used for creating an instance

**Usage**

```
show_fields(datatype)
```

**Arguments**

datatype     An R6 class from dtreg::load\_datatype

**Value**

A character vector of available fields

**Examples**

```
dt <- dtreg::load_datatype("https://doi.org/21.T11969/74bc7748b8cd520908bc")
dtreg::show_fields(dt$inferential_test_output())
```

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`to_jsonld`*Write an instance in JSON-LD format*

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**Description**

Write an instance of a schema-related class in JSON-LD format as a string

**Usage**

```
to_jsonld(instance)
```

**Arguments**

`instance`      An instance of an R6 class

**Value**

JSON string in JSON-LD format

**Examples**

```
dt <- dtreg::load_datatype("https://doi.org/21.T11969/74bc7748b8cd520908bc")
instance <- dt$inferential_test_output(label = "my_results")
result <- dtreg::to_jsonld(instance)
```

# Index

`load_datatype`, [2](#)

`show_fields`, [2](#)

`to_jsonld`, [3](#)