

Search Guide

This guide explains how to write advanced search queries using easy to understand examples.





Simple search (one or multiple terms)

Example: open science

Results will match records with the **terms open or science** in **any field**. Note that stemming is applied so e.g. **science** will also match **sciences**. Search results are ranked according to an algorithm that takes your query terms into account.

You can require **presence** of both terms using either the + or **AND** operator:

Examples: +open +science or open AND science

You can require *absence* of one or more terms using either the - or **NOT** operator:

Examples: -open +science or NOT open AND science

Phrase search

Example: "open science"

Results will match records with the *phrase open science* in *any field*.

Field search

Example: metadata.title:open

Results will match records with the **term open** in the **field metadata.title**. If you want to search for multiple terms in the title you must **group the terms** using **parenthesis**:

Example: metadata.title:(open science)

See the field reference below for the full list of fields you can search.

- Title
- Authors
- Resource type
- Publication date
- Description
- Additional titles
- Additional descriptions
- Rights (Licenses)
- Contributors

- Subjects
- Languages
- Dates
- Version
- Publisher
- Alternate identifiers
- Related identifiers/works
- Funding references
- References

Ranking/Sorting

By default all searches are sorted according to an internal ranking algorithm that scores each match against your query. In both the user interface and REST API, it's possible to sort the results by:

- Most recent
- Best match

Combined simple, phrase or field search

You can combine simple, phrase and field search to construct advanced search queries.

Example: <u>+metadata.title:"open science"</u>, <u>-metadata.title:policy</u> or <u>metadata.title:(-open +science)</u>

Range search

Example: <u>metadata.publication_date:[2017 TO 2018]</u> (note, you must capitalize "TO").

Results will match any record with a publication date between 2017-01-01 and 2018-01-01 (both dates inclusive).

Note that, partial dates are expanded to full dates, e.g.:

- 2017 is expanded to 2017-01-01
- 2017-06 is expanded to 2017-06-01

Use square brackets ([]) for *inclusive* ranges and use curly brackets ({}) for *exclusive* ranges, e.g.:

• [2017 TO 2018] is equivalent to [2017-01-01 TO 2017-12-31] because of date expansion and exclusive upper bound.

Examples of other ranges:

- metadata.publication_date:{* TO 2017-01-01}: All days until 2017.
- metadata.publication_date:[2017-01-01 TO *]: All days from 2017.

Regular expressions

Regular expressions are a powerful pattern matching language that allow to search for specific patterns in a field. For instance if we wanted to find all records with a DOI-prefix 10.5281 we could use a regular expression search:

Example: <u>metadata.subjects.identifier:/03yrm5c2[1,6]/</u>

Careful, the regular expression must match the **entire** field value. See the <u>regular</u> expression syntax for further details.

Missing values

It is possible to search for records that either are missing a value or have a value in a specific field using the **_exists_** and **_missing_** field names.

Example: <u>missing</u>:metadata.additional_titles (all records without metadata. additional_titles)

Example: <u>_exists_:metadata.creators</u> (all records with metadata.creators)

Advanced Concepts

Boosting

You can use the boost operator **A** when one term is more relevant than another. For instance, you can search for all records with the phrase **open science** in either **title** or **description** field, but rank records with the phrase in the **title** field higher:

Example: metadata.title:"open science"^5 metadata.description:"open science"

Fuzziness

You can search for terms similar to but not exactly like your search term using the fuzzy operator ~.

Example: <u>oepn~</u>

Results will match records with terms similar to **oepn** which would e.g. also match **open**.

Proximity searches

A phrase search like **"open science**" by default expect all terms in exactly the same order, and thus for instance would not match a record containing the phrase **"open access and science**". A proximity search allows that the terms are not in the exact order and may include other terms inbetween. The degree of flexiblity is specified by an integer afterwards:

Example: <u>"open science"~5</u>

Wildcards

You can use wildcards in search terms to replace a single character (using ? operator) or zero or more characters (using * operator).

Example: ope? scien*

Wildcard searches can be slow and should normally be avoided if possible.