Working with search options, developing parameters, understanding and modifying search results.

Table of Contents:

Understanding the basic structure of the database . . . . . . . . . . . . . . . 2
Structural Details (Sections, Meta-Data) . . . . . . . . . . . . . . . . . . . 3
Overview of Searching . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
Available Search Options . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5-6
Understanding and Working with Search Results . . . . . . . . . . . . . . . 7-9
Appendix A - Advanced Search Syntax Guidelines . . . . . . . . . . . . . . . 10-13
Appendix B - Customized Search Options by Library . . . . . . . . . . . . . . 14

http://heinonline.org
Understanding the Basic Structure of the HeinOnline Database:

How is HeinOnline Structured?

A library in HeinOnline is often referred to as "collection". Each library contains titles. Each title may have one or more volumes. Within a volume, there may be sections. Each section has meta-data.

Example of Structure: Law Journal Library
Structural Details:

What are Sections?

- The content within a volume is broken down into sections which are determined by the contents of a document. One volume can have multiple sections within it.
- Each library is then tagged with one or multiple sections based upon content of the volumes included in the library.
- The sections are classified as either primary or secondary section types. By default, all primary section types in a library are checked in the search options.
- Each library will contain different sections. Not all libraries have sections.

Example: Law Journal Library consists of the following section types: Articles, Comments, Notes, Reviews, Legislation, Cases, Decisions, Contents, Editorials and Miscellaneous.

What is meta-data?

- Meta-data is particular information or data about a section within a library.
- It is determined based upon the index or structure and content in a given library.
- Meta-data fields are not the same for every section nor every library.
- Sections are indexed based on the available data for that particular section.
- Some sections may not have all of the meta-data available in a library.

Example: The Law Journal Library contains the following meta-data fields: Creator/Author, Date, Description, Text, and Title. The Contents section of this library does not contain Creator/Author fields, but it does contain Text. If you conduct a search in the Contents section in Creator/Author, you will get no results. However, if you conduct a search in the Contents section in Text fields, you will get results.

Search for Hans Kelsen, in meta-data Creator/Author, in section type Contents and you get no results. Change the meta-data to Text, and you will get results.
Overview of Searching:

There are three basic search options that are available in every library in HeinOnline.

1. **Quick Search**: Use full power of Boolean Searching across a given library.

2. **Field Search**: Input terms, select fields to search across, manipulate search results format, and select sections. Limited to 3 fields.

3. **Advanced Search**: Use the full power of Boolean Searching, narrow to specific titles, years and sections. More flexible search option allowing for more than 3 fields.

Using Boolean Logic for Advanced Search and Quick Search options:

- Use Boolean logic to form a search query.
- Every library has different search fields. To view the search fields in a library, click on “Search Tips” from the Search menu inside a library.

- Search syntax guidelines are also available from the Search tab in the left navigation bar by clicking “View Advanced Search Syntax”. These guidelines outline the general rules to follow when forming a search in the Quick Search and/or Advanced Search options, including a breakdown of the Boolean operators and syntax that are supported. See Appendix A to view the guidelines.
Available Search Options:

Quick Search:

- The Quick Search option can be found under the Search tab in the left navigation bar.
- This option runs the search query across the entire library that you are working in, which includes all titles and all years.
- To specify a title or a year, you would need to include the title and/or year in your search string to narrow your results.
- Use Boolean operators to combine search terms and use quotations to form a phrase. (See Boolean Operators in Appendix A)
- The search query will look in the Text meta-data field, unless you otherwise specify a field.
- The results will be sorted by relevance.

Advanced Search:

- This option can be used by researchers who have very specific search parameters and wish to use the full power of Boolean searching. For those of you who are not familiar with Boolean searching, review the HeinOnline Advanced Search Syntax help guide to learn more, found under About Searching, and also in Appendix A of this guide.
- Build complex queries using search fields and Boolean operators (AND, OR, etc.) to combine multiple search terms.
- Use quotations to group words into a phrase.
- Conduct phrase searching, proximity searching, unlimited combined field searching, fuzzy searching, and more complex searches, using the Advanced Search option. See Appendix A for details regarding search syntax.
- Narrow a search to a date range, choose a sort-by method and/or select the sections to search across.

Example (Journals Library):

Use the tilde symbol, “~”, at the end of a phrase and indicate the proximity value to find words that are within a specific distance from each other.

Build a proximity search to search for “watershed” and “planning” within 10 words of each other in a document. Since we want to search the text of the documents, start the query with the “text:” field.
Field Search:

- Limit your search to specific meta-data fields, sections, titles, and/or a defined date range.
- Input multiple search terms, choose a meta-data field for each term and identify the relationship between the terms/fields you are searching using the AND, OR operators.
- Punctuation is ignored. Select either the Word or Phrase button to apply the logic to your search.
- If you enter multiple words into the same search box and select Word, the words you input will be logically paired with the AND operator.
- Narrow your search results to one or multiple titles. Use the shift and/or control buttons in conjunction with your mouse to highlight multiple titles.
- Narrow your results to a range of years. Note: You may insert a beginning year like 1942 and end year 1943, but your results may return sections with 1944 listed. Why? A given volume may begin in year 1943 but coverage expands to 1945.
- Choose your sort-by method to be applied to your results.
- When the query is submitted, a Field Search will apply the Boolean logic based on the way you built your search. Therefore, this search option is helpful for those who are not familiar with Boolean searching and building complex search queries.

Example (Law Journal Library):
Insert phrase “international justice” (without quotations), select phrase, search the Text meta-data field.

Search across “All Titles” in the Law Journal Library.

Sort by Relevance.

Narrow date range to 1942-1943.

Select “Articles” as the only section to search.

Other Search Options:

- Some libraries in HeinOnline offer additional search options. The options available vary by library. See Appendix B for a list of libraries with customized search options.
Additional Options from the Search Results Screen:

- **Modify Your Search:** When selecting Modify Your Search, you will be returned to the search input page where you entered your search terms. The last parameters you entered will be displayed, allowing you to modify the parameters as needed. If you conducted a Quick Search, choosing Modify Your Search will direct you to the Advanced Search screen where you can modify your search parameters.

- **Search within the displayed search results:** Select Search Within These Results to search for a term or phrase from within the search results that are displayed.

- **Run This Search in Other Collections:** If you want to run the same search in a different collection in HeinOnline, select this option and choose the library from the drop down menu that you wish to run the search in. NOTE: If you run a search across a specific field in a library (for example, Author), you may not be able to run this same search in every other library. As outlined earlier, each library has specific fields and they vary by library.

- **Sort-by Method:** Search results will be sorted by the parameter chosen when inputting your search terms on the Field and Advanced search screens. When using the Quick Search option, by default the results will be sorted by relevance. You can change your sort-by method from the search results using the drop down menu displayed above the list of results. You may modify the number of results to show on each page, choosing from 25, 50, 75, or 100 results.

Understanding Search Results:

- **Search Dialog:** The search dialog is displayed at the top of every search results page. This outlines the search parameters entered.
The content displayed in search results will vary by library, based upon the structure and content in a given library. However, the functionality of the results will work the same.

Shows the number of results displayed out of the total results found and the sort-by parameter.

Link to the article/section. The link may display the citation, article name, title name, or other information depending upon the library.

Will display the name of the article/section and the section type in brackets.

If available, the creator/author will be displayed as a link. Clicking on an author’s name generates a full list of titles/articles written by that author (from within the library you are working in).

**Matching Text Pages:** If you do a text search, the search results will display a link to View Matching Text Pages. By default, the Quick Search always performs a text search unless another field is defined. If you conduct a Field or Advanced search for a Title or a Creator/Author for example, you will not see this link.

You can expand/collapse the matching text page results using the +/- toggle. The matching text pages displays a list of pages within the section where the search terms you entered appear. From here, you can link directly to a page. This allows you to drill down search results beyond the volume level. The matching text page results provide a snapshot of the text on the page, with search word(s) highlighted.

**Print/Download Options:** You can choose to print/download an article or document directly from your search results. When clicking on Print/Download Options, the printing options will appear in a new window.
Viewing Search Results Within a Volume:

- After clicking a search result to a volume or article, your search results will be displayed in the left navigation bar. From here, you will be able to view matching text pages for other results and link to another result or page.
- Your search word or phrase will be highlighted in the article to make it easier to locate your search terms on a page.
Terms
- A query is broken up into terms and operators. There are two types of terms:
  - Single: a single word such as “test” or “hello”.
  - Phrase: a group of words surrounded by double quotes such as “hello dolly”.
- Multiple terms can be combined together with Boolean operators to form a more complex query (see below).
- Terms are NOT case-sensitive.

Fields
- When performing a search, you can either specify a field or use the default field. The field names and default field used in HeinOnline are library specific and are listed on each library’s search page.
- You can search any field by typing the field name followed by a colon “:” and then the term you are looking for.
- As an example, let’s assume an index contains two fields-title and text-and text is the default field. If you want to find the document entitled “The Right Way” which contains the text “go this way”, you can enter:

  | title: “The Right Way” AND text: “go this way” |
  | title: “The Right Way” AND “go this way” |
  | (Since, in this example, text is the default field, the field indicator is not required) |

- In the absence of quotation marks, the field is only valid for the term that it directly precedes, so the query - title: Do it right - will only find “Do” in the title field. It will find “it” and “right” in the default field (which in this case is the text field).

Boolean Operators
- Boolean operators allow terms to be combined through logic operators. Boolean operators AND, ”+”, OR, NOT and ”-“ are supported. Boolean operators must be all CAPITALS.

OR
The OR operator links two terms and finds a matching document if either of the terms exist in a document. This is equivalent to a union using sets.

To search for documents that contain either the phrase "watershed planning" or the word "watershed" use the query: "watershed planning" OR watershed
Boolean Operators, Cont.

**AND**
The AND operator matches documents where both terms exist anywhere in the text of a single document. (The symbol "&&" can be used in place of the word AND.)

```
To search for documents whose title field contains "real property" and creator field contains "rheinstein" use the query: title: "real property" AND creator: rheinstein
```

**+**
The "+" or required operator requires that the term after the "+" symbol exist somewhere in a field of a single document.

```
To search for documents that must contain "watershed" and may contain "planning" use the query: + watershed planning
```

**NOT**
The NOT operator excludes documents that contain the term after NOT. (The symbol "!" can be used in place of the word NOT.)

```
To search for documents that contain "watershed planning" but not "watershed system" use the query: "watershed planning" NOT "watershed system"
```

The NOT operator cannot be used with just one term. For example, the following search will return no results: NOT "watershed planning"

**-**
The "-" or prohibit operator excludes documents that contain the term after the "-" symbol.

```
To search for documents that contain "watershed planning" but not "watershed system" use the query: "watershed planning" - "watershed system"
```

**Range Searches**

- Range Queries allow one to match documents whose field(s) values are between the lower and upper bound specified by the Range Query. Range Queries can be inclusive or exclusive of the upper and lower bounds. Sorting is done lexicographically.

```
date:[1938 TO 1944]  This will find documents whose date fields have values between 1938 and 1944, inclusive.
```
Range Searches, cont.

- Note that Range Queries are not reserved for date fields. You could also use range queries with non-date fields.

```
    title:(Aida TO Carmen)  This will find all documents whose titles are between
                           Aida and Carmen, but not including Aida and Carmen.
```

- Inclusive range queries are denoted by square brackets. Exclusive range queries are denoted by curly brackets.

Term Modifiers

- Support for modifying query terms to provide a wide range of searching options.
- Wildcard searches: Support for single and multiple character wildcard searches.
  - To perform a single-character wildcard search use the "?" symbol.
  - To perform a multiple-character wildcard search use the "*" symbol.
- The single-character wildcard search looks for terms that match with the single character placed.

```
    To search for "text" or "test" you can use the search: te?t
```

- Multiple-character wildcard searches looks for zero or more characters.

```
    To search for "test", "tests" or "tester" you can use the search:  test*
```

- You can also use the wildcard searches in the middle of a term.  te*t
- You cannot use a "*" or "?" symbol as the first character of a search term.

Grouping

- Support for using parentheses to group clauses to form sub-queries. This can be very useful if you want to control the Boolean logic for a query.

```
    To search for either "watershed" or "water rights" and "planning" use the query:
    (watershed OR "water rights") AND planning
```

- This eliminates any confusion and makes sure that "planning" must exist and either term "watershed" or "water rights" may exist.

Field Grouping

- Support for using parentheses to group multiple clauses to a single field.

```
    To search for a title that contains both the word "return" and the phrase
    "pink panther" use the query: title: (+ return + "pink panther")
```
Proximity Searches

- Support for finding words which are a within a specific distance away. To do a proximity search, use the tilde symbol, "~", at the end of a phrase.

<table>
<thead>
<tr>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>To search for a &quot;watershed&quot; and &quot;planning&quot; within 10 words of each other in a document use the search: “watershed planning”~10</td>
</tr>
</tbody>
</table>

Fuzzy Searches

- Support for fuzzy searches based on the Levenshtein Distance, or Edit Distance, algorithm. To do a fuzzy search, use the tilde symbol, "~", at the end of a single-word term.

<table>
<thead>
<tr>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>To search for a term similar in spelling to &quot;roam&quot; use the fuzzy search: roam~ This search will find terms like foam and roams.</td>
</tr>
</tbody>
</table>

- Optionally, you can also specify a similarity parameter. The parameter value is between 0 and 1, and the closer the value is to 1, the higher the similarity will be. For example: roam~0.8. The default similarity parameter if not otherwise specified is 0.5.

Boosting a Term

- The relevance level of matching documents based on the terms found is provided. To boost a term, use the caret symbol, "^", with a boost factor (i.e., a number) at the end of the term you are searching. The higher the boost factor, the more relevant the term will be.

<table>
<thead>
<tr>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>For example, if you are searching for &quot;jakarta apache&quot; and you want the term &quot;jakarta&quot; to be more relevant than &quot;apache&quot;, boost it using the caret symbol along with the boost factor next to the term. jakarta^4 apache</td>
</tr>
</tbody>
</table>

- This will make documents with the term "jakarta" appear more relevant.
- You can also boost phrase terms as in the example: "jakarta apache"^4 "Apache Lucene"
- By default, the boost factor is 1.
- Although the boost factor must be positive, it can be less than 1 (e.g., 0.2).

Escaping Special Characters

- Support for escaping special characters that are part of the query syntax. The current list of special characters are: + - & | ! ( ) { } [ ] ^ " ~ * :.
- To escape these characters use the back slash, ", before the character.

<table>
<thead>
<tr>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>For example, to search for (1+1):2 use the query: (1+1):2</td>
</tr>
</tbody>
</table>
Customized Search Options by Library

Law Journal Library

Search the Index to Periodical Articles Related to Law Database. Access this via the list of search options in the left navigation bar in the Journals library. HeinOnline has created a database of all the articles that are indexed in the Index to Periodical Articles Related to Law publication, to allow researchers to search by Article Title, Article Creator/Author, Journal Title and/or Subject. To access this search feature, click on “Search the Index to Periodical Articles Related to Law” found under the Search Tab or when browsing the contents of the publication, select the search option listed just below the title. An additional help guide is available that outlines how to search this database. It can be found under “About Searching” in the journals library.

You can also search by subject, state or country in the Law Journal Library.

Legal Classics Library

Search by subject in the Legal Classics collection. Looking for a “Classic” from tens or even hundreds of years ago that has to do with Transportation or Constitutional Law or another subject of interest? We’ve made it easier to find a Classic title, by providing the ability to browse by subject or search by subject in the Legal Classics collection. In building this capability, we identified over 70 subjects that classify the content of the titles. We then related every title to at least one subject and in many cases multiple depending upon the title’s content. To search for a word or phrase across one or multiple subjects, you can Search by Subject from either the field or advanced search screens. For further details outlining how to use the Search by Subject feature, view the Search By Subject How-To Guide found under the “About Searching” section in the Legal Classics Library.

Treaties and Agreements Library

Use the Treaty Metadata Search option in this library to search for more finite characteristics of a treaty, such as the Treaty Number, Former KAV Number, State Department Number, Country Name, Multilateral Parties, Treaties which amend a Treaty, and much more. This will also allow you to narrow your search to treaties that are in force, not in force, or both. Access this via the list of search options in the left navigation bar in the Treaties and Agreements library.

U.S. Supreme Court Library

Browse or Search United States Supreme Court Cases by Topic or Author. The indexing information presented here for the United States Supreme Court Cases is provided courtesy of the Legal Information Institute (LII) of Cornell University Law School and is part of their United States Supreme Court Collection. Indexes are provided by Topic and Author for cases from 1990 to present and also for over 600 of the Court's most important decisions from the founding of the court to present. You can enter up to 2 search fields, select either Topic or Author for each field, and combine fields using Boolean operators. This feature is accessible from the Resources tab in the U.S. Supreme Court Library by clicking on the link for Legal Information Institute Indexing.