Basic structure of the database

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

What are “sections” and “meta data”? 

**Sections:** The content within a volume is broken down into sections, when applicable, which are determined by the contents of a document. One volume can have multiple sections within it, or a volume may not have sections at all. Each library may then consist of one, multiple or no sections based upon the content of the volumes included in the library. Each library in HeinOnline will contain different section types as determined by the contents of the volumes within a library.

**Example:** As displayed in Figure 2 on page 2 of this guide, the Law Journal Library consists of the following section types: Articles, comments, notes, reviews, legislation, cases, decisions, contents, editorials and miscellaneous.

**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 of the volumes in the library. Meta data fields are not the same for every section nor for every library. The sections are indexed based on the available meta data for that particular section. Some sections may not have all 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 (a.k.a. Table of 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 across the creator/author meta data field, you will get no results. However, if you conduct a search in the contents section across the text meta data field, you will get results. Search for Hans Kelsen in the creator/author meta data field and search across the section type contents. This will produce no results because Table of Contents sections don’t typically contain authors. They do however contain text that is searchable. Therefore, change your meta data field from creator/author to text and you will get results.
Below, in Figure 2, is the structure of data that is available in the Law Journal Library. In this library, there are titles, volumes, section types and meta data fields. Note: Not all libraries have this comprehensive of a data structure. Refer to page 2 for another example of a structure that does not have sections.

Below, in Figure 3, is the structure of data that is available in the Code of Federal Regulations. In this library, there is one primary title, the CFR, which has multiple volumes, each volume represented by the year, and each volume has meta data. Since the CFR is a codification and broken down into fifty titles and subsequent parts, applying sections was irrelevant and therefore the meta data is applied directly to each volume. This makes each volume (year) of the CFR searchable by the meta data fields displayed.
How do sections and meta data translate into search options?

Below is a Field Search form that is available in every library in HeinOnline. In this example, we are displaying the form for the Law Journal Library. The sections and meta data are indicated in the diagram below.

**Meta Data**
These are the meta data fields that you can search across.

**Titles**
Search across one or multiple titles in the library, or all titles.

**Volumes**
Narrow a search by the volume date.

**Sections**
These are the section types that you can narrow your search to.

**HINT:** If you ever come across a meta data field and do not know what that field represents, click on the “Search Tips” option from the search menu. The Search Tips will detail each meta data field available and an example search across that meta data field.
The electronic table of contents for a volume can help you identify the searchable meta data fields available for a given title.

If you are searching in a library or across a title within a library that you have never searched before, we recommend taking a moment to quickly look at the electronic table of contents for a volume of the title you are going to search. Below is the electronic table of contents for a Harvard Law Review volume. The diagram illustrates how the meta data fields are translated into the electronic table of contents.

**Volume Information**

**Sections are denoted by bullets**
Each bullet in the table of contents represents a section. Each of these sections has a type associated with it (as shown on the bottom of the search form on the previous page). The types are not currently displayed in the table of contents.

**Each section displays the meta data within it**
When looking at a section (or bullet), the font type that you see in “italics” is denoted as that section’s description. Description is a meta data field in the drop down on the search form. So in this example, you could search across all the Colloquy: Tax Transitions in this volume of the Harvard Law Review by selecting description from the drop down and entering “Colloquy: Tax Transitions”.

The font type that directly precedes the italicized font type is the section “Title” and title is a meta data field in the drop down on the search form. Depending upon the library, this meta data field may appear as “Article Title” or “Section Title”, or another variation, on the search form. In this example, the title is “Rethinking Tax Transitions: A Reply to Dr. Shacher.” Understanding that this is the title meta data field allows you to search across a specific section title when formulating a search.

On the line immediately following the section description, you may see an author listed. If a section has an author, the author’s name will be displayed as last name, first name, middle name or middle initial. This allows you to search across the author meta data field by last name, first name. In this example, Abrams, Howard E. is the author.

**NOTE:** In looking through the table of contents, not every section has a title, a description, and an author. Some sections may only have a description. For example, Harvard Law Review issues often have sections dedicated to Book Reviews. These sections of the journal have been given a description of “Book Reviews”. So if you wanted to search just book reviews in the Harvard Law Review, you could do so by searching the description field for “book reviews” and then searching the text field for key words.
Basic Search Options

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

Field Search:
Input terms, select meta data fields from drop down, select boolean operators from drop down, manipulate search results format, and select sections. Limited to 3 fields.

Quick Search:
Use full power of Boolean Searching across a given library. If you do not define the meta data field you want to search across, by default it searches across the full text.

One-Box Search:
Presented on the HeinOnline Welcome page, this search box searches all your subscribed libraries at the same time and acts as an advanced search box.

Advanced Search:
Use the full power of Boolean Searching, narrow to specific titles, years and sections. More flexible search option allows you to search across more than 3 fields at a time.
7 Search Syntax & Using Boolean Operators

a) Phrase Searching:
When you are searching for phrases, **you must use “quotations” around the phrase.** This is applicable to every search form you use. In the absence of quotations, the search terms are logically paired with the AND operator.

<table>
<thead>
<tr>
<th>Phrase search:</th>
<th>Same search without quotations will search for:</th>
</tr>
</thead>
<tbody>
<tr>
<td>“right to privacy”</td>
<td>right AND to AND privacy</td>
</tr>
<tr>
<td>This will produce about 30,000 results</td>
<td>This will produce over 100,000 results</td>
</tr>
</tbody>
</table>

b) Boolean Operators:
Boolean operators allow you to search across multiple meta data fields in one query. When using Boolean operators on the Quick or Advanced search forms, the operators must be in all CAPITAL LETTERS.

**AND**
The search query must return results that meet all criteria that is paired with the AND operator.

- **title:**“police power” AND **text:**“takings clause”

**OR**
The search query will return results that meet either of the criteria that is paired with the OR operator. If results are found that meet both criteria, the results are given a higher relevancy and placed higher on the search results list.

- **text:**“takings clause” OR regulation AND “police power”

**NOT**
The search query will exclude results that contain the term after the NOT operator.

- **title:**(conservation NOT “natural resources” NOT “committee”)

c) Defining Meta Data Fields in the Quick & Advanced Search Boxes:
When using the advanced search or quick search box, you should define the field you want to search across followed by a colon and then your search terms. For example if you want to search across the title field use **title:**. If you do not define the field, by default it will search across the full text.

*The below examples are done using the advanced search box.*

- **“international insurance”** - This will search across the full text for the phrase “international insurance”
- **title:**“international insurance” - This will search across the document titles for the phrase “international insurance”

If you are going to search across one field for multiple terms using boolean operators to combine the terms in the query, you have to use parenthesis to group the terms in your query. If you don’t group the terms and don’t define a field before each term, by default it will search the text for the term that does not have a field defined. Refer to the next page for more details about “Grouping Terms Using Parenthesis.”

- **title:** environment AND water - This will search across the document title field for environment and across the full text of the documents for water since water was not grouped nor did it have a field defined.
- **title:**(environment AND water) - This will search across document title field for environment and water.
d) **Grouping Terms Using Parenthesis:**
If you wish to control the Boolean logic for a search query you can do so using parenthesis to group clauses to form sub-queries.

- **text:** (“consumer products” OR “safety standards”) AND “water heaters”
  - This query will return results for documents that may contain either “consumer products” or “safety standards”, but **must** contain the term “water heaters”.

- **text:** “water heaters” OR (title:safety AND text:“consumer products”)
  - This query will return results that contain “water heaters” in the full text of the document, or it will return documents that contain safety in the title of the document and the term “consumer products” in the text of the document.

**e) Proximity Searching:**
Proximity searching allows you to find terms that appear within a certain number of words of each other. The proximity symbol in HeinOnline is the tilde symbol, ~ . To do a proximity search, put all key terms that you want in the query within quotations, followed by the tilde ~ and the numerical value that represents the proximity you wish to search.

- **text:** “consumer product safety standards”~25
  - This will search across the full text for consumer, product, safety, and standards all within 25 words of each other.

- **title:** “consumer product safety standards”~15
  - This will search across the section titles for consumer, product, safety, and standards all within 15 words of each other.

**NOTE:** The current syntax does not support the use of a proximity search and a wildcard search in the same search string. That means you cannot do “consumer product* safety standards”~15.

**f) Wildcard Searching:**
You can perform single-character or multiple-character wildcard searches. To perform a single-character wildcard search use the ? Symbol. To perform a multiple-character wildcard search use the * symbol.

**Single character wildcard search:**
- **text:** heate?
  - This will search for terms that match with the single character placed. Results will include terms such as heater and heated.

- **text:** te?t
  - This search will generate results that include test, text, tent.

**Multiple character wildcard search:**
- **text:** heate*
  - This will search for terms that match zero or more characters. Results will include terms such as heater, heated, heaters.

- **text:** heater*
  - This search will generate results that include heater or heaters.
8 Search Tips & Hints for Doing a Topical/Subject Search

If you are beginning your research with a topic of interest, use proximity searching to search for key words within the text of a document or title of a document, then use facets to narrow your results.

Example: If you want to find articles that discuss consumer products, safety standards and water heaters, but water heaters is the most important term, than you can apply boosting to the term “water heaters”. In your search results, this will bring documents that contain “water heaters” more frequently to the top of your results list.

text: “consumer products” AND “safety standards” AND “water heaters”^5

This query will return results for documents with all the terms, “consumer products” and “safety standards” and “water heaters”. Documents with the term “water heaters” found more frequently will have a higher relevancy and show up higher on our results list.

Here are some additional tips for using and tweaking a proximity query when searching for documents about a topic/subject area:

1. Only use words relevant to your search in the query.
2. Leave out connector words like a, and, the, if, of, or, etc. These will dilute the results.
3. If your search includes several words, increase the proximity range by increasing the proximity number after the tilde.
4. If you try a search the first time and get no results, increase the proximity range.
5. If you try a search the first time and get too many results, decrease the proximity range. Note: This may produce fewer results, but the results are likely to be more relevant to your research topic.
6. Increasing the number of key terms used in a title search query can correspondingly decrease the likelihood of getting a relevant result because in some cases it can OVER limit the search by excluding articles that don’t have those specific words in the title. Therefore, be reasonable in the number of words you are using and try sticking to the key words for your topic.
7. Remember, you can always use the “search within these results” option to search for another key term within a set of results.