

What's New in the Andornot Discovery Interface for 2023

Andornot has designed and developed search engine and information management solutions since 1995, and has used primarily *discovery interface* style tools for the past 10 to 15 years. We've provided our own [Andornot Discovery Interface \(AnDI\)](#) to many of our clients, and watched and learned from their questions and uses of the application.

Over this long period of development, we've added many new features to individual AnDI sites, either at the request of clients, or based on our own observations and learning, as well as taking into consideration ever-evolving best practices in usability, accessibility and web design and development.

In 2020, we embarked on a project to take the best features and enhancements and roll them all up into a new version of AnDI. We've deployed this version to many clients, while continuing to add more new features over the past few years.

With many software products that evolve over time, as more and more features are added, they sometimes become bloated and confusing. More is not necessarily better and it's always been our intention to adhere to the [Don't Make Me Think](#) principle. So a user should not need to read search tips or help pages to use a tool and find what they are looking for, and should be able to understand the entire screen at a glance, without having to pause to decipher complex options.

This document describes some of the most significant enhancements in the latest version of AnDI, which complement the core features that have made AnDI such a powerful search engine. Sites built from the latest version are added to our online [Project Portfolio](#) as they launch, so check that out to see live sites, and be sure to ask us about any features not listed in the PDF that may already exist or could be developed for you.

About the Andornot Discovery Interface

The Andornot Discovery Interface (AnDI) is a powerful search engine and discovery interface developed by Andornot. It uses the popular and highly rated Apache Solr open source search engine to provide the best possible search experience for your users.

A discovery interface encourages serendipitous “discovery” of resources and is now the standard method of searching in most major archives and museums, university and public libraries, and e-commerce sites. Users enter keywords to express roughly what they are looking for, then sophisticated search algorithms, with automatic word stemming and spelling corrections, present relevancy ranked results. Facets allow users to then refine their searches easily and efficiently.

AnDI was designed to search a wide range of information in many different formats, whether from an archive, a library or unique collections such as patient health education materials. It adapts well to any data structure or source, with a wide range of features for finding, viewing and sharing search results.

Latest Searching Features

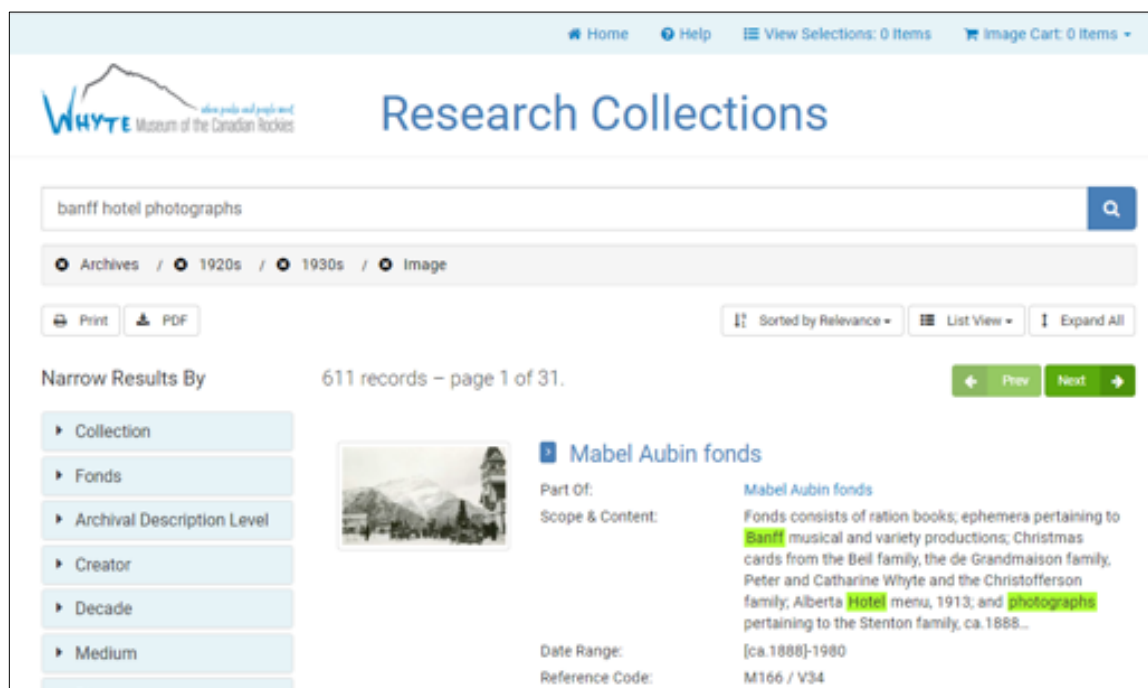
In addition to the great search features AnDI has always had, the latest version:

- Uses a newer version of the Apache Solr search engine and all the linguistic analysis tools it comes with for ever-better searching and relevancy-ranked results, as well as eliminating security vulnerabilities discovered in earlier versions.
- Provides improved treatment of proper names (people, organizations and places) versus other words.
- Provides improved use of stopwords in searching to increase relevancy.
- Provides better indexing of dates for Decade and/or Year facets and sorting by date. Specifically:
 - For records with start and end dates, the complete span of decades in between are automatically generated, for faceting.
 - Dates in various formats, with and without months and years, are better able to be parsed, no matter the format, for searching, faceting and sorting.
 - Automatic selection of best date or year for sorting, if more than one is available.

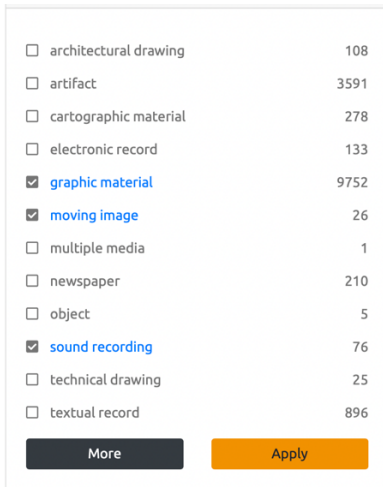
- Some of the technical parts of a search are now hidden. For example, searches in the current interface might result in something like this at the top of search results: “title_free:(water quality) AND identifier_free: (AB 123) NOT objectType_free:book”.

This advanced search syntax has been replaced by more human friendly terms in all but advanced searches, where they are potentially still of use to more advanced users.

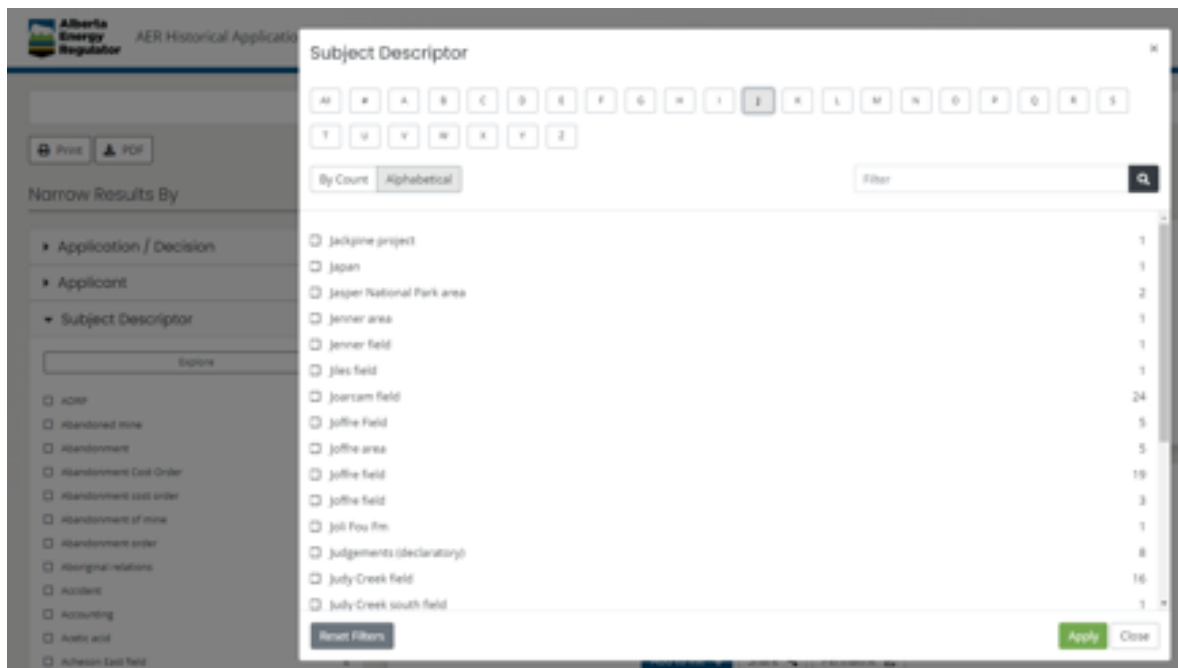
- Users may choose to temporarily save their advanced search, for editing and re-use.
- The search results page has been redesigned with a more prominent search box for better search refinement. This makes it easy to add or remove words, try wildcards, etc. without returning to the home page to start a new search. Shown below.



- Users have the ability to select multiple values from a facet at once. Shown below:



- Users have access to a new *facet explorer* to browse names, subjects, places and other facets in detail. This allows a user to sort a facet by count of records or alphabetically, jump to a letter of the alphabet and filter by words, then to select as many terms as desired and refine the search with them. This new feature is great for finding variations in names and places, different spellings, etc. and selecting all of them.



- Completely rewritten help page with improved examples.
- New responsive framework for viewing on the latest small screens (phones and tablets).

Latest Features for Viewing Search Results

- In addition to the List view that shows brief and full versions of records, AnDI now includes a Gallery view showing thumbnails of images, document first pages and book covers, as well as a Table view showing up to 4 key fields in a table layout. Examples:

- Gallery view:

https://heritagecollections.elgin.ca/en/Gallery?q=Ford%20Assembly%20Plant&p=1&ps=20&onlineMediaType_facet=Image



- Table view:

<https://covid19evidencereviews.saskhealthauthority.ca/en/table?q=Infectious+Disease&p=1&ps=20>



- An archival hierarchy / finding aid style representation of archival records, showing their position in the hierarchy, with the ability to quickly navigate up or down the fonds, series, files and items in each fonds. This display requires well-structured archival records with a hierarchical numbering sequence, in order to correctly sort and place items in the tree view.



- Users may share records with social media sites such as Twitter, Facebook, LinkedIn and Pinterest, as well as initiate an email about one specific record to give you feedback on it.
- Search results include COINS tags for automatic citation creation using external tools such as Zotero.
- An Export to EndNote option is also available, though requires configuration for your specific types of records.
- A “More Like This” search finds related records.
- A new icon collection represents different material types.
- Still available in both English and French, and with renewed accessibility testing to meet the needs of the widest range of users.

Latest Features for Viewing Media

AnDI handles media such as photographs, digitized newspapers, documents, large format materials (e.g. maps, drawings, plans and paintings) and audio and video recordings natively, providing users with tools to view and use these materials within AnDI search results. This latest version:

- Allows users to view image thumbnails and enlargements automatically generated from a single master image, with optional watermarking (e.g. your logo over the image).
- Displays snippets of full text of indexed documents with search words highlighted.
- Allows users to open PDFs within AnDI using an embedded viewer, enhanced with 2 features that reduce the number of false highlights and better show a user the relevant ones:
 - Stopwords such as a, an, the, etc. are no longer highlighted.
 - Entire phrases are highlighted if a user specifically performed a phrase search in AnDI.
- Allows users to open PDFs within AnDI using a flipbook style viewer, with animated page turns, to recreate the experience of browsing a newspaper or magazine. E.g. https://search.bvmuseum.org/flipbook?pdfUrl=%2Fmedia%2FDigitized%2520Archival%2520Items%2FBF5%2520Supplements%2F2020.6.49%2FBF5_2020.6.49_accesscopy.pdf
- Allows streaming playback of audio and video recordings (with no ads as would be the case if the media were hosted on a commercial service such as YouTube). E.g. <https://library.fpinnovations.ca/en/permalink/fpipub7920>
- Still also allows embedding of a YouTube player for media stored there.
- Allows smooth and seamless zooming in to very large format materials, such as maps, fire insurance plans, drawings or paintings. A single large image is processed into small tiles, so the user never needs to download a large file, only small images. E.g. <https://heritagecollections.elgin.ca/en/viewer/seadragon?dzi=%2Fmedia%2Farchives%2FImagesArchive%2Fjpgs%2FFirePlans%2FMAP2.dzi>

Latest Community Collaboration Features

AnDI includes the popular [Disqus](#) commenting and discussion platform, allowing users to engage in dialogue with each other and you about items in your collection. Comments can be moderated and statistics gathered. This is a great way of engaging your community, soliciting help in identifying people in photos, and gauging which items are of most interest to your users. E.g. <https://search.bvmuseum.org/permalink/descriptions7979>

Latest Features for Gathering and Viewing Statistics

With Google retiring their Universal Analytics platform, Andornot is now offering access to a statistics tracking application hosted by Andornot, using the open source Matomo software. Matomo provide you with information on:

1. Overall site traffic, where visitors are from, how long they stay, how they found the site, whether they are using a desktop or mobile browser, and other general information. This is useful in several ways, but especially if you promote the site in some way, and want to see if that promotion affects traffic, or how people use the site.
2. The words or phrases users start searches with. This is invaluable in seeing what is of interest to your users.
3. Searches that result in no records found. This is also very helpful in guiding acquisitions or digitization to meet user interests, but also in seeing the terms users think to search with versus language used in your records. AnDI has a synonym list so this data can be used to then populate that list to better help users, as well as to guide your cataloguing or descriptive practices.
4. Media such as PDFs, images, videos, and URLs to other resources, that a user clicks. This is a great way to gauge which of these media are of specific interest.

The above data can be summarized in a custom dashboard for a quick summary, with links to more detailed reports, and periodic emails of this information can be scheduled.

In addition, you can collect information on which records were shared to social media with an AddThis account, and which records are most discussed using the Disqus feature above.

Latest Access Restriction Features

For non-public sites, AnDI can restrict access to some or all records, or some or all fields or media in a record, based on various criteria, including individual logins or IP addresses.

Latest Back-end Improvements

- Developed using Microsoft .NET CORE, the latest iteration of the .net framework, so that any site built from AnDI today will run well for many years to come.
- All other components (e.g. JS, CSS, media handling) updated to current versions.
- Removes the need for a SQL server, so there is one less component to maintain and upgrade on the server. Replaced by log files on disk.
- Simplified search engine schema, with no loss of search features, for reduced data generation and storage and faster indexing.
- Faster indexing of text in PDFs by pre-extracting the text to .txt files, then indexing those along with DB/TextWorks and other records. Uses less server memory as well.
- Faster generation of PDF cover images by pre-generating them, rather than on the fly in search results.
- Ability to index data from any data source, including DB/TextWorks databases, PastPerfect databases, Filemaker databases, MARC records, folders of PDFs on disk, document management systems. There's not much we can't make use of in an AnDI site!
- Security enhancements to meet modern browser and server requirements.