# Understanding the Central Discovery Index

﻿﻿﻿﻿﻿

Hello, as you learned in the previous session the Central Discovery Index, or CDI, contains billions of records from more than 7,000 content providers, and includes more than 90 different content types. Individual records can be merged together to help researchers find the most relevant content for their search query.

In this session you will learn why individual index records are matched and merged into CDI merged records, and the benefits, as well as how Summon determines what is most relevant to a given search and how Index-Enhanced Direct Linking improves linking reliability.

When the CDI has multiple records for the same item or citation, it will match and merge that data into a single CDI Merged Record along with any Index-Enhanced Direct Linking information that may be available, which we will cover shortly.

The CDI will also add any special content to the Merged record such as Ulrich’s peer review and scholarly status information, CrossRef DOIs, and citation counts from the Web of Science and Scopus.

These Merged records enhance the discoverability of your content by providing the richest searchable records possible.

Summon’s proprietary relevance ranking algorithm is designed so that the most relevant results are listed at the top. Within the algorithm there are two groups of factors: dynamic and static.

Dynamic ranking factors focus on the search terms entered by the researcher, because they are different for every query. Whereas Static factors focus on the attributes of each possible result, because the metadata about each record does not change.

For example, Dynamic Ranking factors include things such as term frequency, field weighting, stop-word processing, as well as synonym mapping, stemming, and lemmatization. And Static Ranking includes attributes such as content type, publication date, peer review/scholarly status, citation counts, and local collections.

Together, Dynamic and Static ranking factors create the algorithm Summon uses to determine the relevance of each item and if it should be place higher or lower on the list of results, when they are sorted by Relevance.

Once a researcher has located a record that Summon has identified as a good match for their search query, the CDI’s Index-Enhanced Direct Linking, or IEDL, helps them connect to the full-text.

Please note, that although Summon can connect researchers to full-text, Summon is not a full-text content provider. IEDL within Summon uses provider metadata and complex logic to create highly reliable direct links that are more than 99% successful.

To access the full-text the researcher simply clicks on the item title. Whenever possible Summon will use IEDL to go directly to the full-text without going through your link resolver. However, when an IEDL link is not available Summon will use your institution’s OpenURL link resolver to connect researchers. This may require them to authenticate with their credentials.

Links may not be available for a given item if the content provider does not support IEDL, or there is not a way to build an IEDL link. Additionally, small metadata mismatches can also cause broken links.

You now know why the CDI matches and merges individual records into Merged Records; how relevance ranking is determined; and how Index-Enhanced Direct Linking improves reliability of linking to full-text.

Thanks for watching!