NISO Metasearch Initiative

Search and Retrieval Results Set Metadata

A Recommended Practice of the National Information Standards Organization

Standards Committee BC / Task Group 3

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Metasearch Search and Retrieval Results Set Metadata

Introduction

A sub group of the Metasearch Initiative Search and Retrieval Task Group was assigned the responsibility of identifying a core set of metadata that provide information about a result set at both the aggregate level (see Aggregate tab in this workbook) and the individual record (see Inidvidual tab in this workbook). These data elements are intended to be used by content providers to provide better quality of information returned through a variety of methods. It may also used to ensure that the needs of metasearch products are met by a given protocol.

The group used the following assumptions in developing the recommended metadata elements:

- 1 The elements in this document apply to metadata related to the results of a search. Specifically excluded is information about the query interpretation (subquery: recommendation) and elements specific to a response (e.g. RetMax and RetStart).
- 2 Result set metadata is nested. So many of the data elements can be reused in the context of a specific database. Elements such as "results by database: count" can be handled through "record count" in a nested structure.
- 3 It is recognized that there may be value to providing result set level defaults for particular elements (e.g. schema id); however this document does not address that particular issues. That is left to a particular protocol to define those elements.

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Aggregate Results

Element	Description	Notes
Branding	Provides branding information from the content provider. May be an image, text, or pointer to branding information.	
Clustering element	Contains the two sub-elements: field and value.	Reconciling across clustering mechanisms from different providers may be problematic
clustering field	The field used for clustering.	
clustering value	The value of the cluster term (common value) e.g. English.	
Clustering ID	An id that points to the result set representing records in the cluster. Particularly useful when an element/field is not appropriate.	
Database name	The name of the database providing the result set.	May be different than what the user selected. E.g., the search used a database name that represented an aggregated set of databases and the results are return by individual database.
Diagnostic Message	Informative message returned with the result set.	
List of terms	Expanded query; what actually got searched.	
Posting count by	Counts related to terms.	
Ranking algorithm	Algorithm used to rank the result set.	
Record count	Number of total records in the result set.	
Resources Used	What did it cost to generate the result set (the cost so far) or execution time.	
Results status	Report on the success/failure of the query operation.	
Sort Order	Sort order of the records in the result set.	

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Metasearch Inititiave Search and Retrieval Results Set Metadata

Individual Record

Application URI Application to be used (e.g. takes user to native interface)	Element	Description	Notes
Cost Info A human readable string expressing constraints on the use of the record. (May be an element out of the descriptive record) A human readable string describing cost information to access the record. Date creation Creation data of the administrative metadata The name of the database that the record belongs to for display purposes. Date of Last Modification Last time the record was modified in the database. Date of Last Review Last time the record was reviewed or validated. Fetches document out of the database to be used in a different context. Language of Record ID local A control or record id that is unique to the database. Position in result set Processing instructions Rank Relevancy ranking for ranked retrieval.* See also Score, below. Record Created By The agent which created the record. Schema instance Instance of schema used. Size The size of the record for the schema Human readable string expressing instructions in the agent which is access the record. Size Human readable string describing cost information to describe the record in the result is explicitly in the result set and in the result set level May be of use to provider underly to display purports of the metasearch engine to display underly to the metasearch engine to display underly to be important for the metasearch engine to display underly to be important to metasearch engine to display underly to be microard. Size The size of the record for the schema The schema specific leads to additional questions in the area if this is handling structured metadata. Human readable message Within A single local identifier for the record within the database,	Application URI	Application to be used (e.g. takes user to native interface)	
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Within A single local identifier for the record within the database,	User message	Human readable message	
equivalent to the 1D attribute in AMI			

^{*}Note: Rank and score pertain to relevancy ranking for ranked retrieval. The server may assign a score and/or a rank to a result set record. The score or rank applies to the record relative to other records in the result set. A score is an integer between zero and 100. The rank of a record is an integer from 1 to N, where N is the result set size. (A higher score means more relevant, while a lower rank means more relevant.) It is assumed that if record A has a better (higher) score than record B, then it will also have a better (lower) rank, however score and rank differ in the following respect: no two records in the result set have the same rank, and for every integer between 1 and N (where N is the result set size) there is exactly one record with that rank; on the other hand, more than one result set record may share the same score, and there need not be a record for every possible score. The reason for defining both (Score and Rank) is that some ranked retrieval systems score records while others rank records. The format of the content is left to the protocol. [Paraphrased from Z39.50 Utility Attribute Set (http://www.loc.gov/z3950/agency/attrarch/archive/util-d3.html).

Although it talks about access points, they have the same semantics as for retrieval elements.)

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