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Content-and-Structure Query

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Synonyms

CAS query; CO+S query

Definition

A content-and-structure query is a formulation of
an information need in XML retrieval or, more
generally, in semi-structured text retrieval that
includes explicit information about the structure
of the desired result.

Key Points

Content-and-structure query is a term from semi-
structured text retrieval, used predominantly for
XML retrieval. The term refers to a specific way
of querying a structured document collection. In
addition to describing the (topical) content of
the desired result, content-and-structure queries
include explicit hints about the structure of the
desired result or the structure of the context
it appears in. Content-and-structure queries are
useful for users who have knowledge about the
collection structure and want to express the pre-
cise structure of the information they are after.
For example, they can express the granularity
of the desired results, e.g., return *sections* about
architecture, or they can express the structural
context of the information they are looking for,
e.g., return *sections* about architecture within
documents about *Berlin*. It is up to the retrieval
system to decide how to use the structural hints in
locating the most relevant information. In INEX,
the Initiative for the Evaluation of XML Retrieval
[1], content-and-structure queries are known as
CAS queries or CO+S queries (*Content-Only
queries* with structural hints) and expressed in the
NEXI language [2]. More information on query
languages, including content-only and content-
and-structured queries in the field of XML search
can be found in [1].

Cross-References

▶ Content-Only Query
▶ NEXI
▶ XML Retrieval

Recommended Reading

1. Amer-Yahia S, Lalmas M. XML search: lan-
   guages, INEX and scoring. ACM SIGMOD Rec.
   2006;35(4):16–23.
2. Trotman A, Sigurbjörnsson B. Narrowed extended
   xpath i (NEXI). In: Fuhr N, Lalmas M, Malik S,
   Szlavik Z, editors. Advances in XML Information
   Retrieval: Third International Workshop of the Ini-
   tiative for the Evaluation of XML Retrieval, INEX
   2004, Dagstuhl Castle, 6–8 Dec 2004. Revised Se-
   lected Papers, Vol. 3493. Berlin/Heidelberg/New York:
   Springer; 2005. GmbH. http://www.springeronline.
   com/3-540-26166-4.