

# **XML-BASED DATA EXCHANGE IN THE HETEROGENEOUS DATABASES (XDEHD)**

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While the world is witnessing an information revolution unprecedented and great speed in the growth of databases in all aspects. Databases interconnect with their content and schema but use different elements and structures to express the same concepts and relations, which may cause semantic and structural conflicts. This paper proposes a new technique for integration the heterogeneous eXtensible Markup Language (XML) schemas, under the name XDEHD. The returned mediated schema contains all concepts and relations of the sources without duplication. Detailed technique divides into three steps; First, extract all subschemas from the sources by decompose the schemas sources, each subschema contains three levels, these levels are ancestor, root and leaf. Thereafter, second, the technique matches and compares the subschemas and return the related candidate subschemas, semantic closeness function is implemented to measures the degree how similar the concepts of subschemas are modelled in the sources. Finally, create the mediate schema by integration the candidate subschemas, and then obtain the minimal and complete unified schema, association strength function is developed to compute closely of pair in candidate subschema across all data sources, and elements repetition function is employed to calculate how many times each element repeated between the candidate subschema.

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