

C-store environment - relational database storing records on the disk by columns. Suitable for aggregations, optimized for reading. Can it be effectively used as XML database? This thesis considers XML data with and without a schema. Database model is generated from a XML file for both cases. A measure of the model suitability is the possibility of making quick XPath queries. Ancestor, child, younger sibling - these are just some of the discussed XPath axes. Low level system enabling the estimation of number of jumps needed on drive is characteristic for algorithms for each axis. Result? Schema for XML data does not seem useful. Regarding the data without a schema, the use of C-store seems to be optimal. But ... Addition of certain functionality to the system would also be appropriate here - direct access to elements, possibility of not reading the whole column. The thesis extends the definition of C-store with these principles, and adds experiments with real data. The conclusion provides an example implementation of selected algorithms that might be used as guidance for further implementation.