Managing space requirements of new buildings using linked building data technologies

Any stakeholder operating in the AEC industry knows that designing a building is a complex and highly iterative task. The project evolves over time and changes happen rapidly, meaning that design requirements, as well as solutions (often as a consequence), must undergo revision. Since building requirements are, however, documented and handled in a predominantly manual manner, the work processes are not aligned with the dynamic nature of the projects. Tracking and acting upon changes is a manual, and therefore an error-prone and labour intensive task. In this article, we suggest a generic method for working with the concept of spaces at different abstraction levels in order to compare requirements with actual properties in a non-static manner using semantic web technologies, primarily developed by the W3C Linked Building Data (LBD) Community Group. The generic modelling approach has the potential of also being applied to other concepts than building spaces.

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