



Design Object Library (DOL) Project

Aim of the project

IAI(S) has identified DOL as one of the priorities to be done as part of its 3D migration strategy that defines the roadmap and action plans to help accelerate adoption of OOCAD for the AEC industry in Singapore. There are at least 2 major benefits IAI(S) aims with the DOL projects:

1. Provide tool for the industry to use national library of building objects directly into their 3D design, which will significantly improve productivity that compensate the steep learning curve of moving from 2D to 3D.
2. Allow standardize or well structured object information into the model without manual input of data from the user. While this is in general benefit the industry, our immediate interest right now is to support rich building model with good enough quality for the use with e-PlanCheck system.

Stages of the project

This project will be split into 3 stages:

1. Standard development of the schema
2. Application development for the delivery method – proof-of-concept
3. Content creation – trial

IAI(S) has decided to start with the first stage, i.e. standard development of the schema or IFL, as an international platform for DOL. IAI(S) has invited AEC3 to assist this development. We would like this effort to be an international collaboration to ensure that the outcome benefits Singapore as well as the International community.

The other 2 stages are planned to be done only after the first stage is completed. They are likely to be done locally in Singapore.

Deliverables

Expected deliverables within the current scope of the projects are:

1. Business cases from e-PlanCheck requirements and feedbacks from the AEC industry in Singapore involved in the OOCAD and e-PlanCheck pilot.
2. IFL schema that defines the structure of object information that is designed to work effectively with IFC:

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- a. Harmonize with ISO12006 (XM7) schema for dictionary and IFC/ISO16739 schema for building model
- b. The schema should enable transport of library information from the library server to the IFC compliant softwares
3. Proof of concept for content generation and storage
4. Proof-of-concept for inserting the content into OOCAD (via ifcXML-extended delivery mechanism)

International Collaborations

International collaboration is sought in order to ensure that the development of IFL is sufficient to address concerns from different countries. IAI(S) understands the DOL potentially has a very large scope and therefore we would focus on the current scope with business cases coming from e-PlanCheck project and OOCAD. The best model for the collaboration is for each participating chapter to have own funding.

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