

District Information Model Server

- Combining building district information to a single server



Opportunity:

As cities expand new building are built with data using different software and purposes. Different data formats have evolved to represent information at varying granularities. While rich in content such information is often used to represent functionally specific information. While each data format can be extended using format specific structures, its granularity remains generally fixed.

A district information model (DIM) server developed by researchers at University College Dublin allows one server to associate information collected for district level with information collected for building and building entities. This allows the provision of information to simulations and other decision support tools, currently unavailable.

Applications:

The DIM, a software implementation, works by creating a semantically integrated view of disparate information formats that describe a district at different granularities, from district to building to zone and room levels. This is achieved by creating a semantic connection between salient points in district and building oriented information formats.

Key Features/Advantages:

- Reduces the cost of creating a series of associations between physical entities in different formats.
- Allows for the creation of a semantic integration of different formats.
- Allows for other third-party information to be associated with these associations.
- Approach does not attempt to represent complex associations, leaving each format to express information that it is designed to manage.

FUNDERS:



Value Proposition:

The server's ability to easily create associations between format specific objects and associate other information with those associations is a powerful tool.

Market: Building Information Modelling Systems.

Lead Inventor: Dr James O'Donnell UCD School of Mechanical and Materials Engineering.

IP Status/Publication: Software source code.



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