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Common Data Environments to facilitate information management in HVAC engineering

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Correction sheet – Ph.D. Thesis "Common Data Environments to facilitate information management in HVAC engineering" by Mikki Seidenschnur

The purpose of this sheet is to correct the errors in the original submitted PhD Thesis "Common Data Environments to facilitate information management in HVAC engineering".

**The reported statements are written in red, while the corrected statements are written in black*

Front & back covers:

Changed from A4 formatting to B5 size

Page 7:

The vision of this Ph.D. thesis is to provide \gls{aeco} stakeholders with a \gls{cde} that can be used for simulations in the \gls{hvac} discipline to reduce the information gap and, as a result, the performance gap.

The vision of this Ph.D. thesis is to provide \gls{aeco} stakeholders with a \gls{cde} that can be used for simulations in the \gls{hvac} discipline to eliminate the information gap and, as a result, the performance gap.

Page 17:

If, for instance, an \gls{hvac} designer wants to run a parameter variation study of an energy simulation.

This is useful, if, for instance, an \gls{hvac} designer wants to run a parameter variation study of an energy simulation.

Page 21:

Furthermore, Figure 2.7 illustrates a simple example, from FSO (See Paper III), of how to provide a semantic description of the connection from a pipe to a fitting.

Furthermore, Figure 2.7 illustrates a simple example, from FSO (See Paper V), of how to provide a semantic description of the connection from a pipe to a fitting.

Page 26:

This may be because the mission of Speckle is to create storage for large 3D models.[13]

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Page 31:

The object model repository ispublicly available on GitHub.

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Page 41:

one in a OWL and one as an object model.

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Page 42:

The ThermalZone contains all information needed for to perform thermal simulations.

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Page 56:

By comparing predicted and measured performance, it is possible to start investigating scenarios on why the performance gap exists, which has the potential to help HVAC engineer to reduce the performance gap.

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Page 56:

Spawn[7] is developed as an Functional Mock-up Unit (FMU) in the Functional Mock-up Interface (FMI), which is based on the Modelica language.

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Page 56:

Providing a connection for Spawn is part of this thesis's future outlook for the CDE.

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Page 62:

Furthermore, research task 4 extends the work of CDE created in research task 3 and presented microservices capable of performing whole-building simulations in E+ and detailed HVAC simulation in a Modelica simulation environment based on the THERM and FSC object models created in research tasks 1 and 2.

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Page 69:

The developed microservices include tools to validate the HVAC model, calculate the airflow in a ventilation system in Paper I, perform whole-building simulation, and detailed HVAC simulation.

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Page 138:

Paper V - Introducing a Semantic Web Ontology and Rule-Set to Support Capacity and Size-Related Property Descriptions and Validation of Heating, Ventilation and Air Conditioning Components in The Design Phase of Buildings

Paper V - Efficient management and compliance check of HVAC information in the building design phase using semantic web technologies

Page 138:

Paper VI - Efficient management and compliance check of HVAC information in the building design phase using semantic web technologies

Paper VI* - Rightsizing HVAC components using an ontology-driven Common Data Environment

*The inserted paper was wrong, and has been updated to the right paper.