Meta-model (glossary)

A model about a model.

Sources

Cited in Haskins, C. 2008. "Systems engineering analyzed, synthesized, and applied to sustainable industrial park development" (PhD diss., Norwegian University of Science and Technology, 2008).

Discussion

There are also alternative definitions of "meta-model" fashioned for specific applications of its use that have been defined in standards below:

(1) A logical information model that specifies the modeling elements used within another (or the same) modeling notation. (IEEE 1175.1-2002 (R2007) IEEE Guide for CASE Tool Interconnections-Classification and Description, 3.8)

(2) A metamodel Vm for a subset of IDEFobject is a view of the constructs in the subset that is expressed using those constructs such that there exists a valid instance of Vm that is a description of Vm itself. (IEEE 1320.2-1998 (R2004) IEEE Standard for Conceptual Modeling Language Syntax and Semantics for IDEF1X97 (IDEFobject), 3.1.111)

(3) A model containing detailed definitions

> *of the meta-entities, meta-relationships and meta-attributes whose instances appear in the model section of a CDIF transfer.* (ISO/IEC 15474-1:2002 Information technology -- CDIF framework -- Part 1: Overview, 4.2)

> *(4) Specification of the concepts, relationships and rules that are used to define a methodology.* (ISO/IEC 24744:2007 Software Engineering-- Metamodel for Development Methodologies, 3.4)

> *(5) Model defining the concepts and their relations for some modeling notation.* (ISO/IEC 15909-2:2011 Software and system engineering -- High-level Petri nets -- Part 2: Transfer format, 4.1.6)

Works Cited

IEEE. 2002. *IEEE Guide for CASE Tool Interconnections-Classification and Description.* New York, NY, USA: Institute for Electrical and Electronics Engineers (IEEE). IEEE 1175.1-2002.

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