

# **Toward an ontology-driven unifying metamodel for UML Class Diagrams, EER, and ORM2**

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## **Abstract**

Software compatibility and application integration can be achieved using their respective conceptual data models. However, each model may be represented in a different language. While such languages seem similar yet known to be distinct, no unifying framework exists that respects all of their language features. Aiming toward filling this gap, we designed a common, ontology-driven, metamodel of the static, structural, components of ER, EER, UML v2.4.1, ORM, and ORM2, such that each is a fragment of the encompassing consistent metamodel. This paper presents an overview and notable insights obtained on the real common core entities and constraints, roles and relationships, and attributes and value types that we refine with the notion of dimensional attribute.