

ICBO 2023 Tutorial: BFO as a top-level ontology for information systems modeling

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Abstract

Abstract text. Basic Formal Ontology (BFO) is a top-level ontology designed to support information retrieval, analysis and integration in scientific and other domains. BFO is used by more than 250 ontology-driven endeavors throughout the world. Indeed, BFO is not only a top-level ontology, rather a framework of resources that provides means to address corporations, including healthcare corporations. Such a framework encompasses middle-level ontologies for several purposes: time and place, information, measures, industry, finance, processes, properties and physical objects. This tutorial explores the potential of BFO for conceptual modeling and it is composed of two parts: The first part aims to introduce basic categories of the world, namely, those adopted within the BFO framework to develop domain ontologies. We will approach the four classification axes from which the primary categories are derived to reach this goal. We will finish the part by presenting the levels of the BFO taxonomy and some theoretical exercises about classification. The second part consists of a hands-on lesson about Protégé, one of the most essential editors in developing ontologies. After some basic notions of the Protégé's UI, we will import BFO and use the editor to classify the entities studied in the first part of the tutorial. We will finish our tutorial with an additional example of corporation modeling.

Keywords

Basic Formal Ontology, top-level ontology, Protégé.

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