Abioui, Hasna & Idarrou, Ali & Ali, Bouzit & Mammass, D.. (2018). Towards a Novel and Generic Approach for OWL Ontology Weighting. Procedia Computer Science. 127. 426-435. 10.1016/j.procs.2018.01.140. Semantic search is qualified – by web-related enterprises as well as, academic research – as a key technology, ensuring important improvements in terms of shared data understanding, while it leads to refined and targeted interpretations. Accordingly, ontologies are the focal asset for a well-functioning semantic search approach, since their ability to share, represent and reuse explicit and semantic domain specification. Nowadays, a multitude of ontologies containing up to hundreds of thousands of concepts are proposed. Thus, our challenge as researchers exceeds conceptualizing or creating ontologies to being able to choose the fitting and suitable one, taking into account specific criteria. This paper comes within the same context as it presents a novel approach for weighting OWL ontologies, in order to choose the most appropriate one from a set of proposed ontologies. Our approach takes into account not only the taxonomic structure, but also the semantic aspect of the ontology. Furthermore, semantic relationships and specific concepts are the favored since they reflect the semantic richness of the ontology.