

Abstract

The Semantic Web aims to enrich the existing Web by adding machine-interpretable metadata so that computer programs can generate new information by making predictions. This goal requires the development of metadata syntax and vocabulary and the creation of metadata for very many web pages. Despite the enormous impact and success of the World Wide Web, it currently has a significant limitation - in most cases it is only available to humans. Machines send information across the network, but they generally do not help us to select information, interpret it, compare different information sources, draw conclusions from information and act on it. The reason for this is that computers only understand the structure and layout of web pages, and do not have access to their meanings. In the Semantic Web, the meaning of information is clearly defined by a formal, standardized representation of knowledge e.i ontology, so that computers can make meaningful interpretations in the same way that humans process information to achieve their goals. I present an overview of the current state of the Semantic Web and the ways and perspectives of its development.