

# Adaptation of ontology sets for water related scenarios management with IoT systems for a more productive and sustainable agriculture systems

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## Abstract

Water management is a key scenario for the deployment of IoT systems because of the particularities that arise depending on the geographical region as well as its inherent weather conditions. This scenario offers different and challenging problems to the deployment of IoT based applications and services which must rely on a rich technological vocabulary able to represent such characteristics and particularities. This is the reason why ontologies are the medium to achieve this goal. In this paper, we review the most well-known related ontologies as well as propose a model called MEGA promoted at state level with the objective of not only representing the information, but also integrating all the elements of an irrigation system, specially water distribution networks under interoperable platforms or systems