

Sensor Networks in the Wild: Challenges and opportunities for Semantic Web technologies (Invited talk)

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Real sensor net deployments reveal challenges that may benefit significantly from Semantic Web solutions. As data is collected we need to record its context so that it may be properly interpreted, and when it is published we need to know its provenance so that we can understand quality and trustworthiness. With more devices delivering more data more often we need to deal with a deluge of data through automation. Often neglected, we also need to be able to configure and monitor devices and networks, and to handle diagnostics – normal running may be the exceptional case. In use, data is linked, annotated and integrated. Mashups and workflows can be assembled rapidly with assistance in finding and integrating data and the services that process it. And, as the data is used in data-intensive science, we can share not just the data but the methods that are used to handle it.