The LifeWatch-ITA Core Ontology and its application to the Phytoplankton domain

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Why an Ontology?

- Biodiversity and ecosystems data are very heterogeneous and need to be better managed for improving the actual scientific knowledge.

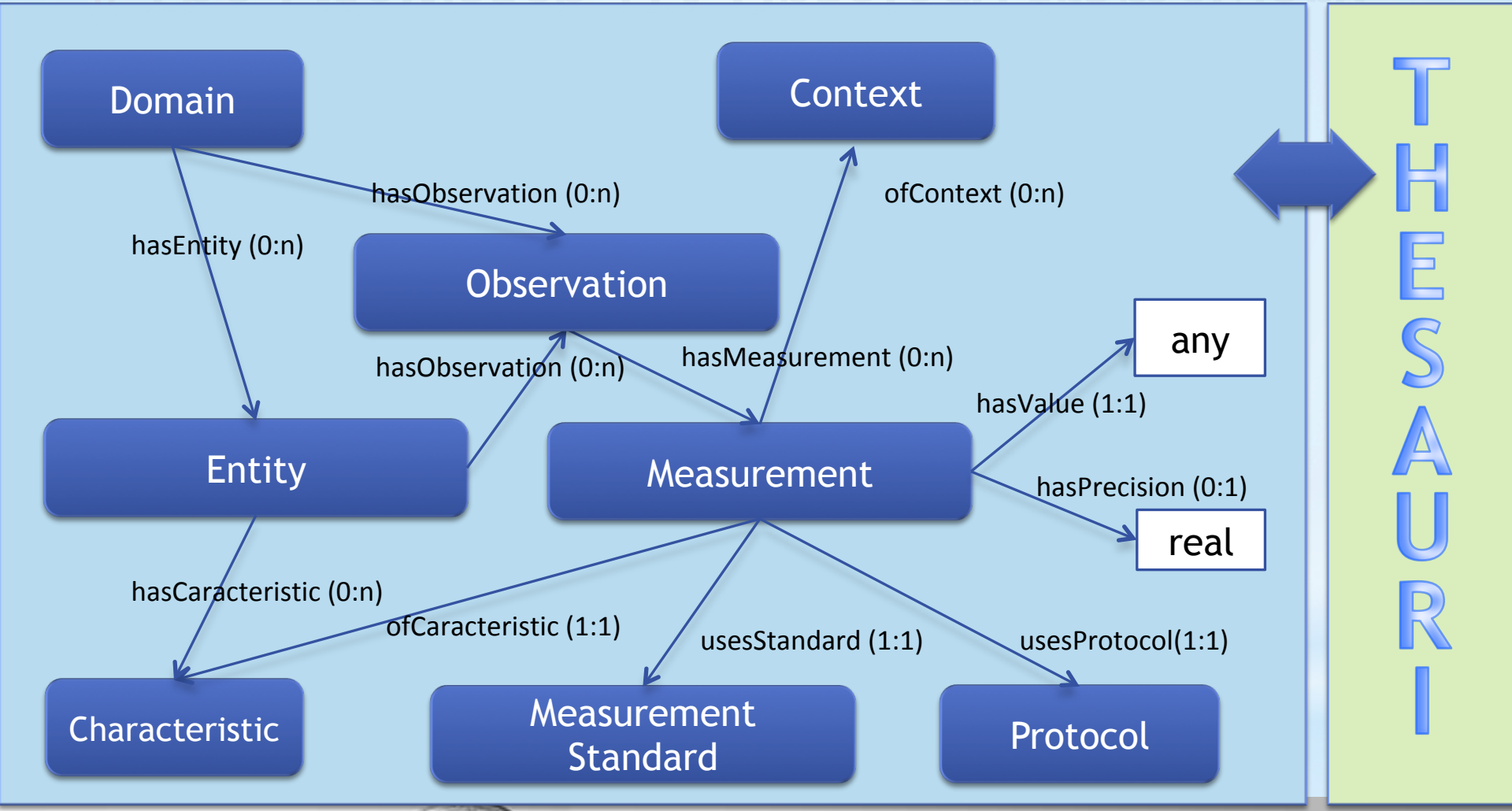
- Semantic approaches provide a promising way to capture rich representations of data in ways that afford maximum interoperability and detailed description for re-use.

- A Semantic Approach can be used to facilitate the discovery and integration of ecological data

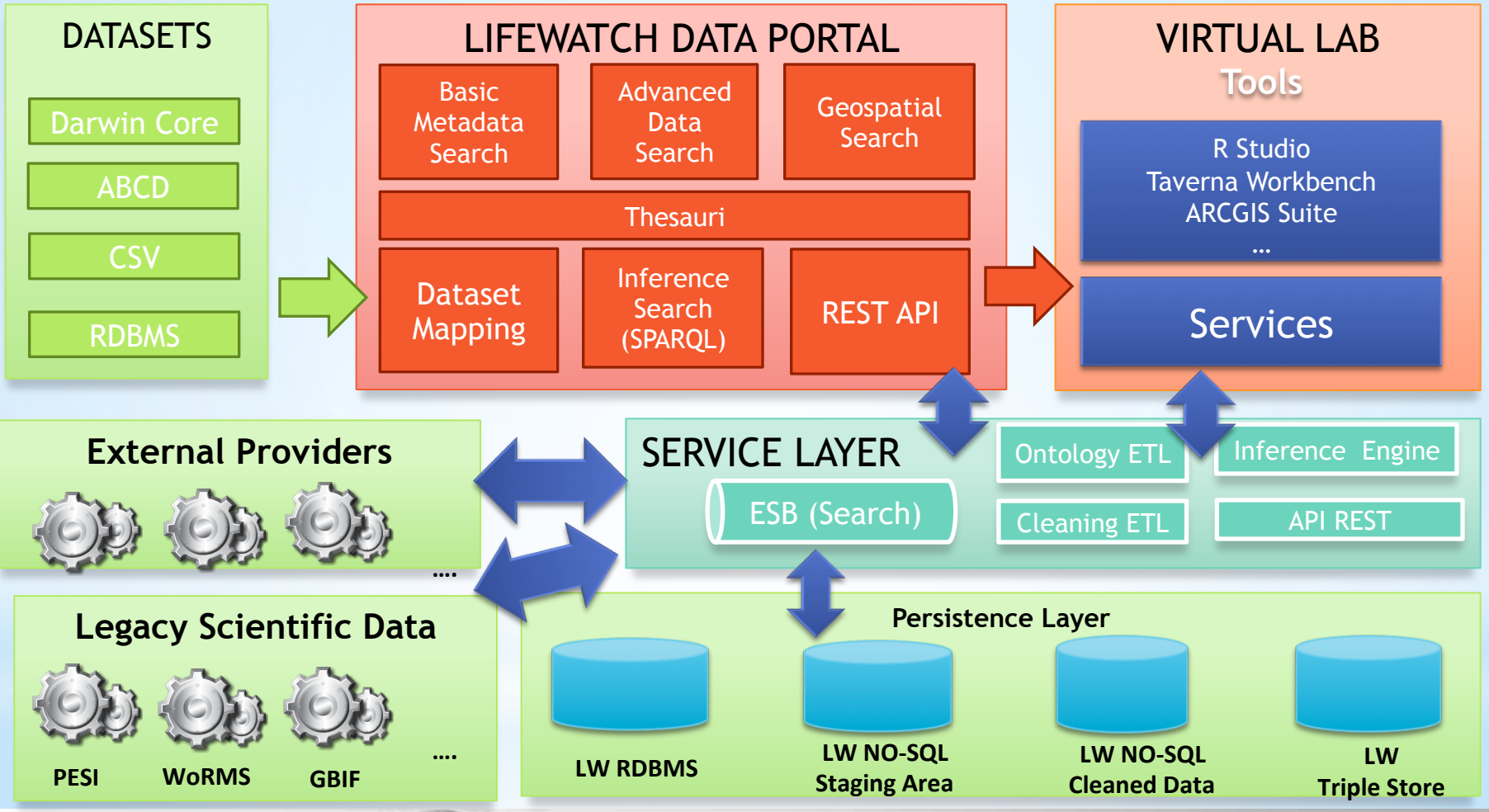
Background

- Different Semantic Approaches has been proposed in the last years:
  - OBOE (MADIN et al., 2006)
  - SERONTO (WERF et al., 2009)
  - ENVO, The Environment Ontology (Buttigieg et al., 2013)
  - OGC O&M Model (Cox, 2013)
  - …

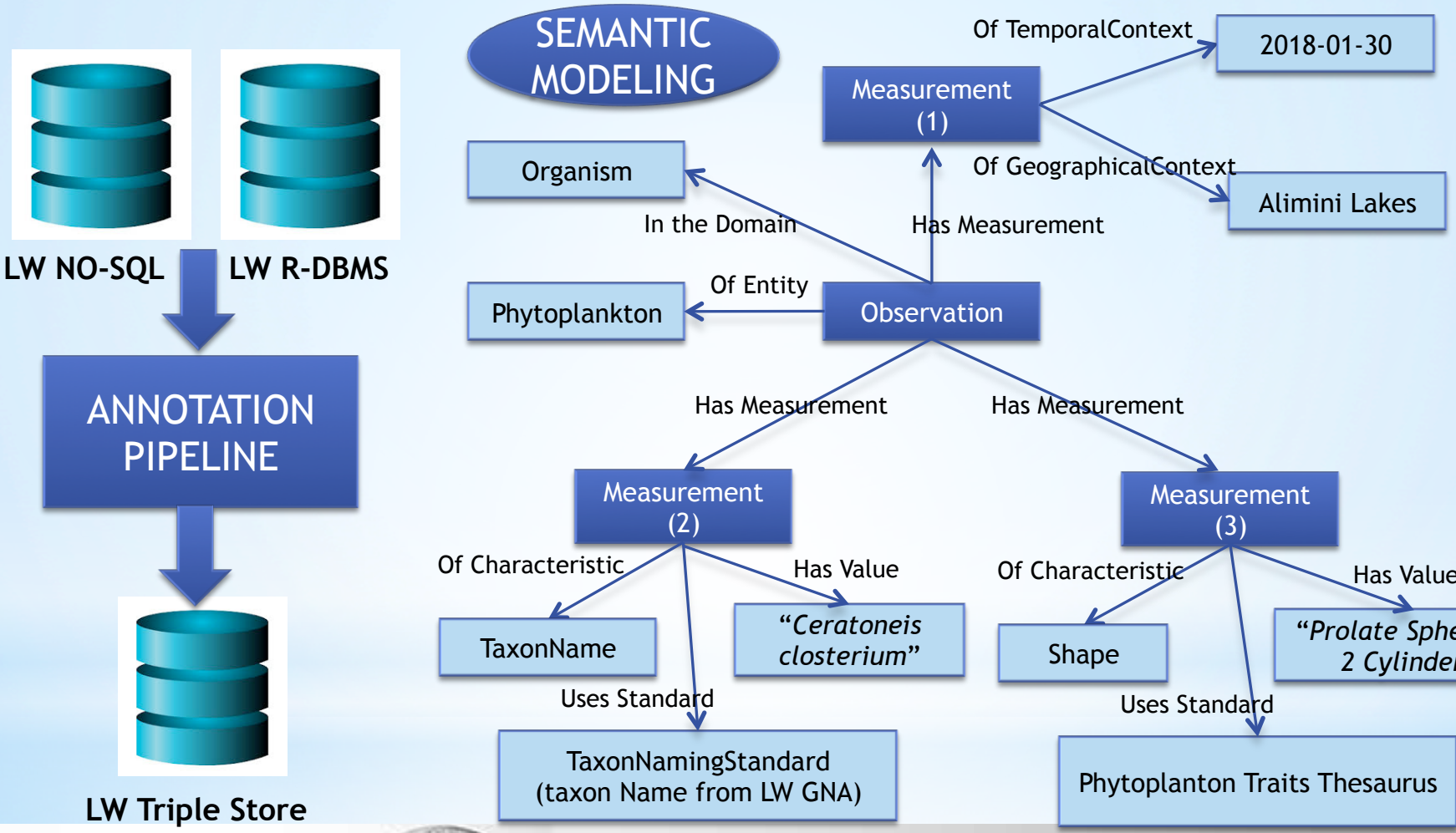
* The LifeWatch-ITA Ontology framework



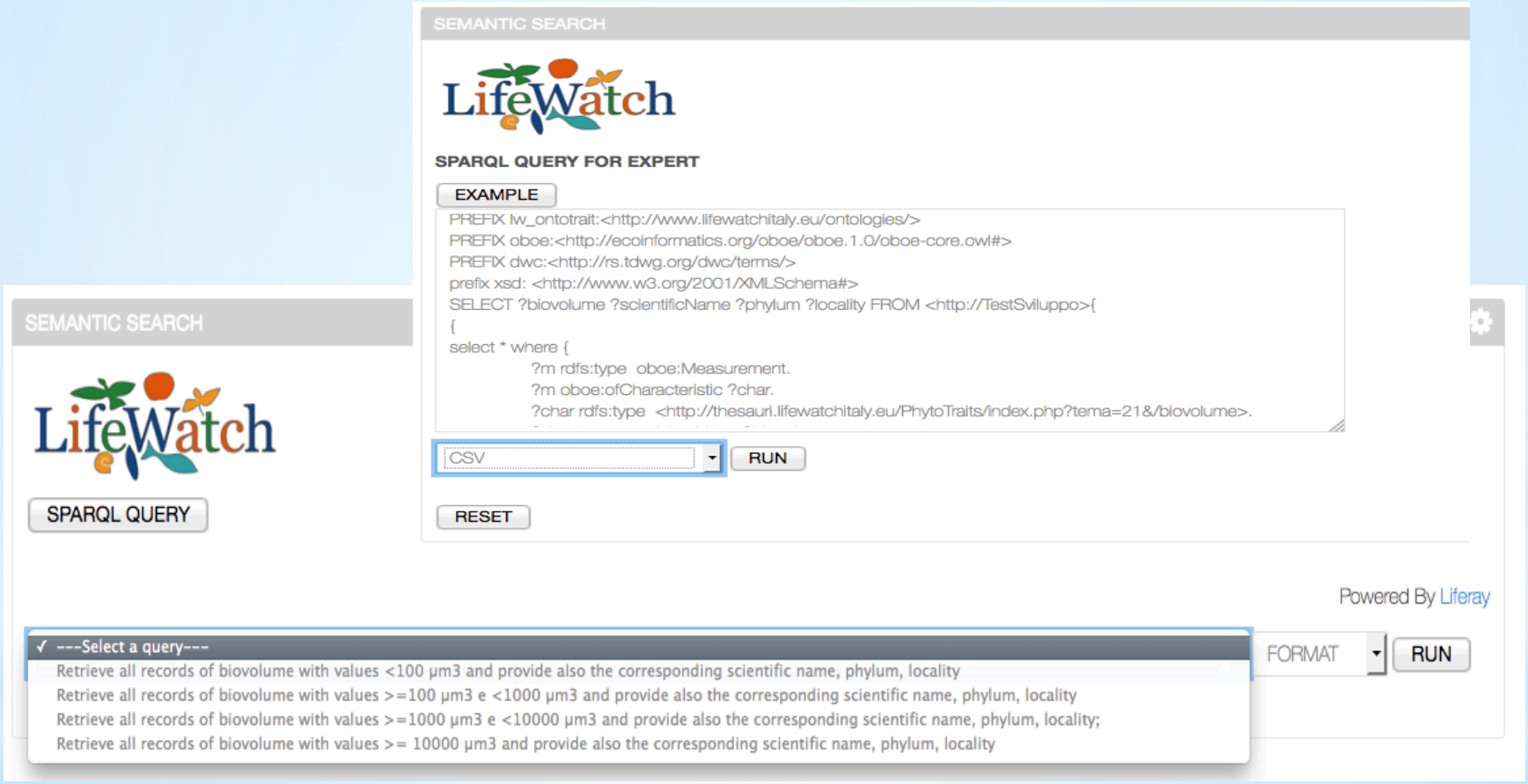
* The LifeWatch-ITA Ontology framework



*The Phytoplankton Domain



*Semantic Searches



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