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Tuning semantic technologies to enhance discovery of ocean best practices

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Observing the vast expanse of the Global Ocean is an immense interdisciplinary challenge, addressed by a diverse community of public and private organisations, agencies, and consortia. Over many decades, ocean observers have amassed an immense and valuable corpus of best practices guiding observing processes from the planning to data archiving phase. Unfortunately, this corpus is far from integrated and evenly accessible, hindering the diffusion of quality methods in the community. To help remedy this, we are enhancing the internationally mandated Ocean Best Practices repository maintained by the IODE of IOC/UNESCO. A central component of this work is the integration of semantic technology into the repository system. Our initial efforts include the text-mining and semantic indexing of best practice documents to power knowledge-guided search and discoverability. Simultaneously, we are enhancing the coverage of ocean-related entities in environment-focused ontologies, shaping them to reflect the knowledge and needs of the ocean science community while enhancing access to best practices. In this contribution, we will describe our approach and plans to extend our prototypical system in the coming year, stressing potential points of interaction with other semantic technologies to further promote discovery and access across ocean disciplines.