

MxD 15-11-03	Category: Recurring Manufacturing, Engineering Change
Title:	Coordinated Holistic Alignment of Manufacturing Processes (CHAMP)
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Summary:

The CHAMP project was motivated by observations to produce a data curation pipeline that would resolve semantic heterogeneity in the enterprise. The foundational component of this pipeline is a set of tiered ontologies that can be used to semantically model the products and processes across the product lifecycle. In addition to developing ontologies, the CHAMP project used, explored, and developed data management tools including the Ontological Semantic Concept Alignment and Refinement (OSCAR), natural language processing (NLP), optical character resolution (OCR), Process Workflow and Ontoview. In combination, these tools provide a prototype capability to ingest structured data into the semantically consistent ontological model and build reports based upon the aligned data.

The components of CHAMP are:

- Ontologies
- OSCAR
- NLP and OCR
- Process Workflow
- Ontoview