



Military Ontology Development

Dynamics Research Corporation



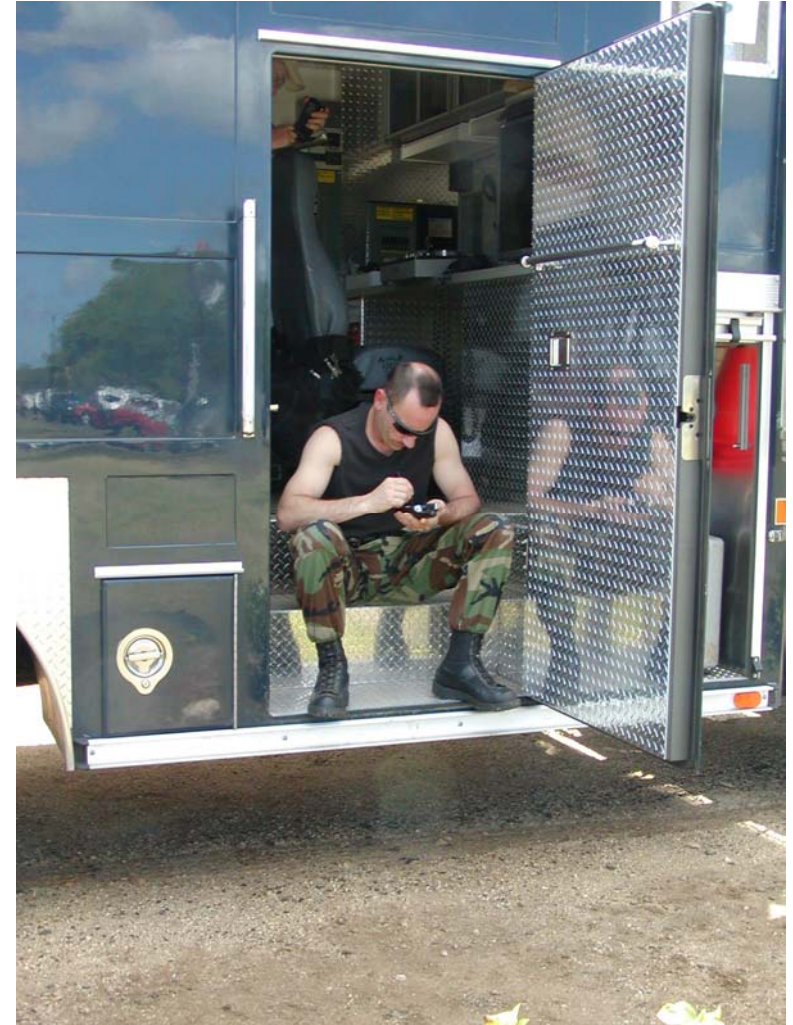
Lee W. Lacy
December 1, 2004



Overall Program Summary



- DRC focused on developing ontologies and applications for military users
- Developed a systematic process for developing ontologies
- Identified military user requirements and worked with them to develop ontologies to support their applications





Technical Progress



- Developed ontologies in several categories:
 - Military task list
 - Military equipment
 - Explosive Ordnance Disposal job aid
 - Intelligence Reporting / Homeland Security
 - Horizontal (common use)
- Developed demonstration prototypes:
 - Military equipment data search with semantic join
 - Dynamic Job Aid System
 - OWL ontology encoding tool (from MS Access)
 - Restaurant Finder (HotDAML)



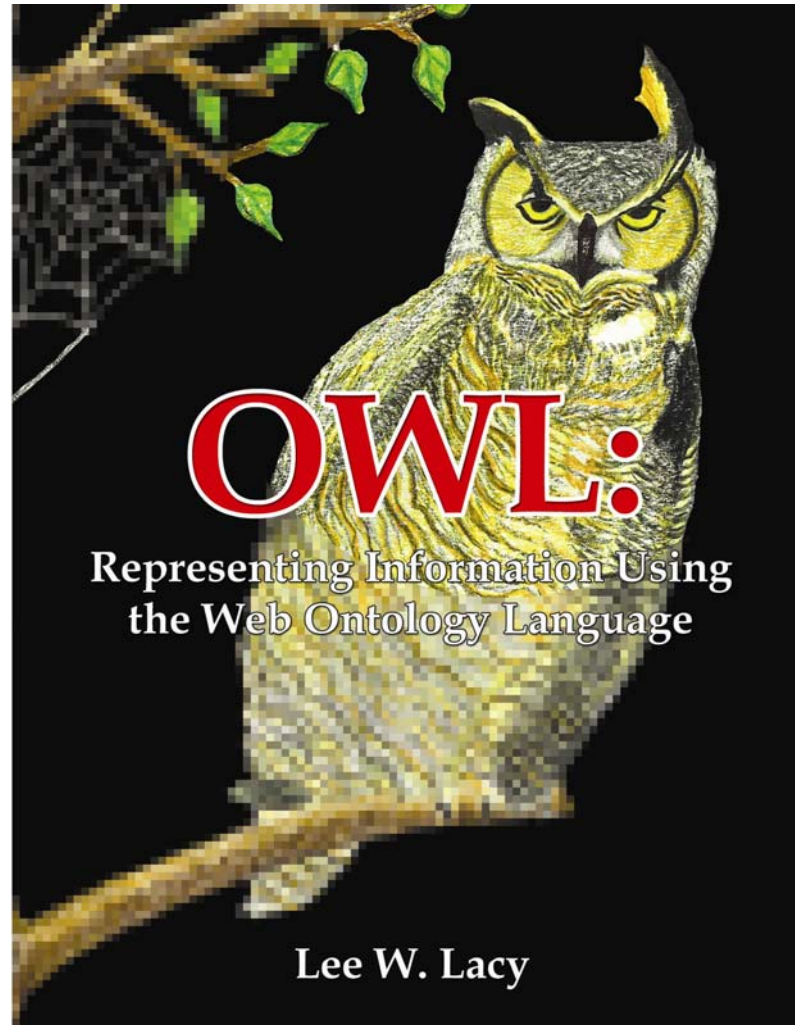
Transition/Handoff



- Ontologies and other results available at: <http://orlando.drc.com/semanticweb>
- Contributed to technical editing of OWL documents
- Ontologies and software being delivered as part of final report and Software Product Specification (SPS) deliverables to AFRL
- Related conference papers presented to simulation conferences including I/ITSEC, SIW, WinterSim
- Contributed to several DoD prototype efforts including NPS and JEOD ACTD
- DARPA work spawned new contracts with JEOD ACTD, DMSO (HBR), AFRL/BBN (FCG)
- Newest contract involves using a procedure ontology to support a condition-based job aid for EOD community



OWL Syntax Book



OWL: Representing Information Using the Web Ontology Language



Military Ontology Development Remaining Issues



Issue	Remediation
Final deliverables	Will be provided later this month (December)



Summary



- Military-related applications developed to support specific needs
- Some ontologies demonstrated through applications
- OWL syntax book available in December



DRC contributors: Lee W. Lacy, Gabriel Aviles, Alan Meeks, Dany King, Marti Hall, Mike Puhlmann