

## "From Cottage Industry to the Industrial Age: New Infrastructure for Ontology Authoring and Dissemination"

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Just as the advent of desktop publishing made it possible for anyone with a computer to mass-produce beautiful typeset documents, the widespread availability of tools such as Protégé now makes it possible for large groups of individuals to mass-produce ontologies and electronic knowledge bases in a relatively informal manner. The ontologies and knowledge bases that these developers create, however, are not always particularly beautiful. Often, the pressure to represent badly needed content subverts the desire to adhere to good modeling practices and clear design principles. For ontology development to scale up to the demands of the industrial age, our community will require new research to support the creation and distribution of ontologies with the same kinds of techniques that guarantee the quality of our print media: Immediate access to new ontologies by interested users, immediate feedback to the developers, peer review by recognized experts, intelligent indexing and targeted retrieval of ontologies, and the creation of a culture that encourages widespread "ontology criticism," in the same vein as literary criticism. We also will need a new generation of tools for development, dissemination, and management of ontologies. The Protégé community certainly will play a major role in achieving this vision.