

*Collaborative Editing Systems and their Application to Distributed Software Engineering*

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Jon A. Preston  
Interim Department Head  
Assistant Professor  
Department of Information Technology  
College of Information and Mathematical Sciences  
Clayton College and State University

Abstract

Computer-supported collaborative (or cooperative) work (CSCW) systems bring people together and utilize computing to facilitate a work goal. Much work has been done in the field of CSCW, including examining synchronous and asynchronous interactions, virtual presence and other HCI-related issues, update notification algorithms, and transparent and aware models of collaboration.

One widespread application of CSCW is software system development; many models exist to facilitate the development of large systems, and much work has been done in the field of software engineering as related to configuration management. To date, work in configuration management has relied upon a file-level granularity in locking; configuration management systems provide mutual exclusion (checking in and checking out) only at a file-level. Additionally, research in distributed version control systems (DVCS) does not address fine-level locking granularity.

This presentation will discuss the current field of computer-supported collaborative work and distributed software engineering; the presentation will map to well-defined problems in systems research such as mutual exclusion and cache coherency. Open areas of interest and future research will also be presented.