Group Support Systems (GSS) emerged as a rich, flexible toolbox for facilitators to help move a group toward a goal. Research shows that groups using GSS can be far more productive than teams using other means to accomplish their tasks. However, experience in the field suggests that organizations do not tend to become self-sustaining with GSS until they incorporate the technology into their daily work practices, in support of mission critical tasks that are conducted over and over again by the practitioners themselves, rather than under the guidance of an outside facilitator. This suggests a new, perhaps higher role for GSS facilitators: to create and leave behind well-crafted, well-tested repeatable processes for others to execute on their own.

This first minitrack on GSS Patterns brings together a diverse set of papers that focus on technology support for repeatable collaborative processes. Four of the papers describe repeatable collaborative processes and the technologies that support them. The fifth paper proposes a middleware architecture to support repeated collaborative tasks.


The paper, *Collaborative Project Management Software*, by Romano, Chen, and Nunamaker, presents tools and processes that can be used to manage the support large-scale, complex projects.

Lowry, Albrecht, Lee, and Nunamaker describe their experiences in supporting large teams on collaborative writing tasks using an internet-based GSS in their paper entitled, *Users experiences in collaborative writing using Collaboratus*. They present the steps in process, and the lessons learned from several field experiences.

In their paper, *EasyWinWin: Managing Complexity in Requirements Negotiation with GSS*, Briggs and Gruenbacher examine the nature of task complexity, and then describe a 9-step requirements negotiation process based on GSS. They discuss how each step of the process can either reduce or manage the complexity of requirements negotiations.

Finally, Gregory and Briggs, in their paper, *An Approach to Middleware for Repeatable Collaborative Processes*, argue the need for a middleware architecture that integrates five classes of middleware on a universal data model in order to fully support the integration of repeatable collaborative processes into the daily work processes of an organization.

Each of these papers discusses different technologies and different processes. Each offers a unique contribution to our understanding of how software tools can be developed and deployed in support of mission critical repeatable tasks. We commend them to your reading.