

# THE GRID SHARED DESKTOP: A BOOTSTRAPPING ENVIRONMENT FOR COLLABORATION

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## Abstract

The paradigm shift from an information sharing infrastructure (i.e., the Web) to a resource sharing infrastructure (i.e., the Grid) has open new perspectives for CSCL (Computer Supported Collaborative Learning). With Grid, it is now possible to envisage a scalable infrastructure that offers live collaborative environments in a secure manner. The Grid Shared Desktop (GSD) is such a collaborative environment that inherits from the desktop as a natural human-machine interface to become a multidimensional humans to humans interface via several dedicated desktops.

The success of such environments depends upon several consideration that we will develop here. We have not so far identified any equivalent solution that can fully suit CSCL requirements. In fact, all solutions are either ad-hoc system-oriented or they are not scalable since they cannot manage resource efficiently. In order to satisfy the CSCL needs, we propose a platform independent solution that benefits of the intrinsic advantages of the Grid technology. This goal is greatly enhanced thanks to the capability of Grid, to support stateful, dynamic services.

In this paper, we tackle also the problem of bootstrapping and supporting a collaborative environment. As we target communities of non computer-literate people, we investigate easy-to-use and flexible solutions. Finally, we present our latest experimental case study with the GSD in the context of collaborative construction of a shared ontology.

## Key Words

CSCL, Computer Supported Collaborative Learning, Grid, GSD, Grid Shared Desktop, collaborative ontology building

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