

GeoCollaborative Crisis Management

www.geovista.psu.edu/grants/GCCM/

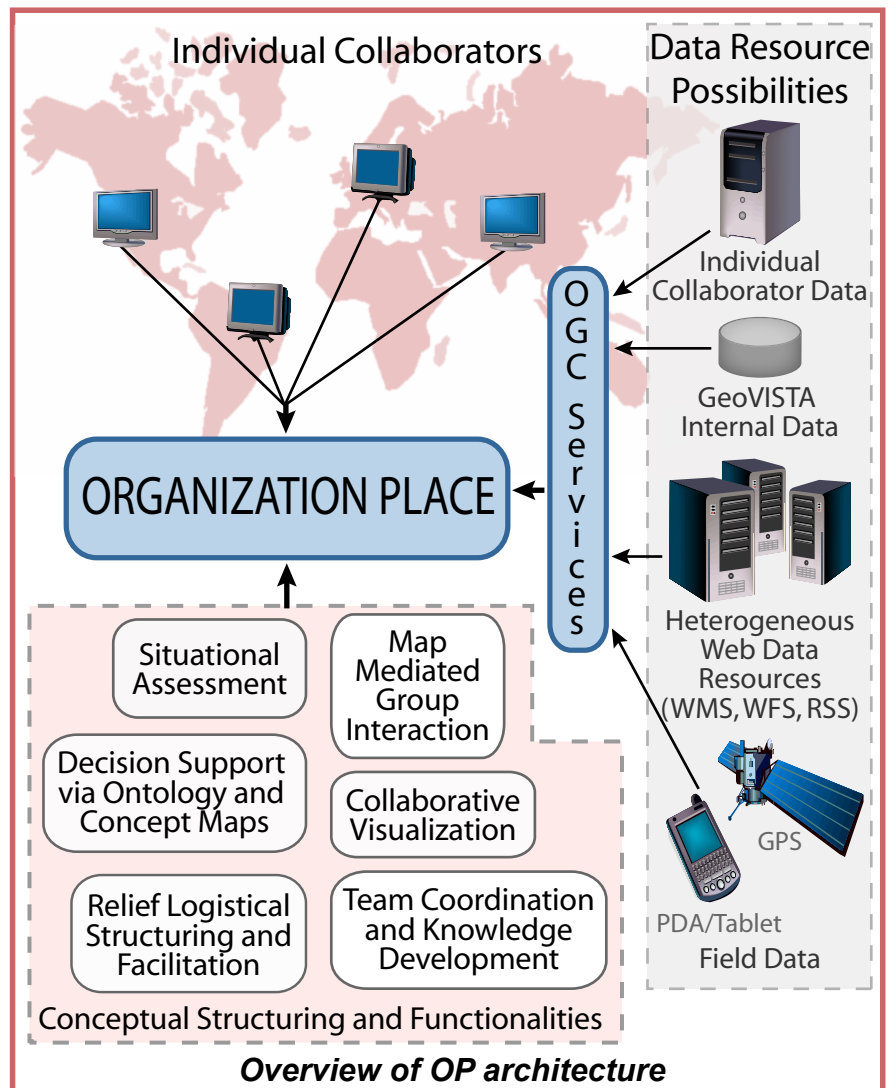
The Organization Place

The Organization Place (OP) geocollaborative web portal application is designed to provide a common and intuitive interface through which asynchronous, geocollaborative activities can be conducted in support of humanitarian relief operations. The OP extends the core goals of the GeoCollaborative Crisis Management (GCCM) project. It does so by providing specific functionality and tools within a web-based environment that supports situation assessment, positioning and monitoring of field-teams and distribution sites, and supply routing. Special emphasis is placed on supporting international group interaction through collaborative annotation and visualization procedures, support for awareness of group interactions, multi-lingual map feature labeling, and organization-specific symbol sets to overcome communication barriers. In addition to facilitating asynchronous group interaction, the OP enhances group knowledge development through the ability to integrate external WMS and WFS geospatial resources into the portal, access and add to concept maps that represent operational rules and command structures in intuitive ways, store and retrieve file-based data resources such as site-imagery and documents, and monitor real-time RSS and GeoRSS feeds of situation-relevant information such as news and weather reports.



The map within the OP uses the open-source MapBuilder API and JetSpeed Portal engine. These open frameworks have allowed our research team to develop scalable functionality and interface elements that can easily accommodate dynamic collaborative processes such as quickly adding or removing collaborators, tools, and functionality as the situation dictates.

An underlying goal of our overall research program is to understand how distributed cognition operates across groups working with geospatial artifacts (maps, images, site reports) to develop both awareness of the geographic situation within which events unfold, and insights about the processes that have lead to that geographic situation over time. We build on past research to propose a distributed spatiotemporal cognition perspective to support group work on geospatial tasks within humanitarian disaster relief.



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Overview of OP architecture