Exploitation of heterogeneous information sources for the generation of Common Operational Pictures

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Abstract:

The paper focuses on the exploitation and information fusion of heterogeneous data sources, which can be geo-referenced (e.g. satellite imagery, weather data, maps) or without inherent geo-reference (e.g. text messages from WWW or audio recordings), for the generation of Common Operational Pictures (COP) that are needed in various military and civilian C4I, simulation and mission planning systems.

An interoperable, service-oriented and Web-based architecture for information acquisition, completion, indexing, categorisation, updating, validation, visualisation and dissemination is presented. Our approach has been implemented in a demonstrator for geospatial intelligence (GEOINT) as well as open source intelligence (OSINT) applications and tested using classified and open information sources.