

Web based alert system based on CAP

Close to a year ago SMHI started to consolidate our different alert systems (warnings for e.g. strong winds, flooding, and forest fire). Each and every alert system to create alerts and send information to customers was different. We decided to use three different emerging technologies; OGC Web mapping, Web 2.0, and Common Alerting Protocol (CAP)[1]. It was found that the CAP-standard fits well we the needs for meteorological alerts. Our selected software stack became totally open source based containing; PostgreSQL with the spatial PostGIS[2] add on for data storage, Geoserver[3] as OGC Web mapping server, JBoss as middleware, and Openlayers[4] for viewing and editing alerts in web clients.

The result is a web client where the forecaster can use a selection of the relevant forecast imagery and graphically compile them to an alert, together with the necessary attributes. The alert is saved, via a web service using CAP, in a database. Customers can subscribe on different types of alerts covering their own defined geographical area. When a new alert matches a customer's subscription he/she will get an e-mail, SMS or any other format. The alert will also be displayed on a web page. The proof of concept system was for thunderstorm alerts. SMHI is now working on developing clients for wind and snow alerts.

We will in this talk present the background of the project and technology choices. Give a brief overview of what the alert system can do and its architecture. Summarize our experiences using the CAP standard

About the speaker

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References

- [1] <http://www.incident.com/cap/index.html>
- [2] <http://postgis.refrations.net/>
- [3] <http://geoserver.org/>
- [4] <http://openlayers.org/>