



WINTDO - What I Need To DO ?

An innovative plugin to alert and inform people via mobile applications using CAP messages

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21.09.2017

MeteoFactory® / CAP implementation at SAWS

WMO recommendations adapted by the SAWS

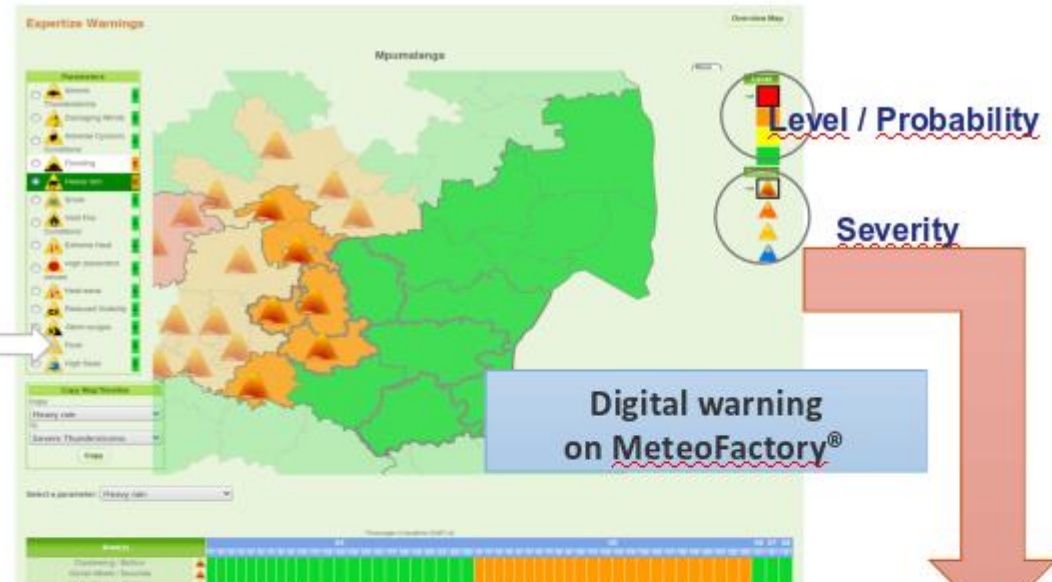
Severity

	Severe Weather Alert Levels			
	GREEN	YELLOW	AMBER	RED
Alert Category	No alert	Advisory	Watch	Warning
Awareness level for disaster management and public	None expected	Be aware	Be prepared	Take action
Risk	No adverse weather is expected	A risk that adverse weather conditions may occur	Moderate risk that adverse weather conditions will occur	Very high risk, about to happen, or already happening
Impact		A risk of some damage to infrastructure and local disruption, dangerous to people and small communities	Moderate risk of some damage to infrastructure and local disruption, dangerous to people and small communities	High risk of some damage to infrastructure and local disruption, dangerous to people and small communities
Advice		Be alert and follow the latest weather forecasts.	Be vigilant and follow the latest weather forecasts.	Be extra vigilant of dangerous conditions and follow the advice given by authorities.
Typical forecaster confidence of event occurring	Very low <20%	Low >20% Moderate to high >40%	Low >20% Moderate to high >40%	Very high >80%

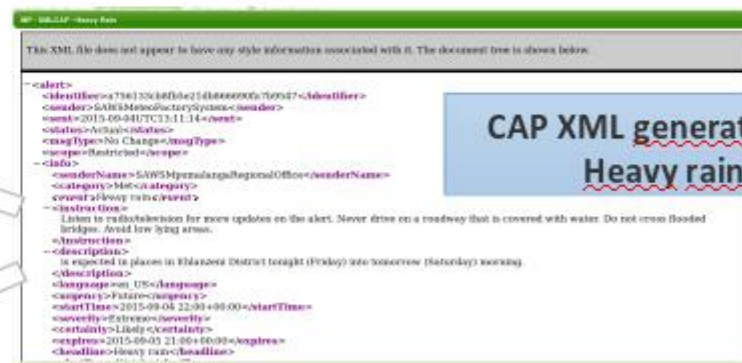
Probability



Multi-channel dissemination



Timeline



MeteoFactory® CAP production

- MeteoFactory® CAP – Use cases
 - South African - SAWS – Operational dataflow
 - ➔ National department of agriculture
 - ➔ SABC - South African Broadcasting Corporation
 - ➔ NDMC - National Disaster Management Centre
 - Indonesia - BMKG – Pre-operational dataflow
 - Luxembourg – MeteoLux – Incoming end of 2017 (Meteo Alarm)
- MeteoFactory® CAP – Software developments
 - New prototype interface for CAP alerting (User defined areas)
 - Fixed non compliance issues on V1.0 & V1.1
 - New compliance with CAP V1.2

MeteoFactory® CAP message sample in SAWS

google.org Common Alerting Protocol Validator

The [Common Alerting Protocol](#) validator is a free service that checks the syntax of CAP XML messages and Atom, RSS and EDXL-DE feeds of CAP messages. It supports CAP v1.0, v1.1 and v1.2.

Input feed

```
<alert xmlns="urn:oasis:names:tc:emergency:cap:1.2">
<identifier>b2338facc0e62bc74cb352321fdadaba</identifier>
<sender>vergehp@mfi.fr</sender>
<sent>2017-07-25T15:39:00-00:00</sent>
<status>Test</status>
<msgType>Ack</msgType>
<scope>Restricted</scope>
<info>
<language>en-US</language>
<category>Fire</category>
<event>Veld Fire Conditions</event>
<urgency>Future</urgency>
<severity>Severe</severity>
<certainty>Likely</certainty>
<effective>2017-07-25T15:39:00-00:00</effective>
<onset>2017-07-26T16:00:00-00:00</onset>
<expires>2017-07-26T23:00:00-00:00</expires>
<senderName>SAWS Eastern Cape Regional Office</senderName>
<headline>Veld Fire Conditions</headline>
<description>expected over the western and central interior of the Eastern Cape.
</description>
<instruction>No open fires allowed under these conditions.</instruction>
<web>http://www.weathersa.co.za</web>
<area>
<areaDesc>Inkwanca / Molteno</areaDesc>
<polygon>-31.60859300999974,26.30129999900037
-31.613609998999948,26.260699997000024 -31.587580001999982,26.229389998000045
-31.583579995999969,26.204920000000045 -31.582580000999994,26.175999997000076
```

Type an alert or [upload a file](#).

(Optional) Validate against common CAP profiles:

- ☐ [US IPAWS Profile v1.0](#)
- ☐ [CAP Canadian Profile v1.0](#)
- ☐ [CAP Australian Profile v3.0 Committee Specification 02](#)
- ☐ [Google Public Alerts CAP v1.0](#)

Validate

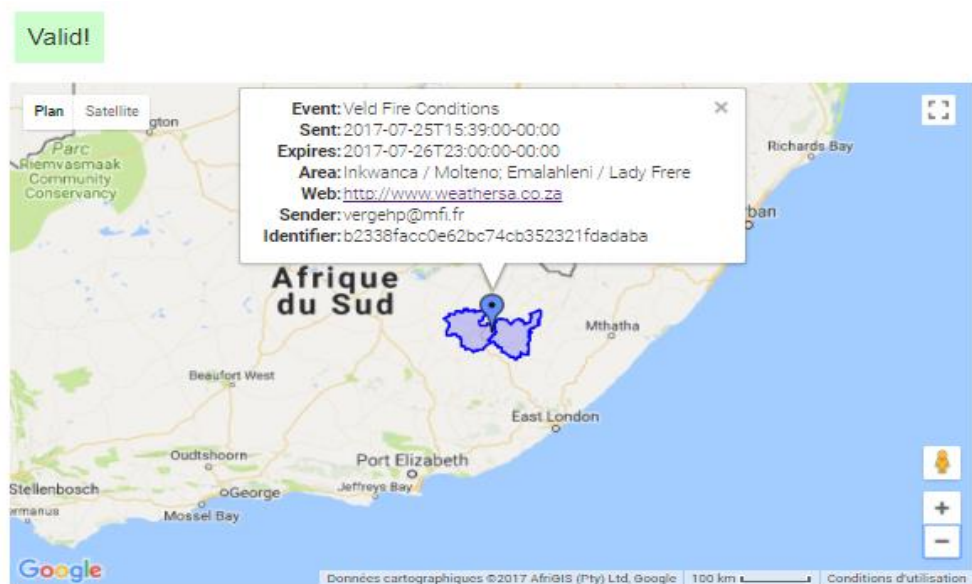
Result

Valid!

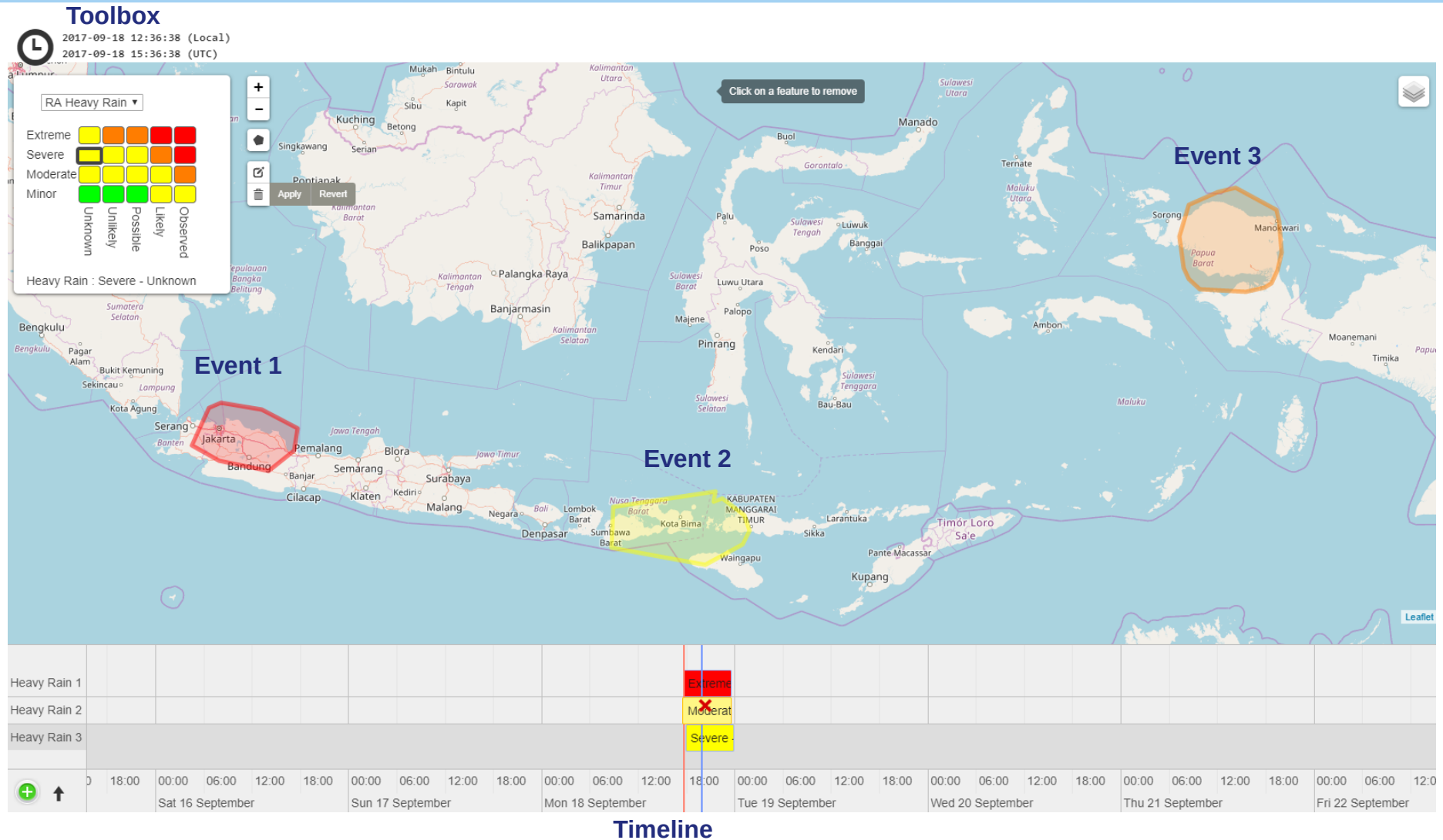
Try

[CAI](#)
[CAI](#)
[CAI](#)
[CAI](#)
[CAI](#)

[Sut](#)



MeteoFactory® CAP interface prototype



Wintdo : award at #HackRisques Hackathon



One topic :
natural hazards
management

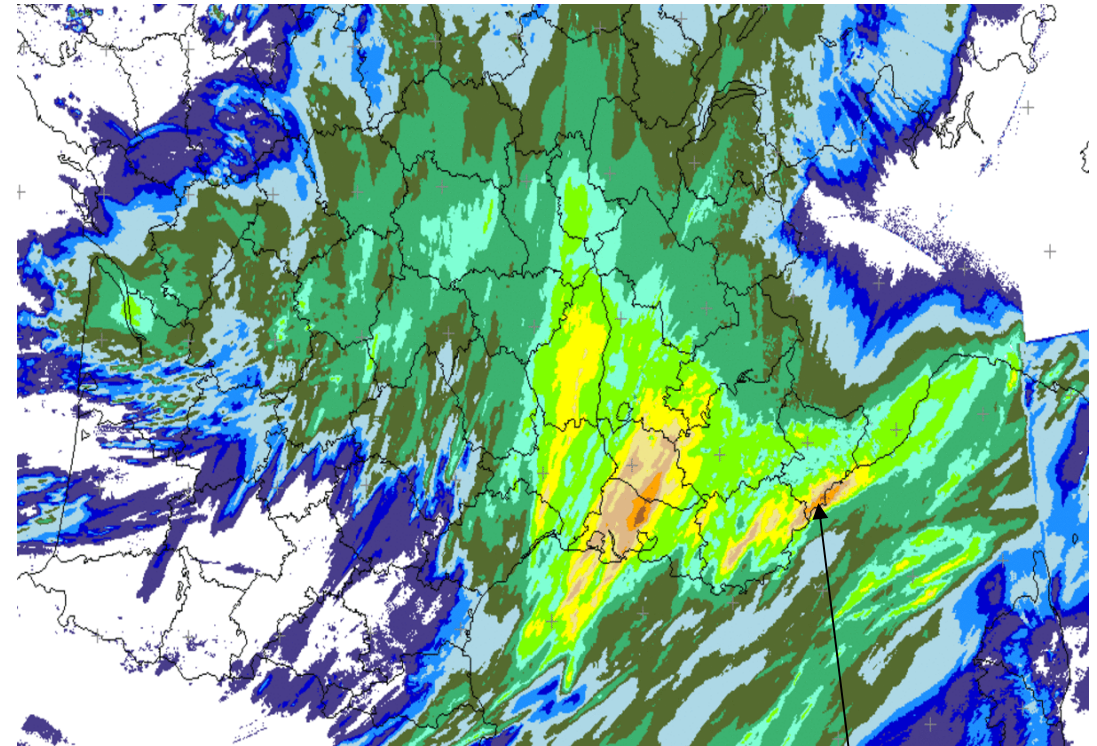
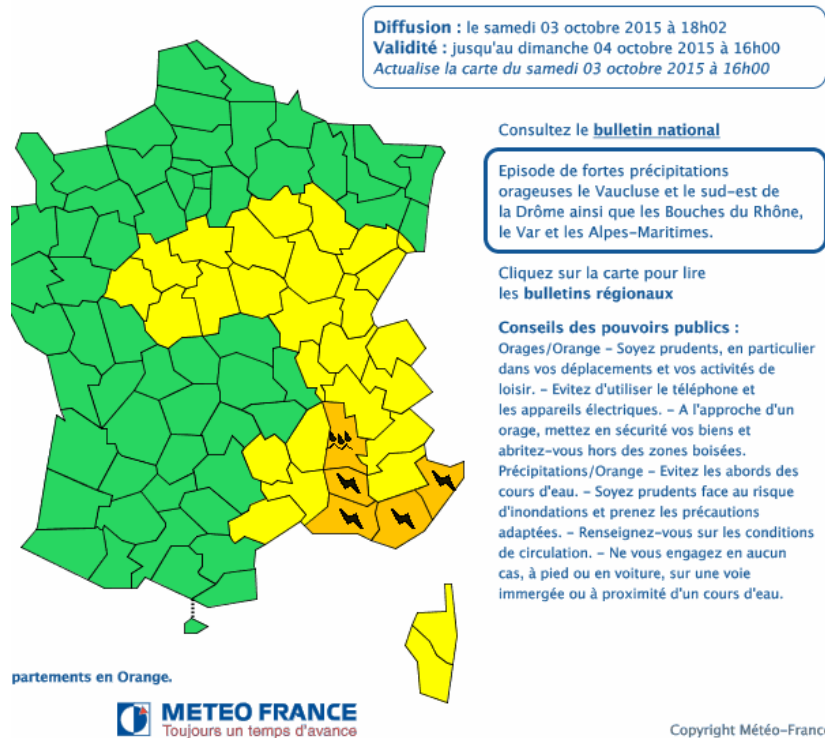
90 participants
10 teams

48 hours to
develop

A three-minute
presentation

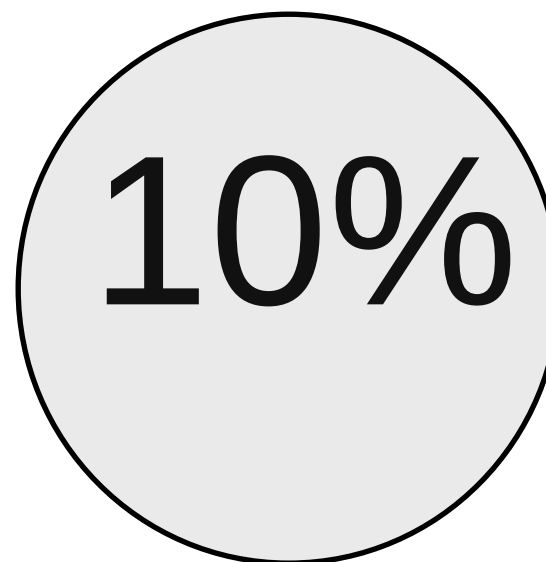
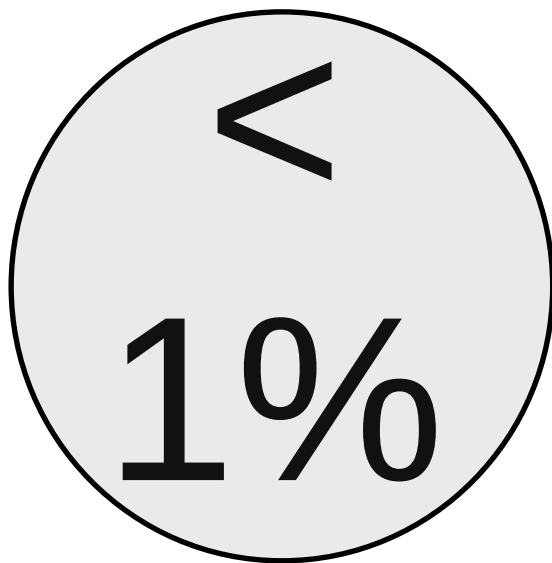


Feedbacks on recent weather hazards



Cannes, 3rd October
2015

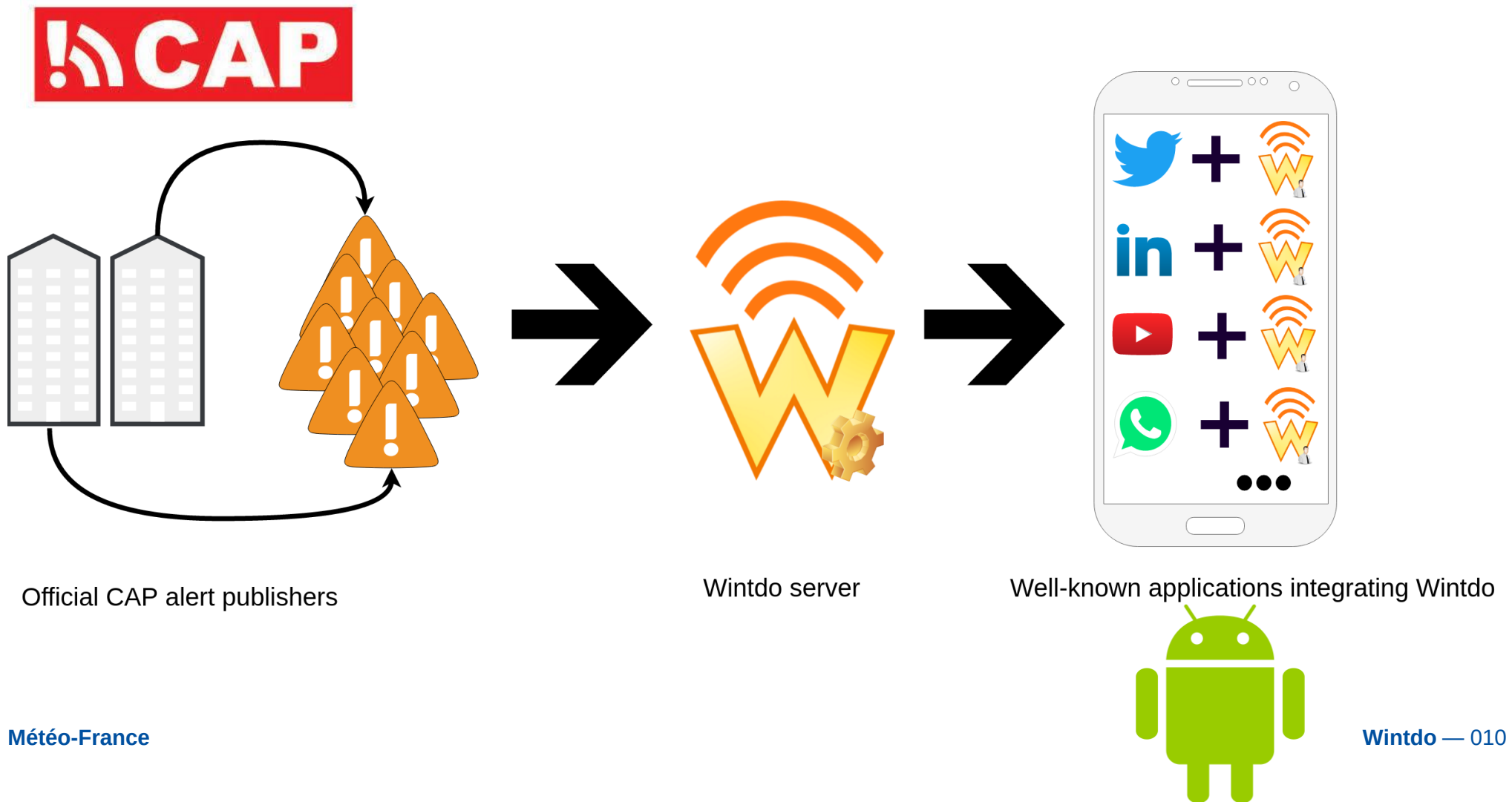
Alert-dedicated mobile application is barely used



Numerous well-known and widespread mobile applications



Wintdo : a CAP-based system to integrate into mobile applications



Alert providers : any official CAP authorities

- Data updated every 10 minutes
- Based on two CAP feeds.

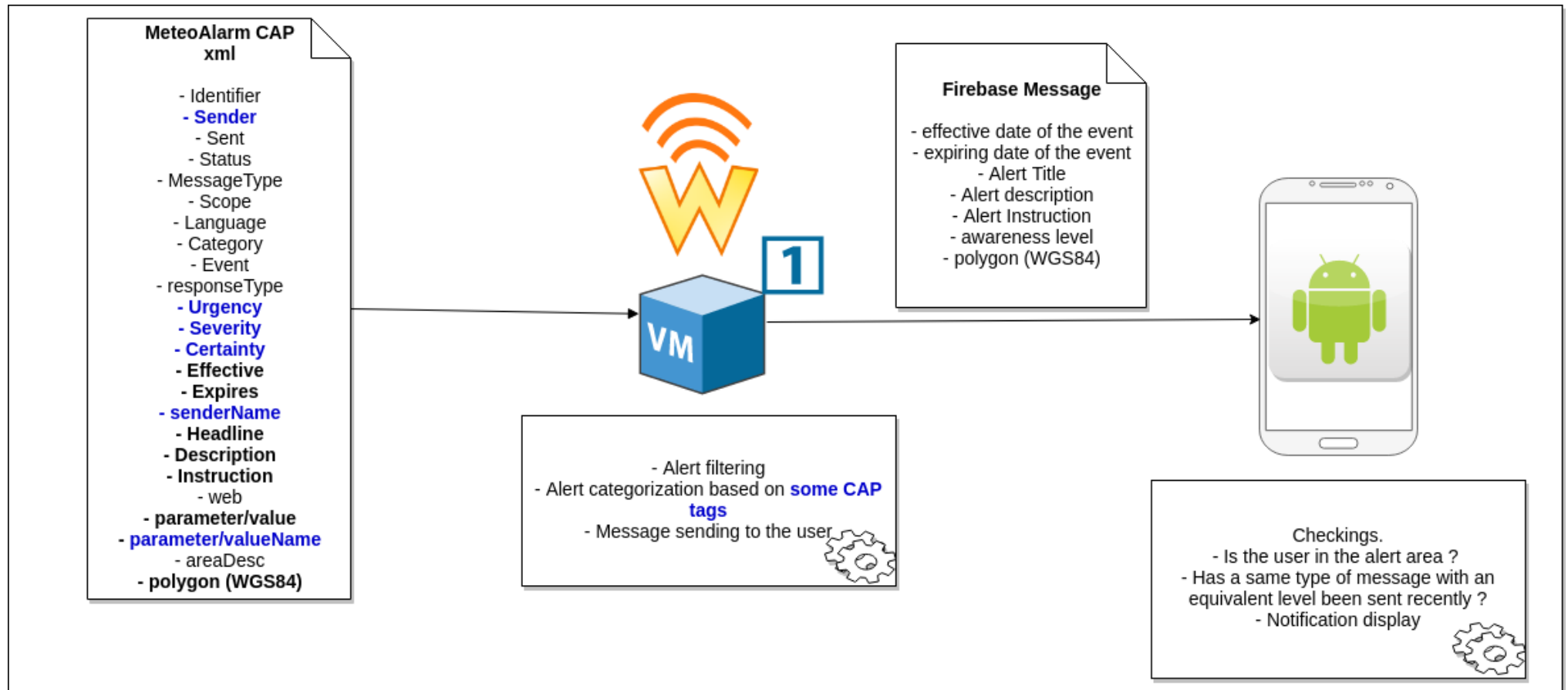


<http://meteoalarm.eu/ATOM/FR.xml>



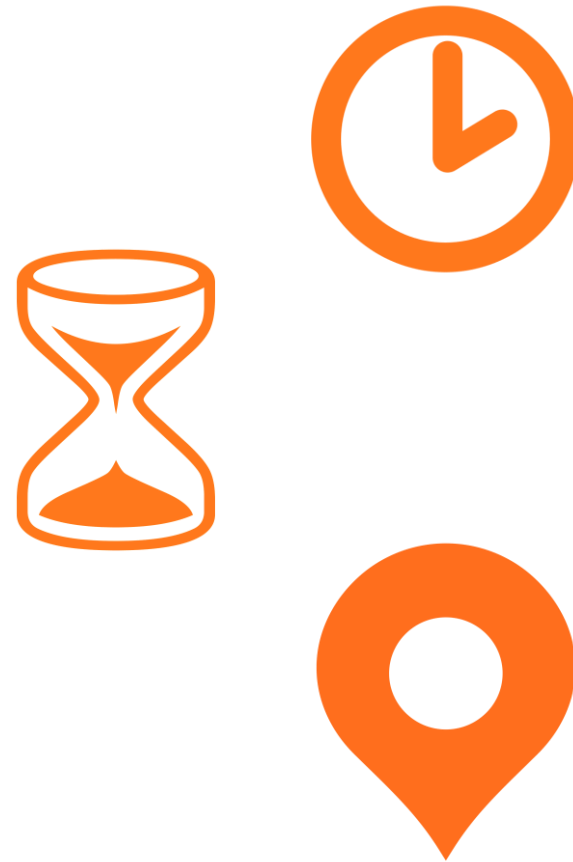
http://www.gdacs.org/xml/gdacs_cap.xml

CAP processing in Wintdo server

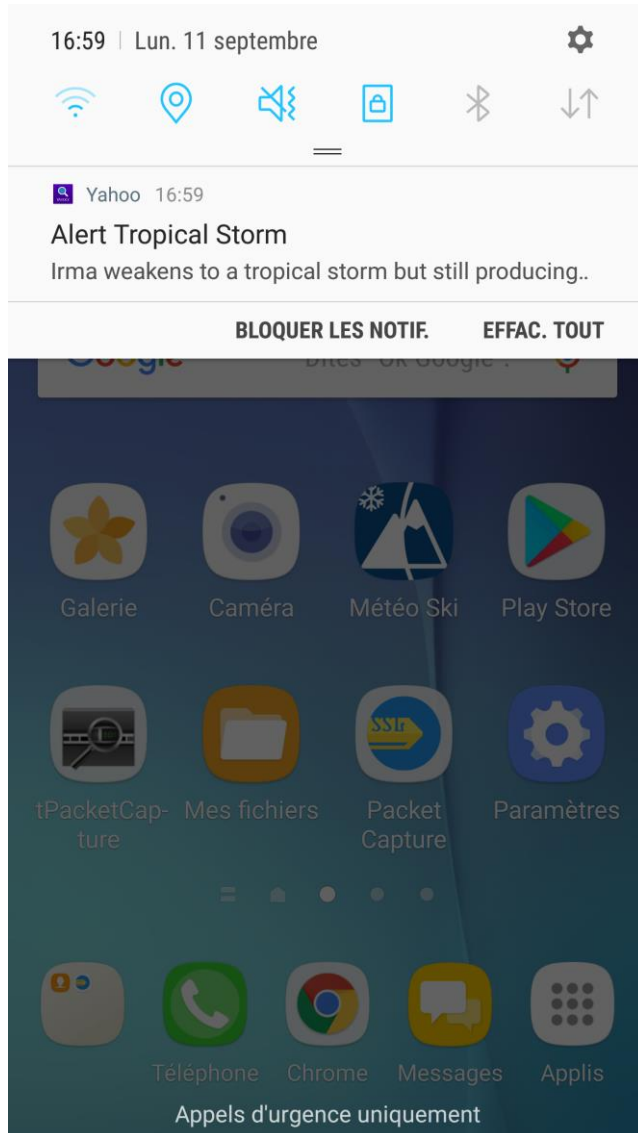


Conditions for a CAP message to be displayed

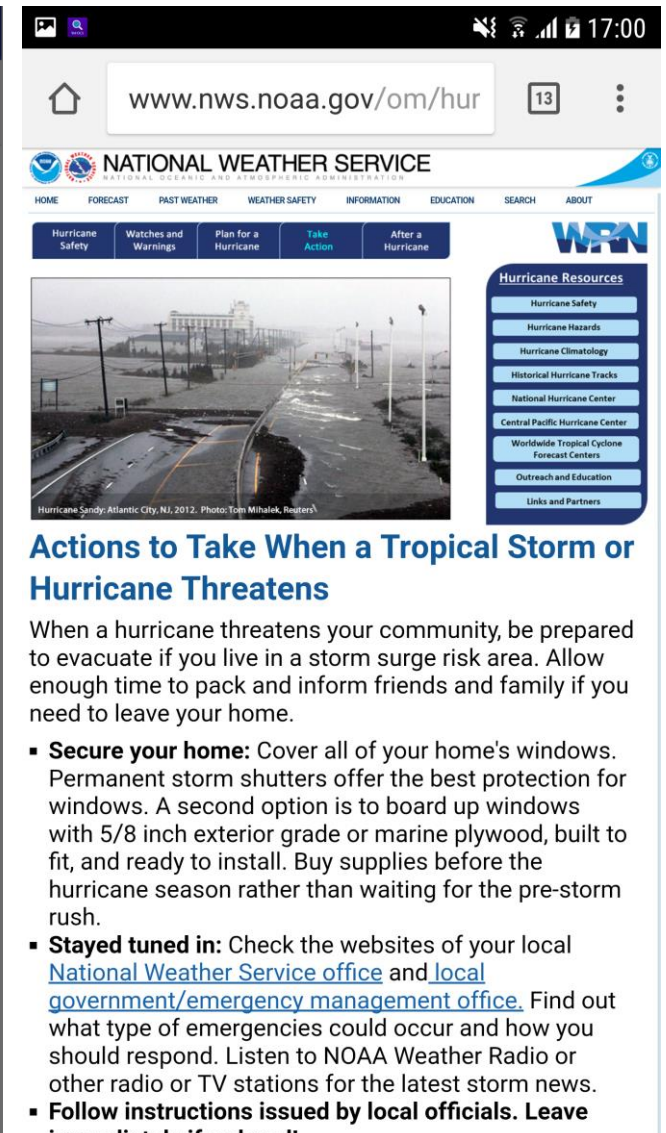
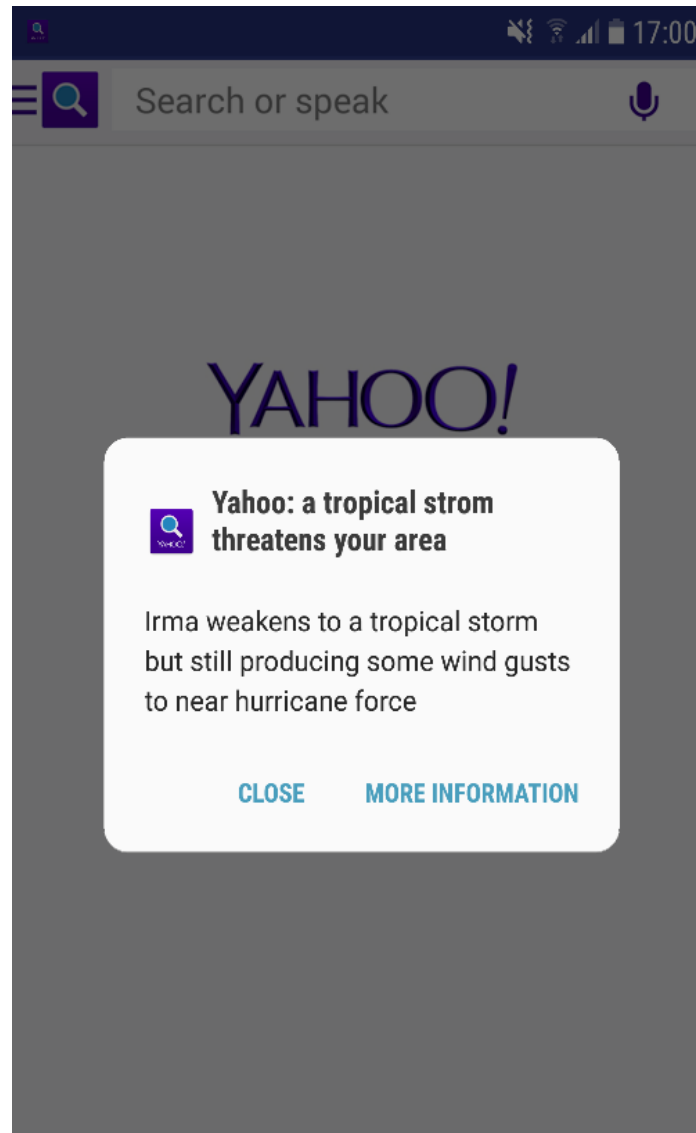
- **Effective and expiring date**
- **Time between two messages with the same type**
- **User geolocation**



Wintdo : notification sample



Météo-France

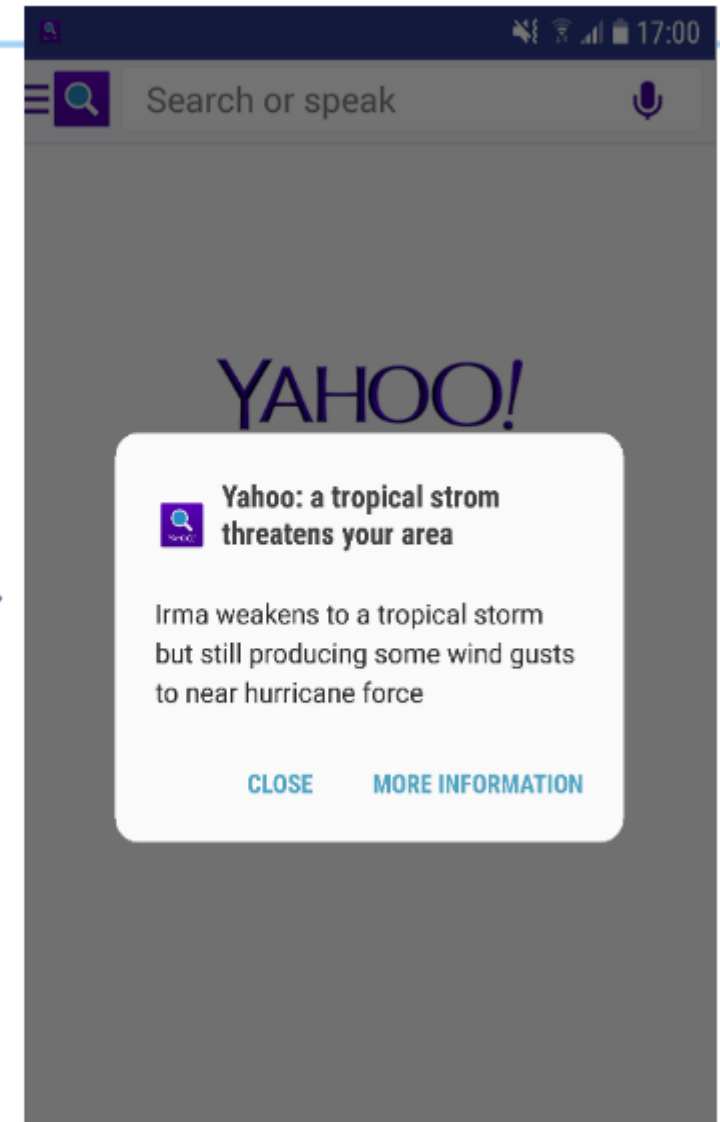


Simple and quick integration into mobile applications

```
import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;

import com.google.android.gms.maps.model.LatLng;
→ import fr.meteo.wintdo.wintdo_sdk.Wintdo;

Wintdo.register("EDITOR_ACCESS_CODE");
```



A customizable service to fulfil your requirements

- **Adaptable time between two messages of the same type**



- **Possibility to define a specific area of interest**



A customizable service to fulfil your requirements

- **Message title**



Yahoo: a tropical storm threatens your area

- **Message logo**

Irma weakens to a tropical storm
but still producing some wind gusts
to near hurricane force

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User-adapted alerts based on topic subscription

- Topic definition

```
var alertsMapping = {  
  sailing: ["wind", "coastal event", "thunderstorm", "fog", "flood", "rain"],  
  ski: ["thunderstorm", "fog", "avalanches", "rain", "snow/ice"],  
  hike: ["thunderstorm", "rain", "snow/ice", "fog", "forestfire", "avalanches"]  
}
```



- Topic subscription

```
 Wintdo.subscribe2Topic("fr-hike");  
}
```

Business plan in progress

Open Source

- Source code 'Wintdo SDK' to integrate into mobile applications
- Source Code 'Wintdo Server'

Open Data

- Public CAP Alerts

+

Paying Services for mobile applications editors

- Wintdo service as a SaaS
Access to hosted Wintdo servers
- Non-public, value-added alerts.
Agriculture, bulding, targeted audience
- Turnkey delivery of Wintdo into mobile applications



<http://wintdo.meteo.fr>

WINTDO

Vos applis vous sauvent la vie
Your apps save your life