



# IFRC CAP Editor



**Alerting the general public to hazards:  
Overview of the IFRC CAP Editor Freeware**



# What is CAP?

The Common Alerting Protocol (CAP) is an OASIS standard, which communicates key facts of an emergency such as:

- What is it?
- Where is it?
- How soon is it?
- How bad is it?
- What should people do?

It is used by **official alerting authorities** to broadcast **all-hazard emergency alerts** and public warnings over **all kinds of networks**.

## Problem

Ineffective public warning: emergency alerts that are not timely enough, not understandable enough, or fail to reach everyone at risk.

## Solution

Utilization of the Common Alerting Protocol

Interoperability



Completeness



Simple implementation



Simple XML



Multi-use format



Targeted

`<area> Geneva </area>`

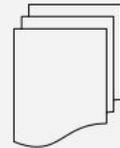


Contextualized and actionable

#WhatNow



Consistent



## Example

Show/Hide XML External Validation End this session

identifier urn:oid:2.49.0.1.36.2.2022.2.3.11.41.34

sender meteo.rwanda@gmail.cc sent 2022-02-03T12:41:34+01:00

status Test msgType Alert scope Public

language en category Met responseType

event flood

urgency Expected severity Minor certainty Possible

onset expires 2022-02-05T12:41:34+01:00

senderName Meteo Rwanda

[Text templates for 'headline', 'description', 'instruction' IFRC messaging](#)

### headline

Flood warning for Musanze Northern Province, Rwanda

### description

Heavy rains in Musanze Northern Province of Rwanda will lead to flooding, with likely extensive damage to houses and property in an area of 1,000 square kilometers. Rwanda Red Cross estimates that 1,000 households may be affected.

### instruction

If you are in the warning area, avoid low-lying areas or move to higher ground immediately. Residents living along streams and creeks should take immediate precautions to protect life and property. Do not attempt to cross swiftly flowing waters or waters of unknown depth. Continue listening to local media as updates will be provided as conditions change. For emergency assistance, call 112.

web http://www.meteorwanda.gov.rw

image uri

image mimeType

contact meteo.rwanda@gmail.com

### areaDesc

Musanze Northern Province of Rwanda

### circle

format: lat,long<space>radius

### geocode

format: 'type' = 'value'

### polygon

-1.63,29.41 -1.63,29.74 -1.38,29.74 -1.38,29.41 -1.63,29.41

format: SW SE NE NW SW (lat,lon points)



## CAP - category field

<b>category</b>	<b>cap. alertInfo. category. code</b>	<b>The code denoting the category of the subject event of the alert message (REQUIRED)</b>	<p>(1) Code Values:</p> <ul style="list-style-type: none"><li>“Geo” - Geophysical (inc. landslide)</li><li>“Met” - Meteorological (inc. flood)</li><li>“Safety” - General emergency and public safety</li><li>“Security” - Law enforcement, military, homeland and local/private security</li><li>“Rescue” - Rescue and recovery</li><li>“Fire” - Fire suppression and rescue</li><li>“Health” - Medical and public health</li><li>“Env” - Pollution and other environmental</li><li>“Transport” - Public and private transportation</li><li>“Infra” - Utility, telecommunication, other non-transport infrastructure</li><li>“CBRNE” – Chemical, Biological, Radiological, Nuclear or High-Yield Explosive threat or attack</li><li>“Other” - Other events</li></ul> <p>(2) Multiple instances MAY occur within an &lt;info&gt; block.</p>
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## CAP - event and event code



event	cap. alertInfo. event. text	The text denoting the type of the subject event of the alert message (REQUIRED)	
eventCode	cap. alertInfo. eventCode. code	A system-specific code identifying the event type of the alert message (OPTIONAL)	<p>(1) Any system-specific code for event typing, in the form:</p> <pre>&lt;eventCode&gt;   &lt;valueName&gt;valueName&lt;/valueName&gt;   &lt;value&gt;value&lt;/value&gt; &lt;/eventCode&gt;</pre> <p>where the content of "valueName" is a user-assigned string designating the domain of the code, and the content of "value" is a string (which may represent a number) denoting the value itself (e.g., valueName="SAME" and value="CEM").</p> <p>(2) Values of "valueName" that are acronyms SHOULD be represented in all capital letters without periods (e.g., SAME, FIPS, ZIP).</p> <p>(3) Multiple instances MAY occur within an &lt;info&gt; block.</p>

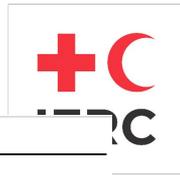
# CAP Editor Freeware



The screenshot shows the CAP Editor web interface in a browser window. The address bar shows 'localhost:3000/editor'. The page title is 'CAP Editor'. There are buttons for 'Create alert', 'Settings', and 'Logout'. Below the title, there are tabs for 'Metadata', 'Category', 'Map', 'Data', 'Text', and 'Summary'. The 'Category' tab is active, showing a list of categories to choose from for a new alert. The categories are: Geophysical (e.g., landslide), Meteorological (inc. flood), General emergency & public safety, Law enforcement, military, homeland & local/private security, Rescue & recovery, Fire suppression & rescue, Medical & public health, Pollution & other environmental, Public & private transportation, Utility, telecommunication & other non-transport infrastructure, Chemical, Biological, Radiological, Nuclear or High-Yield Explosive threat or attack, and Other. There is also an 'Abort' button at the bottom left. A 'GitHub' link is visible at the bottom of the page.

The screenshot shows the 'New Alert: Text' screen in the CAP Editor. The page title is 'CAP Editor'. There is a button for 'Alerting'. Below the title, there is a language selection dropdown menu with 'English' and 'Spanish' selected, and an 'Add Another Language?' button. Below the language selection, there is a text input field for 'What is the event this alert pertains to?' with the text 'Inundaciones' entered. Below the text input field, there is a character count '12/15 characters'. Below the character count, there is a 'Headline' section with a text input field containing 'Inundaciones en Medellin'. A map is visible on the right side of the screen.

# Example CAP Alert



This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
<?xml version="1.0" encoding="UTF-8" ?>
<alert xmlns="urn:oasis:names:tc:emergency:cap:1.2">
  <identifier>2.49.0.0.554.0.tswarning.wl.20230320050141282.0</identifier>
  <sender>https://www.metservice.com</sender>
  <sent>2023-03-20T18:01:41+13:00</sent>
  <status>Actual</status>
  <msgType>Alert</msgType>
  <scope>Public</scope>
  <info>
    <category>Met</category>
    <event>Thunderstorm</event>
    <responseType>Prepare</responseType>
    <urgency>Immediate</urgency>
    <severity>Severe</severity>
    <certainty>Observed</certainty>
    <onset>2023-03-20T17:45:00+13:00</onset>
    <expires>2023-03-20T18:45:00+13:00</expires>
    <senderName>Meteorological Service of New Zealand Limited</senderName>
    <headline>Severe Thunderstorm Warning</headline>
    <description>At 05:45 pm, MetService weather radar detected severe thunderstorms near FRANZ JOSEF, WHATARO A, OFFSHORE ABUT HEAD and OKARITO. These severe thunderstorms are moving towards the east, and are expected to lie near HARIHARI and LAKE IANTHE at 06:15 pm. These thunderstorms are expected to be accompanied by torrential rain and damaging wind gusts.</description>
    <instruction>Torrential rain can cause surface and/or flash flooding about streams, gullies and urban areas, and make driving conditions extremely hazardous. Very strong wind gusts can break branches from trees, damage roofing, and make driving hazardous especially for high-sided vehicles and motorcycles. The National Emergency Management Agency advises that as storms approach you should: - Take shelter, preferably indoors away from windows; - Avoid sheltering under trees, if outside; - Get back to land, if outdoors on the water; - Move cars under cover or away from trees; - Secure any loose objects around your property; - Check that drains and gutters are clear; - Be ready to slow down or stop, if driving. During and after the storm, you should also: - Beware of fallen trees and power lines; - Avoid streams and drains as you may be swept away in flash flooding.</instruction>
    <web>https://www.metservice.com/warnings/home</web>
    <parameter>
      <valueName>ColourCode</valueName>
      <value>Red</value>
    </parameter>
    <parameter>
      <valueName>ColourCodeHex</valueName>
      <value>#FF181E</value>
    </parameter>
    <area>
      <areaDesc>Westland,Selwyn,Ashburton,Timaru,Mackenzie</areaDesc>
      <polygon>-43.501,170.895 -43.520,171.079 -43.527,171.171 -43.531,171.222 -43.527,171.273 -43.523,171.313 -43.479,171.354 -43.445,171.354 -43.349,171.298 -43.213,171.160 -43.131,171.069 -43.087,171.023 -43.009,170.932 -42.976,170.846 -42.935,170.670 -42.927,170.533 -42.926,170.387 -42.917,170.205 -42.906,170.114 -42.912,170.023 -42.974,169.936 -43.067,169.965 -43.108,170.010 -43.149,170.060 -43.213,170.115 -43.291,170.200 -43.347,170.291 -43.399,170.382 -43.411,170.438 -43.448,170.529 -43.482,170.620 -43.489,170.697 -43.493,170.773 -43.501,170.895</polygon>
    </area>
  </info>
  <Signature xmlns="http://www.w3.org/2000/09/xmldsig#">
    <SignedInfo>
      <CanonicalizationMethod Algorithm="http://www.w3.org/TR/2001/REC-xm1-c14n-20010315#WithComments"/>
      <SignatureMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#rsa-sha256"/>
      <Reference URI="">
        <Transforms>
          <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature"/>
        </Transforms>
        <DigestMethod Algorithm="http://www.w3.org/2001/04/xm1enc#sha256"/>
        <DigestValue>MCQYcuXX0rJuEnaSRkbSQ37BH+mNnE168q+3FUGD1u0=</DigestValue>
      </Reference>
    </SignedInfo>
  </Signature>
</alert>
```

# OASIS Event Terms List



← → ↻ 🏠 🔒 docs.oasis-open.org/emergency/etl/v1.0/etl-v1.0.html



## OASIS Committee Note

### Event Terms List Version 1.0

#### Committee Note 02

#### 12 October 2021

**This stage:**  
<https://docs.oasis-open.org/emergency/etl/v1.0/cn02/etl-v1.0-cn02.docx> (Authoritative)  
<https://docs.oasis-open.org/emergency/etl/v1.0/cn02/etl-v1.0-cn02.html>  
<https://docs.oasis-open.org/emergency/etl/v1.0/cn02/etl-v1.0-cn02.pdf>

**Previous stage:**  
<https://docs.oasis-open.org/emergency/etl/v1.0/cn01/etl-v1.0-cn01.docx> (Authoritative)  
<https://docs.oasis-open.org/emergency/etl/v1.0/cn01/etl-v1.0-cn01.html>  
<https://docs.oasis-open.org/emergency/etl/v1.0/cn01/etl-v1.0-cn01.pdf>

**Latest stage:**  
<https://docs.oasis-open.org/emergency/etl/v1.0/etl-v1.0.docx> (Authoritative)  
<https://docs.oasis-open.org/emergency/etl/v1.0/etl-v1.0.html>  
<https://docs.oasis-open.org/emergency/etl/v1.0/etl-v1.0.pdf>

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OET-035	canal issue	utility issue	Infrastructure
OET-036	chemical fire	fire	CBRNE; Fire
OET-037	chemical hazard		CBRNE
OET-038	chemical smoke		Health; CBRNE
OET-039	child abduction	criminal activity	Safety; Security
OET-040	Civil issue	civil issue	Security
OET-041	civil protest	civil issue	Safety
OET-042	coal gas	utility issue	Infrastructure
OET-043	coastal flood	flood	Meteorological
OET-044	cold	temperature hazard	Meteorological
OET-045	cold weather	winter weather	Meteorological
OET-046	communications service disruption	utility issue	Infrastructure
OET-047	contagious disease	health hazard	Health
OET-048	contaminated water	health hazard	Health
OET-049	contamination		CBRNE; Health
OET-050	criminal activity	criminal activity	Safety
OET-051	cybercrime threat	criminal activity	Safety; Security
OET-052	cyclone	tropical storm	Meteorological
OET-053			Geological;



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