



Emergency and Weather Alerts

How to not have your life depend on using Google

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Why are we talking about this here?

- Mobile phones are the most important alerting channel
 - Cell broadcast
 - Push notifications
- Existing infrastructure/apps:
 - Proprietary
 - Limited to one region





Push Notifications via UnifiedPush

- Client infrastructure shipped with KDE Gear
- Supports self-hosted and KDE infrastructure
- Used by
 - NeoChat
 - Tokodon



Push Notifications

Online
Connected to the push notification server and operational.

Push provider: Ntfy

Url: <https://unifiedpush.kde.org>

▶ Test

Applications

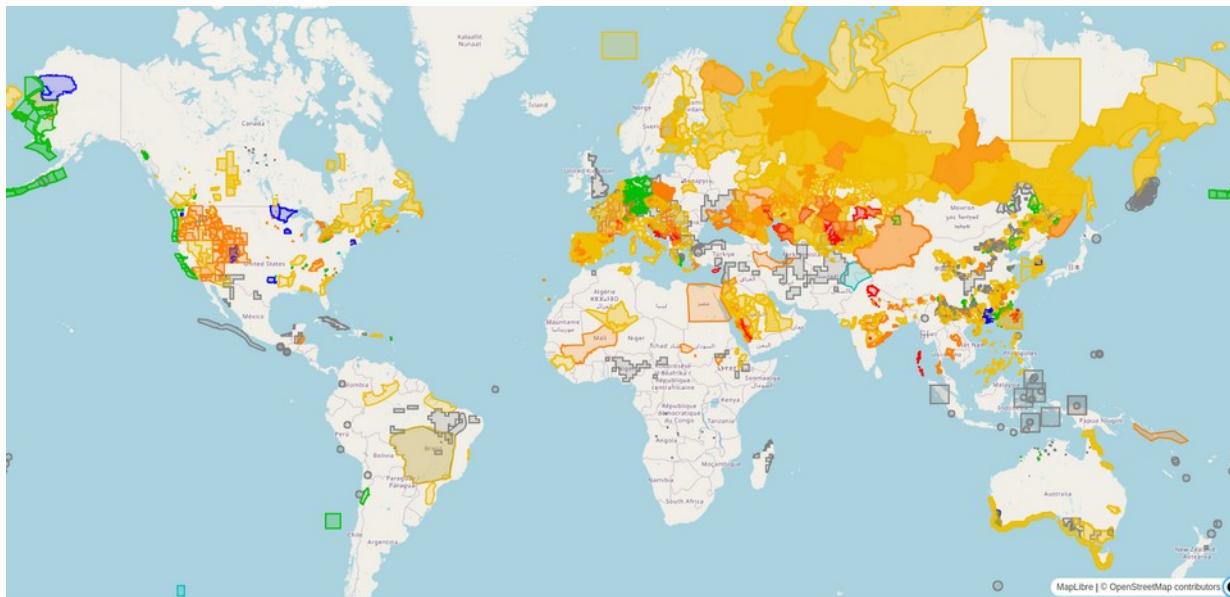
	NeoChat Receiving notifications for new messages	
	Public Alerts Weather and emergency alert notifications	

Help Reset Defaults OK Apply Cancel



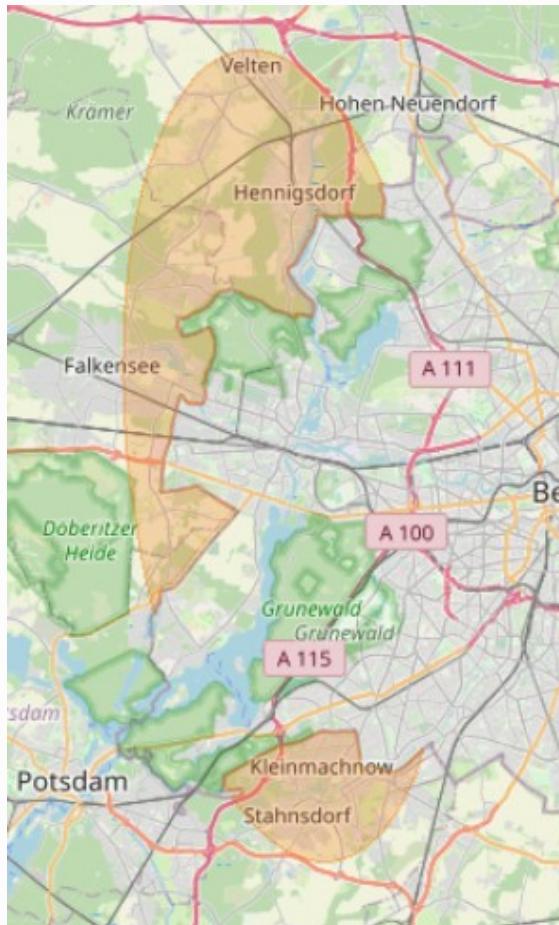
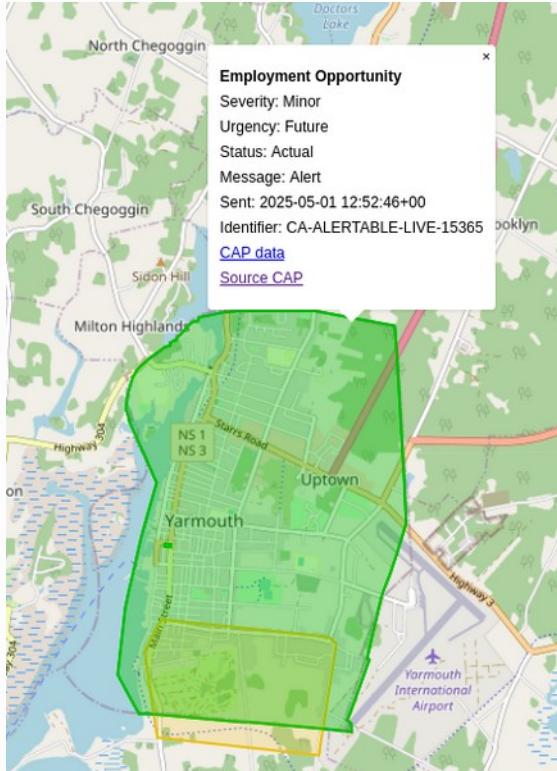
Alert Aggregator

- Based on OASIS Common Alerting Protocol (CAP)
- Server infrastructure developed in collaboration with FOSSWarn





Side quest: Alert data access and data quality



```
category:
  0: "Geo"
  1: "Rescue"
  2: "Fire" (highlighted in blue)
  3: "Infra"
  4: "CBRNE"
  5: "Safety"
  6: "Other"
event: "Gefahrenmitteilung"
urgency: "Immediate"
severity: "Severe"
certainty: "Observed"
▶ eventCode: [...]
headline: "Warnung vor markanter Glätte - Berlin"
```



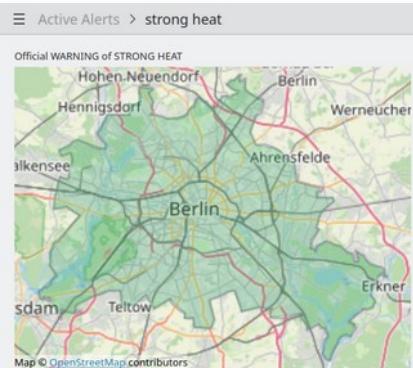
Client Integration

- How do we want to integrate this?
 - Dedicated app?
 - Plasma/KCM?
 - Weather apps/applets?
 - Marble?
 - Locations provided by other apps like Itinerary?

≡ Active Alerts

Current

- Drought is on going in Albania, Austria, Bosnia & Herzegovina, Belgium, Bulg... The Drought alert level is Green.
- Official WARNING of STRONG HEAT The expected weather will bring a situation of strong heat stress. (level 1 of 3) Height range: < 200 m
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- Official WARNING of STRONG HEAT The expected weather will bring a situation of strong heat stress. (level 1 of 3) Height range: < 400 m
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Categories: Medical and public health

Urgency: Responsive action should be taken immediately

Severity: Minor — Minimal to no known threat to life or property

Certainty: Likely (> 50%)

Recommended response: Make preparations as per the instructions.

Web:

Public Alerts

Gefahrendurchsage

In Deutschland findet heute der Warntag 2024 mit einer bundesweiten Probewarnung statt. Es besteht keine Gefahr für die Bevölkerung.

Dismiss



Thank you!

- CAP Aggregation Server: <https://alerts.kde.org>
- KPublicAlerts: <https://invent.kde.org/utilities/kpublicalerts>
- FOSSWarn: https://github.com/nucleus-ffm/foss_warn
- Emergency and Weather Warnings @ 38C3:
<https://cfp.cccv.de/38c3-community-stages/talk/CE8KSK/>
- Emergency and Weather Warnings @ FOSDEM 2025:
<https://fosdem.org/2025/schedule/event/fosdem-2025-5102-weather-and-emergency-alerts/>
- Push Notifications @ Akademy 2022:
<https://conf.kde.org/event/4/contributions/108/>
- Push Notifications @ LAS 2023:
<https://conf.linuxappsummit.org/event/5/contributions/149/>
- OASIS Common Alerting Protocol (CAP):
<https://docs.oasis-open.org/emergency/cap/v1.2/CAP-v1.2.html>
- Early Warnings for All: <https://earlywarningsforall.org>

