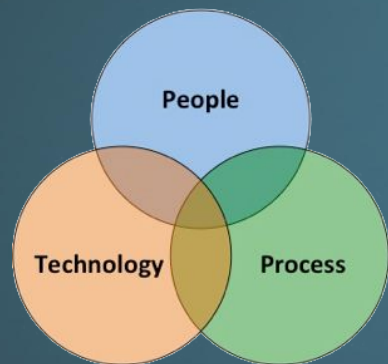


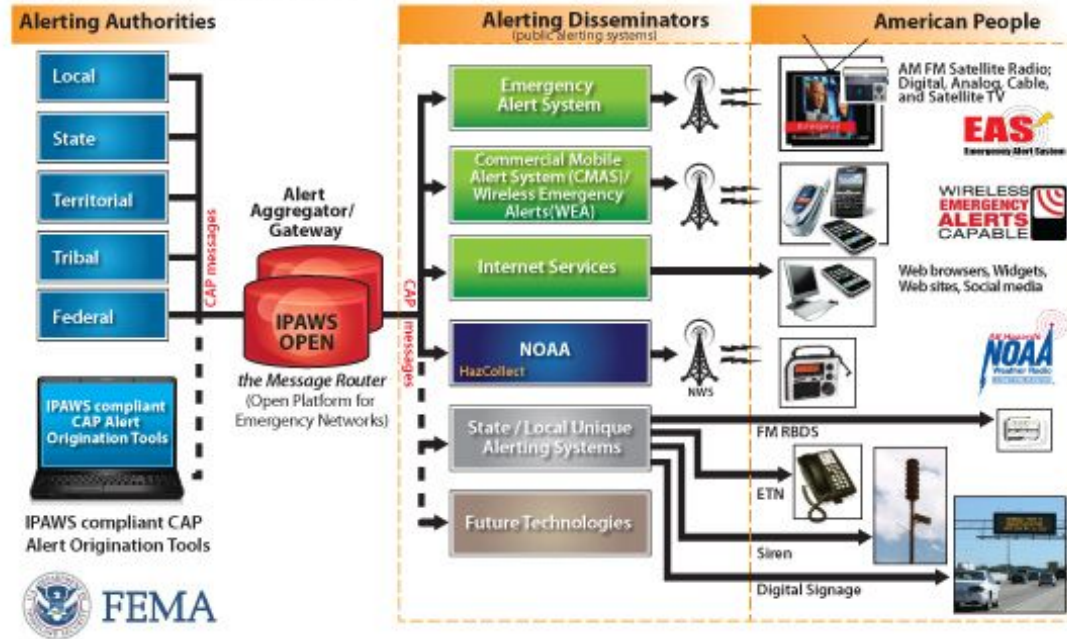
IPAWS Emergency Alerting System

An effective system is made from people, processes and technology. This overview shows the technology component, and specifically the user interface provided by the AlertSense IPAWS alerting tool. This tool allows emergency teams to send alerts to the FEMA/IPAWS system.



IPAWS Architecture

Standards based alert message protocols, authenticated alert message senders, shared, trusted access & distribution networks, alerts delivered to more public interface devices



IPAWS Experience

Once logged into the system, this Dashboard is shown.

The user can review recently created templates, history, verify connection to IPAWS and initiate a public message.

Since this system is permission based, some users may see more information than others.

Messages

Go to the Message Form to send a Message:

SEND A PUBLIC MESSAGE

IPAWS-OPEN Service Status

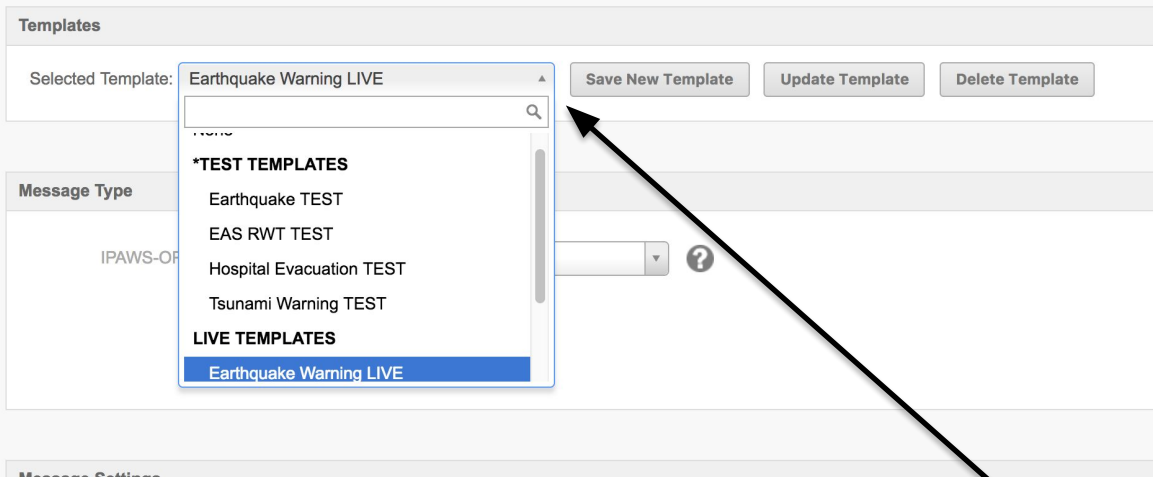
TEST	120028	Expires on 05/20/2018	Status
DEMO	120028	Expires on 06/11/2015	Status

Recently Created Templates

- [Earthquake Warning LIVE](#)
- [High Surf Warning LIVE](#)
- [Tsunami Warning TEST](#)
- [Hospital Evacuation TEST](#)
- [Earthquake TEST](#)
- [EAS RWT TEST](#)
- [EAS Monthly Test LIVE](#)
- [EAS RWT LIVE](#)
- [Test Template](#)
- [Shelter in Place](#)

Step 1:
Select Send A Public Message

Create Public Message



Templates

Selected Template: Earthquake Warning LIVE

Save New Template Update Template Delete Template

***TEST TEMPLATES**

- Earthquake TEST
- EAS RWT TEST
- Hospital Evacuation TEST
- Tsunami Warning TEST

LIVE TEMPLATES

- Earthquake Warning LIVE

Message Type

IPAWS-OR

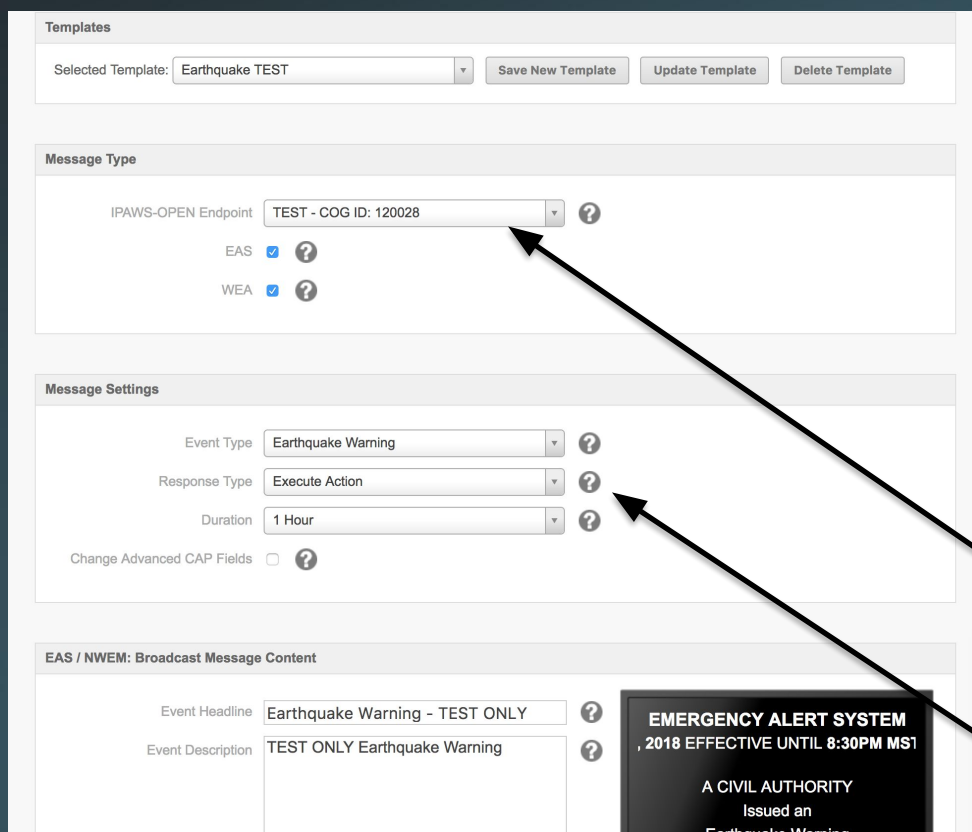
Message Settings

Regardless of the previous selection, the user is brought to a 2nd page in the system, which provides the alerting form necessary to complete the message.

Templates provide a convenient starting point for alerts and they can be organized into different groups. The emergency alerting team names and organizes templates in accordance with their specific needs, use-cases and processes.

If a template is selected, the form is pre-populated with everything that was saved in that template, including endpoint (demo or live), communication channels and other message options.

Step 2:
Select or Verify Template



The screenshot shows the AlertSense configuration interface. At the top, the 'Templates' section has a 'Selected Template' dropdown set to 'Earthquake TEST', with buttons for 'Save New Template', 'Update Template', and 'Delete Template'. Below this is the 'Message Type' section, which includes an 'IPAWS-OPEN Endpoint' dropdown set to 'TEST - COG ID: 120028', and checkboxes for 'EAS' and 'WEA', both of which are checked. The 'Message Settings' section contains dropdowns for 'Event Type' (set to 'Earthquake Warning'), 'Response Type' (set to 'Execute Action'), and 'Duration' (set to '1 Hour'). There is also a checkbox for 'Change Advanced CAP Fields'. At the bottom, the 'EAS / NWEM: Broadcast Message Content' section shows 'Event Headline' as 'Earthquake Warning - TEST ONLY' and 'Event Description' as 'TEST ONLY Earthquake Warning'. To the right of the form, a preview of an emergency alert is shown: 'EMERGENCY ALERT SYSTEM', '2018 EFFECTIVE UNTIL 8:30PM MS1', 'A CIVIL AUTHORITY', 'Issued an', 'Earthquake Warning'. Two black arrows originate from the right side of the image: one points to the 'TEST - COG ID: 120028' dropdown in the 'Message Type' section, and the other points to the 'Event Type' dropdown in the 'Message Settings' section.

Templates

Selected Template: **Earthquake TEST** Save New Template Update Template Delete Template

Message Type

IPAWS-OPEN Endpoint: **TEST - COG ID: 120028** ?

EAS ☒ ?

WEA ☒ ?

Message Settings

Event Type: **Earthquake Warning** ?

Response Type: **Execute Action** ?

Duration: **1 Hour** ?

Change Advanced CAP Fields ☐ ?

EAS / NWEM: Broadcast Message Content

Event Headline: **Earthquake Warning - TEST ONLY** ?

Event Description: **TEST ONLY Earthquake Warning** ?

EMERGENCY ALERT SYSTEM
2018 EFFECTIVE UNTIL 8:30PM MS1

A CIVIL AUTHORITY
Issued an
Earthquake Warning

The system supports both 'practice' (demo) and 'live' scenarios. Practice alerts can help the team maintaining their skills. Treating them seriously insures that team members are well versed in their own processes and familiar with the software system.

Regardless of whether a template is used as a starting point, and regardless of whether the alert is practice or live, the next steps are to modify, review and verify the message type, message content and other settings for the specific scenario.

Step 3:
Verify Message Type (demo or live)

Step 4:
Complete the Message Settings section

Recommended Instructions **Seek shelter if needed. TEST ONLY** ?

Audio Message [Preview Text to Speech](#) ?
[Select Existing File](#)
[Upload File](#)

**A CIVIL AUTHORITY
Issued an
Earthquake Warning**

CAP to EAS Translation:

A CIVIL AUTHORITY HAS ISSUED AN EARTHQUAKE WARNING FOR THE FOLLOWING COUNTIES/AREAS: NO AREA AT 7:30 PM MST ON JAN 16, 2018 EFFECTIVE UNTIL 8:30PM MST. Message from . TEST ONLY EARTHQUAKE WARNING. SEEK SHELTER IF NEEDED. TEST ONLY

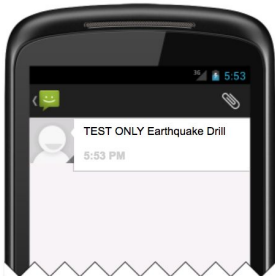
WEA: Mobile Phone Content

Auto Generated Text Message Earthquake Warning in this area until 8:30PM MST ?
Execute Action

Edit Text Message ☒ ?

Text Message TEST ONLY Earthquake Drill ?

26 of 90 characters used.



Target Area

Area Description Area ?

Geographic Area  Circle 1  

[Add Shape](#) ?

FIPS Codes ?

SEND MESSAGE

System operators review and edit all information before sending the message in a clear and easy **WYSIWYG** (what you see is what you get) format.

Whether for practice or live scenarios, these content preview steps are very important to ensure that the alert message is accurate and formatted correct before pressing “SEND”.

Step 5:
*Create / modify / preview / verify
Message Content and Formatting*

Step 6:
Specify the target area

Step 7:
Click Send Message

CAP to EAS Translation:

A CIVIL AUTHORITY HAS ISSUED AN
EARTHQUAKE WARNING FOR THE FOLLOWING
COUNTIES/AREAS: NO AREA AT 7:30 PM MST
ON JAN 16, 2018 EFFECTIVE UNTIL 8:30PM MST.
Message from . TEST ONLY EARTHQUAKE
WARNING. SEEK SHELTER IF NEEDED. TEST
ONLY

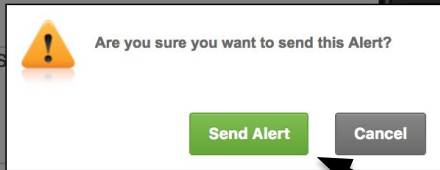
Audio Message [Preview Text to Speech](#) ?
[Select Existing File](#)
[Upload File](#)

WEA: Mobile Phone Content

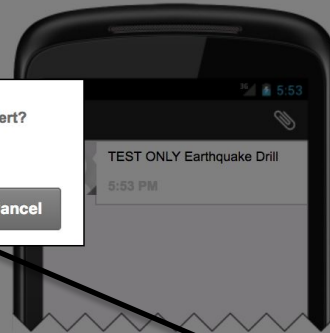
Auto Generated Text Message Earthquake Warning in this area until 8:30PM MST ?
Execute Action

Edit Text Message ☒

Text Message



26 of 90 characters used.

**Target Area**

Area Description ?

Geographic Area



[Add Shape](#) ?

After completing the form, and pressing “SEND MESSAGE” a third confirmation dialog is presented. This dialog is presented such that the underlying form and previews are still visible.

After the message has been reviewed, the user confirms that the message is to be sent by clicking “SEND ALERT” in the pop up window.

Send Alert will send the message to IPAWS for dissemination to the channels selected.

Cancel will take the user back to the form for further review.

Step 8:
Click Send Alert
As final confirmation

AlertSense IPAWS software is regarded by FEMA as one of the most intuitive and easy to use in the industry, but software is only one component of an effective public emergency alerting system.

FEMA requires that emergency management teams are trained on proper procedures before they're allowed to use any IPAWS software.

Training includes instructions for how to cancel and retract messages in cases of human error.

Processes that emergency alerting teams can use to help prevent human errors:

- Treat every practice alert like the real thing. It's a powerful system, be careful!
- Require review and approval by a 2nd person before sending any alert.
- Templates are the responsibility of the emergency alerting team. Clearly name and organize any templates that are created/used, and make sure operators are trained on them.
- Have a plan for false alarms and human error in case they occur.