

How to use the IPAWS Message Viewer

The Federal Emergency Management Agency (FEMA) Integrated Public Alert and Warning System (IPAWS) Program Management Office (PMO) has developed an IPAWS Message Viewer. This service can be used by authorized alerting authorities to practice writing and sending IPAWS messages in a closed testing environment at the IPAWS Lab at JITC (Joint Interoperability Testing Command). To use the IPAWS Message Viewer, the alerting authority must have the following:

- IPAWS compatible alerting tool (a list of developers can be found at www.fema.gov/how-sign-ipaws)
- MOA with FEMA for Production or Test access
- A training COG identification (ID) and certificate (Note: this is not the Production certificate and usually starts with a “12” or “15”)

The alerting authority must verify that the authoring tool is connected to the IPAWS Lab at JITC, and not connected to the IPAWS Production system.

In a web browser, open the website below and enter your training COG ID where it says “[insert COGID#]”:

[https://ipaws-open.net/ALERT_SERVICES/postedmessages.php?COGID=\[insert COGID#\]](https://ipaws-open.net/ALERT_SERVICES/postedmessages.php?COGID=[insert COGID#])

This will bring up IPAWS Message Viewer main page similar to the following:

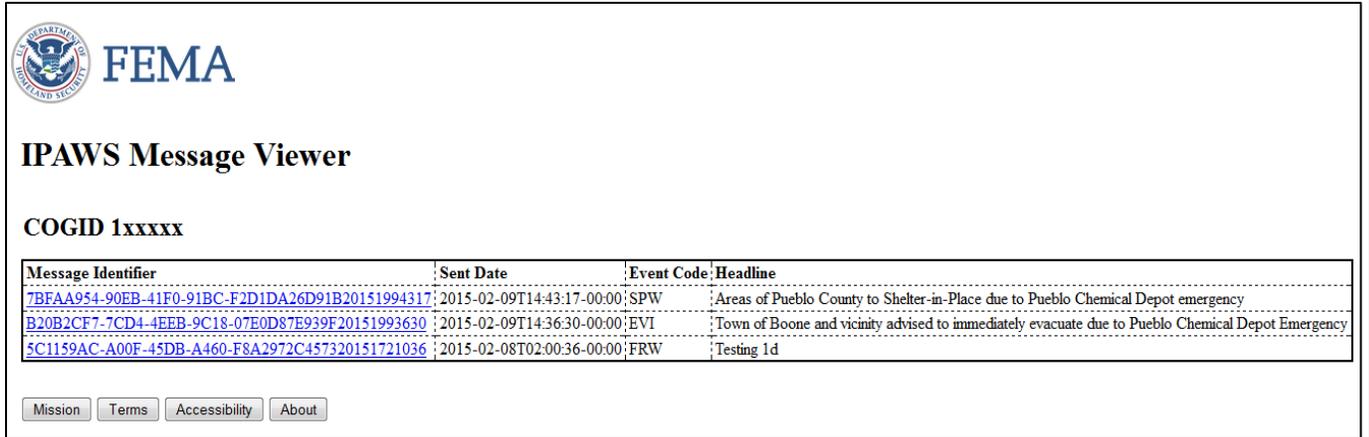


COGID 1xxxxx shows under the IPAWS Message Viewer title above with your training COG ID. Listed under the COGID is a table of public messages posted by the COGID. The table contains “Message Identifier”, “Sent Date”, “Event Code”, and “Headline” and will show all the public messages posted within the last 48 hours. The table is sorted by the “Sent Date” and is displayed in GMT time. Under the table, the “Mission”, “Terms”, “Accessibility”, and “About” buttons contain required information governing the information displayed in the IPAWS Message Viewer.

The IPAWS Message Viewer website is normally available 24/7 for independent alert testing and verification. It should be noted, however, that after hours support is not available, and any outages that do occur will not be repaired until normal working hours.

As new messages are posted, the IPAWS Message Viewer website retrieves a list of posted public messages from the IPAWS Lab web interface to verify your posted alerts for training and demonstration purposes.

When you have the IPAWS Message Viewer website displayed on your screen, you will have to refresh the screen each time to see any new messages. The posted public messages will look similar to the following:



The screenshot shows the FEMA IPAWS Message Viewer interface. At the top left is the FEMA logo. Below it is the text "IPAWS Message Viewer" and "COGID 1xxxxx". A table displays a list of messages with columns for Message Identifier, Sent Date, Event Code, and Headline. Below the table are four buttons: Mission, Terms, Accessibility, and About.

Message Identifier	Sent Date	Event Code	Headline
7BFAA954-90EB-41F0-91BC-F2D1DA26D91B20151994317	2015-02-09T14:43:17-00:00	SPW	Areas of Pueblo County to Shelter-in-Place due to Pueblo Chemical Depot emergency
B20B2CF7-7CD4-4EEB-9C18-07E0D87E939F20151993630	2015-02-09T14:36:30-00:00	EVI	Town of Boone and vicinity advised to immediately evacuate due to Pueblo Chemical Depot Emergency
5C1159AC-A00F-45DB-A460-F8A2972C457320151721036	2015-02-08T02:00:36-00:00	FRW	Testing 1d

Mission Terms Accessibility About

Message Identifier

To see more details on a message, you can click on the "Message Identifier" link, which will open a new page: "Alert Information View" with details of the message, as shown below:



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Alert Information View

Message Identifier: 5C1159AC-A00F-45DB-A460-F8A2972C457320151721036 Sender: com.eyestreet.cap.esbit@co.pueblo.c Sent Date: 2015-02-07T21:00:36-05:00

Headline: Testing 1d

WEA Text

Testing. Take no action. This is a Test 1d

EAS Text

ZCZC-CIV-FRW-008101+0100-380200-LLLLLLLL-
A CIVIL AUTHORITY HAS ISSUED A FIRE WARNING FOR THE FOLLOWING COUNTRIES/AREA: PUEBLO, CO ; AT 09:00 PM ON FEB 07 2015 EFFECTIVE UNTIL 10:00PM. Message from CO Pueblo County Sheriff's Office Pueblo CO. Testing. This is a test for multiple polygons in one alert. Testing 1d. Take no action. This is a test only..

PUBLIC Text

This message was posted to the All Hazards Alert Feed

NWEM Text

Not an NWEM Message

Exchange COGs: 150205
Warning Area FIPS Codes: 008101
Polygon(s): No Circle(s): Yes

All URIs: No

Raw XML:

Note that "Message Identifier", "Sender", "Sent Date", and "Headline" are extracted from <identifier>, <sender>, <sent>, and <headline> elements in the posted message XML file.

WEA Text

This is the WEA message that would appear on cell phones. This text is created based on the rules for WEA (i.e. 90 character limit, automatically generated if the WEA text parameters are missing) [see page 99, IPAWS document, reference 2].

EAS Text

This is the EAS message that would be transmitted via TV and radio. This text is created based on the rules for EAS [see ECIG Guide, reference 3]. The TV text scroll and/or text to speech capabilities and specifics vary depending on the broadcaster's technology and configuration. The actual message relayed to the public may be different than what is reflected here.

The EAS Text follows the formatting rules below:

"A CIVIL AUTHORITY HAS ISSUED A [text from Event Code] FOR THE FOLLOWING COUNTIES/AREAS: [text from County Code(s)] AT [h:mm AM/PM formatted time from Sent Time] ON [mmm dd, yyyy formatted date from Sent Time] EFFECTIVE UNTIL

[h:mm AM/PM formatted time from Expires Time]. Message from [text of Sender Name]. [text from Description]. [text from Instruction].”

PUBLIC Text

This field indicates whether or not the CAP message was posted to the IPAWS All-Hazards Information Feed. Please refer to IPAWS Program literature for additional information on this dissemination capability.

NWEM Text

This is the message that would be transmitted via the NOAA Weather Radio All-Hazards system. This text is created based on the rules for Non-Weather Emergency Messages [see NOAA document, reference 4].

The NWEM Text follows the formatting rules below:

“THE FOLLOWING MESSAGE IS TRANSMITTED AT THE REQUEST OF THE [Text from Sender Name]. [Text from Headline]. [Text from Description]. [Text from Instruction].”

Exchange COGs:

If the CAP message includes the COG-to-COG messaging function, the recipient COG IDs are listed in this field.

Warning Area FIPS Codes:

The FIPS codes (county codes) that would receive the alert are listed in this field.

Polygons: Yes/No; Circles: Yes/No:

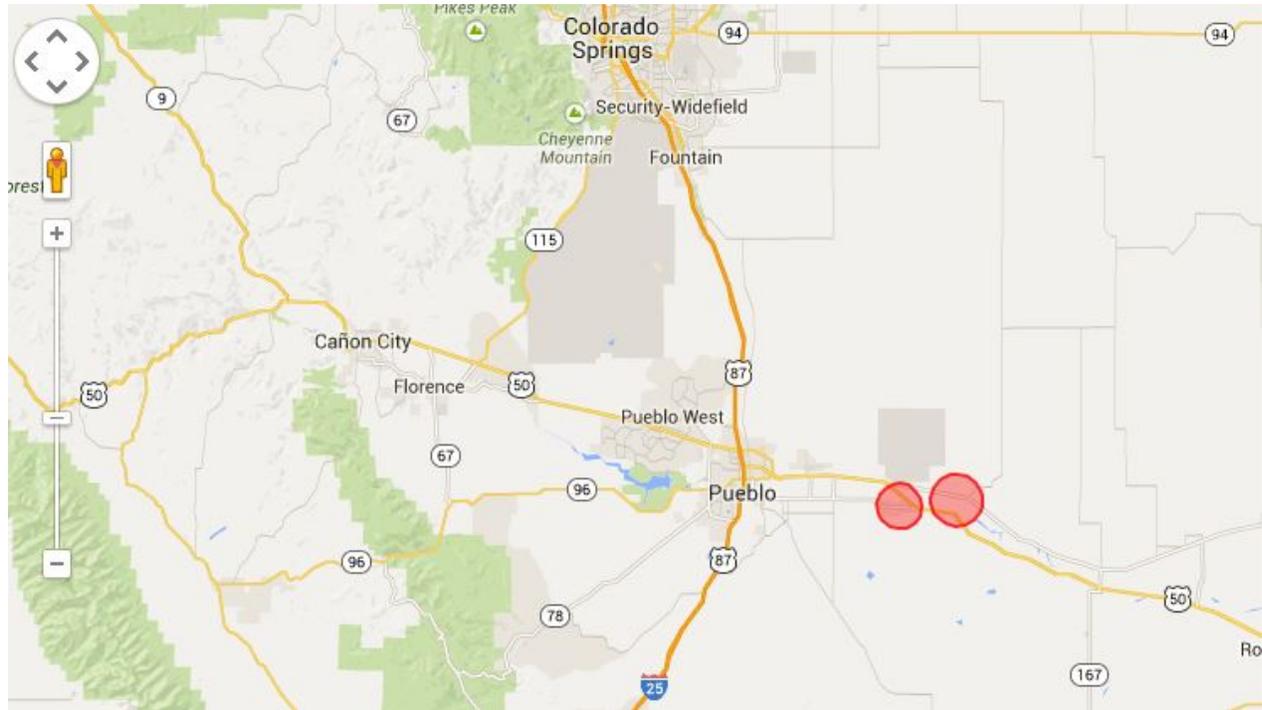
If the CAP message includes a polygon and/or circle, then a “Yes” or “No” would appear here. If a polygon or circle is present, the “Display Affected Area” button is enabled to display the alert-affected area; otherwise, the “Display Affected Area” button is disabled and grayed out.

All URIs: Yes/No:

If the CAP message includes a link to external source (mp3 audio, jpg image) then a “Yes” would appear here along with a link to the file, otherwise a “No” would appear here.

Display Affected Area

If the CAP message includes a polygon and/or circle, then this button will display a map with the alerting area highlighted.



Display Alert Status

This button will open a new page that displays the status codes for this CAP message. A complete table of the codes is located on page 115 of the IPAWS document [reference 2].



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Alert Status Response View

Message Identifier: B20B2CF7-7CD4-4EEB-9C18-07E0D87E939F

Channel Name	Status Item ID	Error	Status
CAPEXCH	200	N	Ack
CAPEXCH	202	N	alert-signature-is-valid
IPAWS	300	N	Ack
NWEM	401	N	message-not-disseminated-as-NWEM
EAS	500	N	Ack
CMAS	600	N	Ack
PUBLIC	801	N	message-not-disseminated-as-non-EAS-public
NeilG2	10	N	Ack

The first column, "Channel Name", indicates the device or service from which the status was generated. Any posted alert message with a "300" "Status Item ID" is qualified for IPAWS channel dissemination as a public message for retrieval of posted message list.

Channel Name	Service	Code range
WEA Carrier	CMAS Dissemination ACK and Errors	10+ 100+
CAPEXCH	CAP Exchange ACK and Errors	200+
IPAWS	Core IPAWS-Profile ACK and Errors	300+
NWEM	NWEM Specific ACK and Errors	400+
EAS	EAS Specific ACK and Errors	500+
CMAS	CMAS Specific ACK and Errors	600+
Multi-channel	Multi-channel Errors	700+
Public	Public Non-EAS Specific ACK and Errors	800+

The second column, "Status Item ID", provides the status item code, while the fourth column, "Status", provides the text of the status item code. This text describes what the status means. The third column indicates if this status was an error message. Non-error messages usually

indicate that the message was processed properly. Together, these codes act as “advice” codes to let you know how IPAWS saw and processed the message that was received.

These codes are the same as those used in the production IPAWS. Learning the key messages, and where you can see responses in your authoring tool, will improve your ability to send messages and troubleshoot errors in an actual event.

Display Raw XML

This button will bring up the actual Common Alerting Protocol (CAP) message in the Extensible Markup Language (XML) format. This will assist in understanding how a message is developed and displayed. It is particularly valuable for technical troubleshooting by developers and by IPAWS support staff.

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Original Raw XML

Message Identifier: B20B2CF7-7CD4-4EEB-9C18-07E0D87E939F
Message Status Response: <ns4:messageResponseTypeDef xmlns:ns4="http://gov.fema.ipaws.services/IPAWS_CAPService/"><alert xmlns="urn:oasis:names:tc:emergency:cap:1.2"><identifier>B20B2CF7-7CD4-4EEB-9C18-07E0D87E939F</identifier>
<sender>com.eyestreet.cap.esbit@co.pueblo.co.us</sender><sent>2014-12-17T13:32:13-05:00</sent><status>Actual</status><msgType>Alert</msgType>
<source>Pueblo County Sheriff's Office</source><scope>Public</scope><addresses>150205</addresses><code>IPAWSv1.0</code><note>Testing</note>
<references>None</references><incidents>Testing</incidents><info><language>en-US</language><category>CBRNE</category><event>Evacuation
Immediate</event><responseType>Evacuate</responseType><urgency>Immediate</urgency><severity>Severe</severity><certainty>Observed</certainty>
<audience>BOONE</audience><eventCode><valueName>SAME</valueName><value>EVI</value></eventCode>
<effective>2014-12-17T13:35:00-05:00</effective><onset>2014-12-17T13:35:00-05:00</onset><expires>2014-12-17T15:26:59-05:00</expires>
<senderName>CO Pueblo County Sheriff's Office,Pueblo,CO</senderName><headline>Town of Boone and vicinity advised to immediately evacuate due to
Pueblo Chemical Depot Emergency</headline><description>THIS IS A TEST. The Pueblo County Sheriff advises people in the Town of Boone to immediately
evacuate due to a possible release of mustard agent at the Pueblo Chemical Depot. It is estimated the mustard plume may reach the Town of Boone and Boone
Road at 2pm. The evacuation area includes, The Town of Boone, the Boone School, Il Ranch Road, Boone Road, Boone Hill Road, Nepesta Road, Prairie Hills
Road, the remainder of zones East 1, East 2, Southeast 1 and Southeast 2. Other areas near the Depot are not affected at this time, but should stand by for
additional information. This emergency does not affect the City of Pueblo. TEST1c</description><instruction>People in these areas should leave, traveling away
from Pueblo Chemical Depot. Close vehicle windows and vents and turn off the air conditioner or heater. If evacuation is not possible, in-place sheltering is
recommended. Boone School is implementing it's emergency plans, do not attempt to pick up children from school. THIS IS ONLY A TEST</instruction>
<contact></contact><parameter><valueName>CMAMtext</valueName><value>TEST SHERIFF-Chemical Emergency-Boone Area Evacuate now-CSEPP
Zones E1-E2-SE1-SE2 Test1c</value></parameter><parameter><valueName>EAS-ORG</valueName><value>CIV</value></parameter><parameter>
<valueName>BLOCKCHANNEL</valueName><value>NWEM</value></parameter><area><areaDesc>Boone Area</areaDesc><circle>38.2496433284373,-
104.254750533347 9.61145893741198</circle><geocode><valueName>SAME</valueName><value>008101</value></geocode></area></info>
<capsig:Signature xmlns:capsig="http://www.w3.org/2000/09/xmldsig#" xmlns:cap="urn:oasis:names:tc:emergency:cap:1.2"

References

1. Common Alerting Protocol, v. 1.2 USA Integrated Public Alert and Warning System Profile Version 1.0 (<http://docs.oasis-open.org/emergency/cap/v1.2/ipaws-profile/v1.0/cap-v1.2-ipaws-profile-v1.0.pdf>)
2. Integrated Public Alert and Warning System (IPAWS) Open Platform for Emergency Networks (OPEN) IPAWS-OPEN v3.07 Web-Service Interface Design Guidance (document can be requested from ipaws@fema.dhs.gov)
3. Page 30, ECIG Recommendations for a CAP EAS Implementation Guide, Version 1.0 (http://www.eas-cap.org/ECIG-CAP-to-EAS_Implementation_Guide-V1-0.pdf)
4. NATIONAL WEATHER SERVICE INSTRUCTION 10-1708 (<http://www.nws.noaa.gov/directives/sym/pd01017008curr.pdf>)