



FEMA

IPAWS OPEN 4.0 Recap

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May 5, 2021

IPAWS OPEN 4.0 Recap

- The IPAWS Cloud Transition was successfully executed April 13, 2021 at 2:51 AM EDT

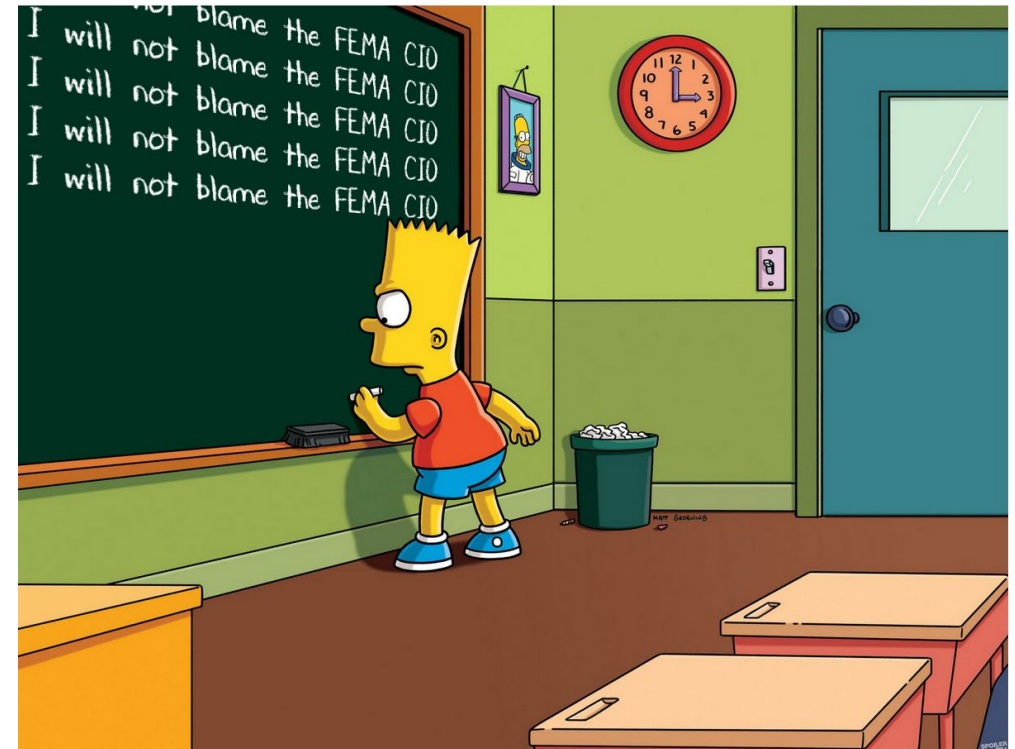
...Now what?



Lessons Learned

“Experience is simply the name we give our mistakes.” Oscar Wilde

- Planning and Oversight
- Requirements
- Design
- Development
- Development Testing
- IV&V and UAT Testing Cycle
- Network Connectivity
- Stakeholders/Collaboration



The Good

- Extensive up-front planning
 - Engineer: “We can do this in 4 months”
 - PM: “Not so fast, this is the government”
- Architecture design, socialized with FEMA and DHS early
 - Integration with native AWS tools
 - Built-in infrastructure redundancy and better SLAs
 - Improved processing speed
 - Centralized control
- Rapid turn-around time for new builds
- Coordination with vendor stakeholders (**we did great!**)
 - 22 vendors participated in UAT



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The Bad

- Coordination with vendor stakeholders (**we can do better**)
- Network connections took 4x longer than planned
 - Scheduling, paperwork, some redesign, holiday blackout
- Previously coordinated go-live dates slipped:
 - 3/1: Rescheduled - Not enough carriers connected
 - 3/30: Unsuccessful - Akamai redirect issue
 - 4/6: Unsuccessful - Missing digital signature on some WEAs
 - 4/13: Successful

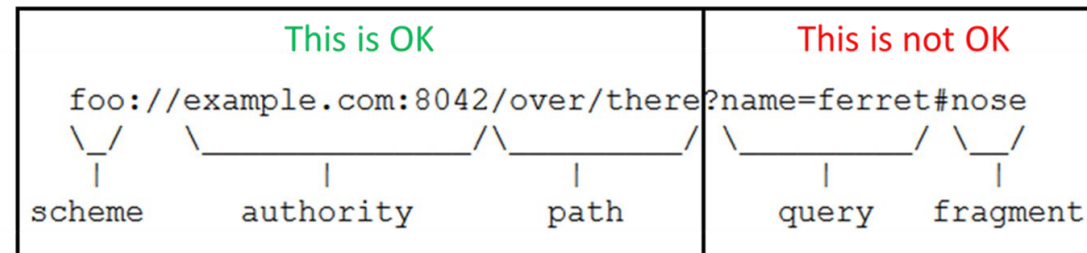


The Ugly

- Slim FEMA guidance on cloud implementation
 - This is all changing for the better....now
- Ongoing legacy requirements changes (and delays)
 - Redesigning the airplane while mid-flight
- Security IV&V, ATO, paperwork took fuh evah!
- Many bugs got through SIT
- Some bugs got through UAT
 - EAS RWT signature bug (fixed)
 - URL/URI validation bug
 - multiple area blocks



- Guidance for developers and users
 - The <web> element is an optional element and is not used by WEA or EAS (...so skip it!)
 - The <uri> element is only required if you are using a link to an EAS audio file
 - For the <web> and <uri> values be sure to include “http://” or “https://” at the beginning of your address. For example:
 - This will succeed:
 - `http://www.fema.gov/alert.mp3`
 - This will fail:
 - `www.fema.gov/alert.mp3`
 - Do not include a query string in your URI. Reference RFC 3986 (<https://tools.ietf.org/html/rfc3986#section-3>)



- *All this only applies to the CAP <web> and <uri> elements. This does not apply to the CMAMtext parameter, <description> element, <instruction> element, <headline> element, etc.*

Multiple Area Blocks



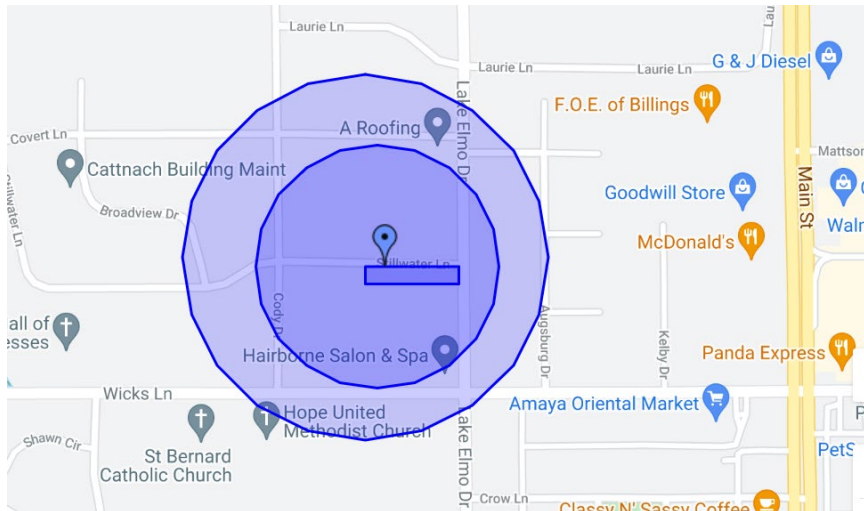
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  <areaDesc>MT Yellowstone County Disaster and Emergency Services</areaDesc>
  <polygon>45.8288,-108.4765 45.8288,-108.4780 45.8286,-108.4780 45.8286,-108.4765 45.8288,-108.4765</polygon>
  <geocode>
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    <value>030111</value>
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</area>
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</CMAC_Alert_Area>
  
```

OK
...but duplicate?



Back to list

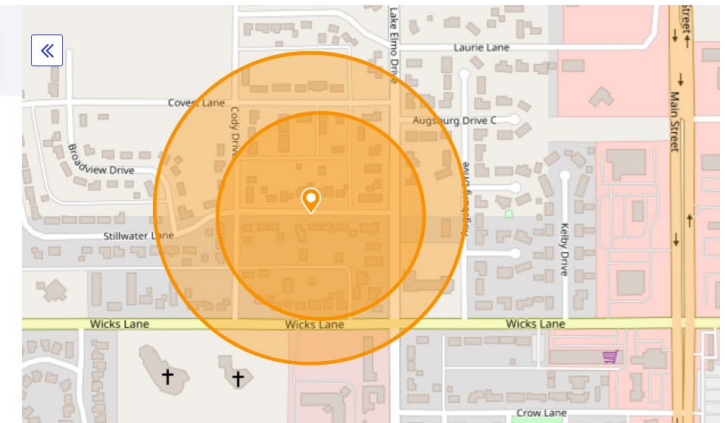
EXPIRED LAW ENFORCEMENT WARNING

English Spanish

SENT 05/03/2021 10:16:20 EXPIRES 05/03/2021 10:16:22

HEADLINE EN
Law Enforcement Warning

AREA
MT Yellowstone County Disaster and Emergency Services



Update Your Links

- LIVE (change it by 6/1...or maybe later?)
 - A-Interface https://integration.aws.fema.gov/IPAWS_CAPService/IPAWS
 - EAS Feed https://apps.fema.gov/IPAWSOPEN_EAS_SERVICE/rest/...
- TDL (change it now...no flex)
 - A-Interface https://tdl.integration.aws.fema.gov/IPAWS_CAPService/IPAWS
 - EAS Feed https://tdl.apps.fema.gov/IPAWSOPEN_EAS_SERVICE/rest/...
 - Message viewer https://messageviewer.tdl.apps.fema.gov/ALERT_SERVICES/postedmessages.php?COGID=12xxxx
- LAB (change it by 5/31...no flex)
 - A-Interface https://demo.integration.aws.fema.gov/IPAWS_CAPService/IPAWS
 - EAS Feed https://demo.apps.aws.fema.gov/IPAWSOPEN_EAS_SERVICE/rest/...
 - Message viewer https://messageviewer.demo.apps.fema.gov/ALERT_SERVICES/postedmessages.php?COGID=30xxxx

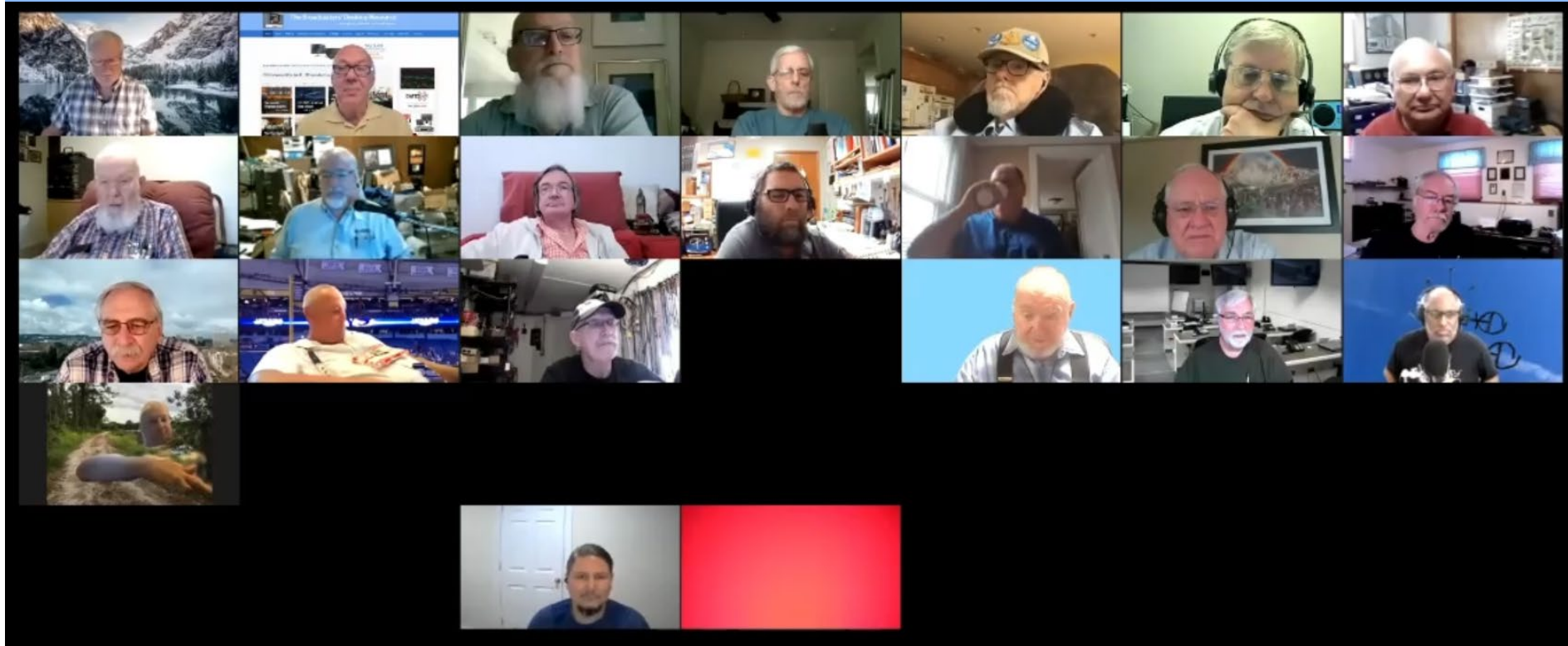


Other Stuff

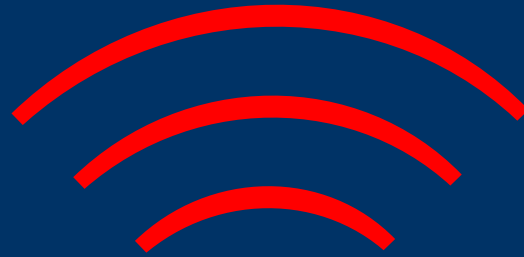


The Broadcasters' Desktop Resource

... edited by Barry Mishkind - the Eclectic Engineer



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IPAWS

Integrated Public Alert & Warning System

QUESTIONS?

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