

Configuring a DASEOC to send alerts to IPAWS



Preliminary Requirements:

There are a few things that need to be setup and possibly installed in order to send CAP alerts to FEMA. The requirements are:

- A valid *EAS_NET/CAP Send* license key
- A valid *EAS_NET/CAP Send to IPAWSOpen* license key
- DNS enabled
- EAS Platform Auxiliary Server Software. To find out if you have this or not, go to **Setup > Server > Upgrade** on the DASEOC web interface. From there, click on the **Show Auxiliary Package Info** button (if isn't already open). Then look under the *Package group:aux_server_apps*; it should look something like this:

| | |
|--------------------------------------|---|
| <i>Package group:aux_server_apps</i> | <i>EAS Platform Auxiliary Server Upgrade Software</i> |
| dasdec_fc10-aux_app_upgrade | Installed version: 1.0-0.i386.Latest known : 1.0-0.i386 |

If the *Package group:aux_server_apps* section says **Not Installed**, then you need to contact Digital Alert Systems so that you can receive the upgrade file. Once the file is received, you can install it by uploading the file using the interface just above the Auxiliary Package Information section.

- **The .jks file that you received from FEMA must be converted to a .pem file!** To do this, you can contact Digital Alert Systems and we will be glad to convert the file for you. Have your .jks file, Key password and KeyStore password ready for the conversion.

If all of these things are confirmed to be setup in your DASEOC, you are ready to start your configuration.

The steps to configure your EAS_NET client:

1. On the DASEOC browser interface, go to **Setup > Net Alerts > EAS NET**
2. Jump down to the **Configure EAS NET Clients** section of the page. It should look like this:

Configure EAS NET Clients. Except for Add/Delete Clients, changed Settings are not effective until Accept Changes is pushed.

- Alert Forwarding to EAS_NET devices. *Disabled. Check to enable.*
- Encoder Originated Alerts Sent to EAS_NET devices. *Disabled. Check to enable.*
- Decoded Alerts can be sent to EAS_NET devices. *Disabled. Check to enable.*

3. Click on the check box **Encoder Originated Alerts Sent to EAS_NET devices.** to enable it. If you are already using an EAS NET client, you should leave any options that involve that alone. Do not disable options just for sending CAP alerts to FEMA. *On the other hand*, if you have clients that are configured and are not doing anything, **delete them**. Only clients that are necessary should be on the list and enabled.
4. When that check box is enabled, a whole bunch of options should appear in the purple section below. The beginning of it all should look something like this:

Configure EAS_NET Client Connection (client IP & program values apply to both Origination and Forwarding)

| | |
|--|---|
| Send_to_FEMA ▾ Select EAS_NET client | Add EAS_NET Client Interface <small>(effective immediately)</small> |
| There is 1 defined client interface (max is 8). | Duplicate EAS_NET Client Interface <small>(effective immediately)</small> |
| 15 EAS NET Timeout in seconds (for advanced use only). | Delete this EAS_NET interface <small>(effective immediately)</small> |
| Send_to_FEMA | Client Interface Name |
| <input checked="" type="checkbox"/> ENABLE Client Interface. <i>Enabled. Uncheck to disable client.</i> | |

To make a new client like the one shown above, click on the **Add EAS_NET Client Interface** button. It should show up as ***Client 1** in the drop down list (or something similar). To change the name like the one above, just type in the name you would like in the **Client Interface Name** text box. In this example, it is **Send_to_FEMA**.

5. The next section to edit will be the **Event Data Protocol** in the purple section. It should look like this when it is done being configured:

Event Data Protocol

- EAS NET
- Common Alert Protocol (CAP)**

Send Options

- Send only at Origination** Send only at Forward Send at both Orig & Frwr
- Send EAS NET prior to alert audio payout.** *Enabled. Client will send EAS NET alert info prior to alert audio payout. Only needed with EAS NET compatible equipment that manages alert payout with GPI closure action or Extended Status Play requests. Prior send is incompatible with EAS NET Web audio streaming! Uncheck for EAS NET alert info send synced with alert audio payout.*
- Send National Alerts (EAN/EAT).** *Disabled. National Alert forwarding is disabled on this EAS NET Client. Uncheck to enable National Alert forwarding.*

Since we are sending CAP alerts, select the **Common Alerting Protocol (CAP)** radio button. Under the **Send Options** section, be sure to select **Send only at**

Origination just like the picture shown above. This is important, because if you select the third option, Send at both Orig&Frwr, you will create a send/receive loop with the FEMA server. Also, select the **Send EAS NET prior to alert audio playback** checkbox as shown above.

- The section just below that, **CAP Event Data IP control options**, is the next section to configure.

The **IPAWS CAP Aggregator Web Address** field should be configured to *integration.fema.gov*. The **EAS_NET/CAP Event Transfer Protocol** should be configured to *IPAWS Open 2*. The Local Network Device should be configured to the network that you can reach the FEMA server with (Likely to be the First Ethernet). The **IPAWS CAP Aggregator URL Path** should be configured to *IPAWS_CAPService/IPAWS*. The **IPAWS Logon User** field should be filled in with the username that has been given to you by FEMA. The **IPAWS COG Service Logon ID** should be the numbers after the IPAWSOPEN_ prefix of your .pem file. For example, if your .pem file was "*IPAWSOPEN_123456.pem*" then the COG Service Logon ID would be 123456. When you are finished configuring this section, it should look similar to this:

| | |
|---|--|
| CAP Event Data IP control options: | |
| integration.fema.gov | IPAWS CAP Aggregator Web Address <small>(name if DNS enabled or dot.decimal)</small> |
| IPAWS Open 2 | EAS_NET/CAP Event Transfer Protocol |
| First (Main) Ethernet | Local network device (provides return IP address) |
| IPAWS CAP Aggregator URL Path (eg. IPAWS_CAPService/IPAWS) | |
| IPAWS_CAPService/IPAWS | |
| USER_IPAWS | IPAWS Logon User |
| 200067 | IPAWS COG Service Logon ID |
| 3rd Party Ancillary Data File IP control options: | |
| None | EAS NET Data File Transfer Protocol |

The section below that is the **3rd Party Ancillary Data File IP control options**. This can be set to "*None*" by selecting that in the dropdown list.

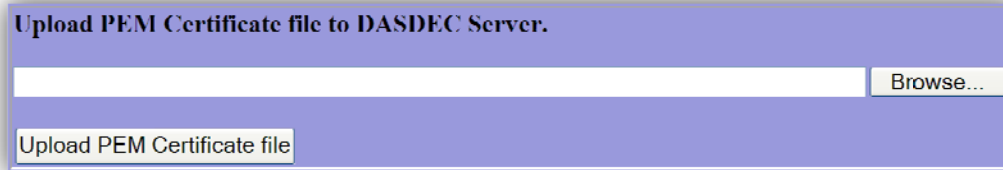
- Next, you need to upload your .pem file to the DASEOC. If you have received a .jks file and have not converted it to a .pem file, you must do that before uploading to the DASEOC. If you have not uploaded a .pem file yet, it should look like this:

IPAWSOPEN requires CAP alerts to be digitally signed using of an authorized IPAWS PEM certificate.

| | |
|------|--|
| None | PEM File Signing Certificate Name <small>(upload below.)</small> |
|------|--|

IPAWSOPEN requires a digital signature for CAP alerts. You must select an authorized IPAWS PEM certificate!

To upload a file, go to the bottom of the page. There will be an uploading interface that looks like this:



Use the button to choose the .pem file from your computer. After it is chosen, click the to upload the .pem file to the DASEOC. Once the file is uploaded, you can choose the .pem file from the dropdown list next to **PEM Signing Certificate Name**.

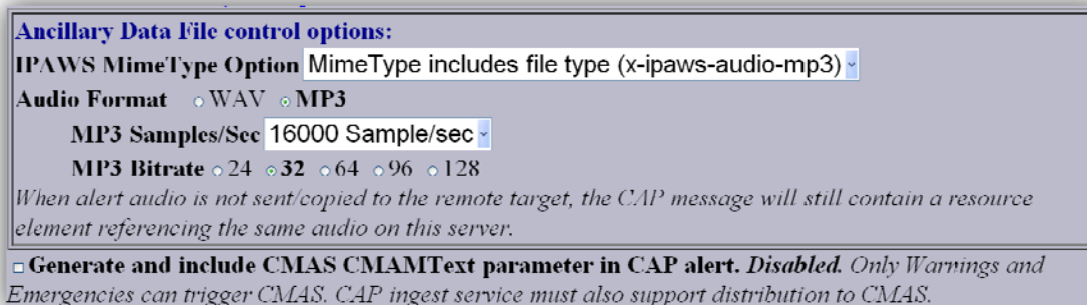
When your .pem file is selected from the PEM Signing Certificate Name dropdown menu, a Certificate Password field should appear. It will look like this:



The **Certificate Password** is your .pem file's *Key Password*, not the KeyStore Password. In this field you can also delete an uploaded certificate by using the button after selecting the file you want to delete in the dropdown list.

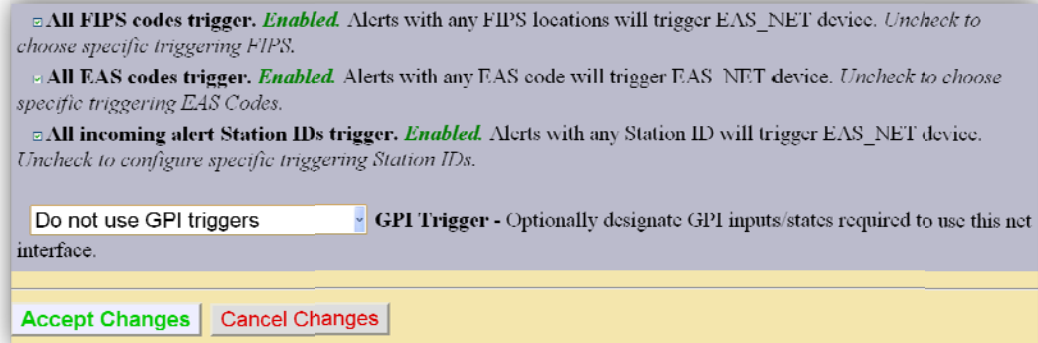
8. The **Ancillary Data File control options** section is next.

In the **IPAWS mimeType Option** dropdown list, select *MimeType includes file type (x-ipaws-audio-mp3)*. For the **Audio Format**, select the **MP3** radio button. You can leave the **MP3 Samples/Sec** at *16000*, and you can leave the **MP3 Bitrate** at *32*. When you are finished configuring this section, it should look like this:



The **Generate and include CMAS CMAMText parameter in CAP alert** check box enables the alert to be sent out from FEMA over CMAS to mobile phones.

9. Lastly, the **FIPS**, **EAS Codes**, and **Alert Station IDs** are to be configured. It is simple; these should all be enabled so that all alerts are sent to the FEMA server from your DASEOC. It should look like this:



With all three of those options enabled, all CAP alerts that are originated from your DASEOC will be sent to the FEMA server.

For the **GPI Trigger**, it should be left at *Do not use GPI triggers*. This option is not used often.

Configuring your DASEOC to send CAP alerts to the FEMA server is now complete. To send an alert, go to **Encoder > General Alerts** and follow the steps to create an alert that is specific to your situation.