

Cablevista(Vcom) - OneNet (Monroe) Interoperability for Out of Band EAS

Once the Cablevista and the OneNet are set up on the network, you can begin configuring EAS for Out of Band.

Log into the OneNet as an Admin and go to the Setup tab as seen in Figure 1.



Figure 1

Click on the Encoder radio button and select the General tab. (Figure 2)

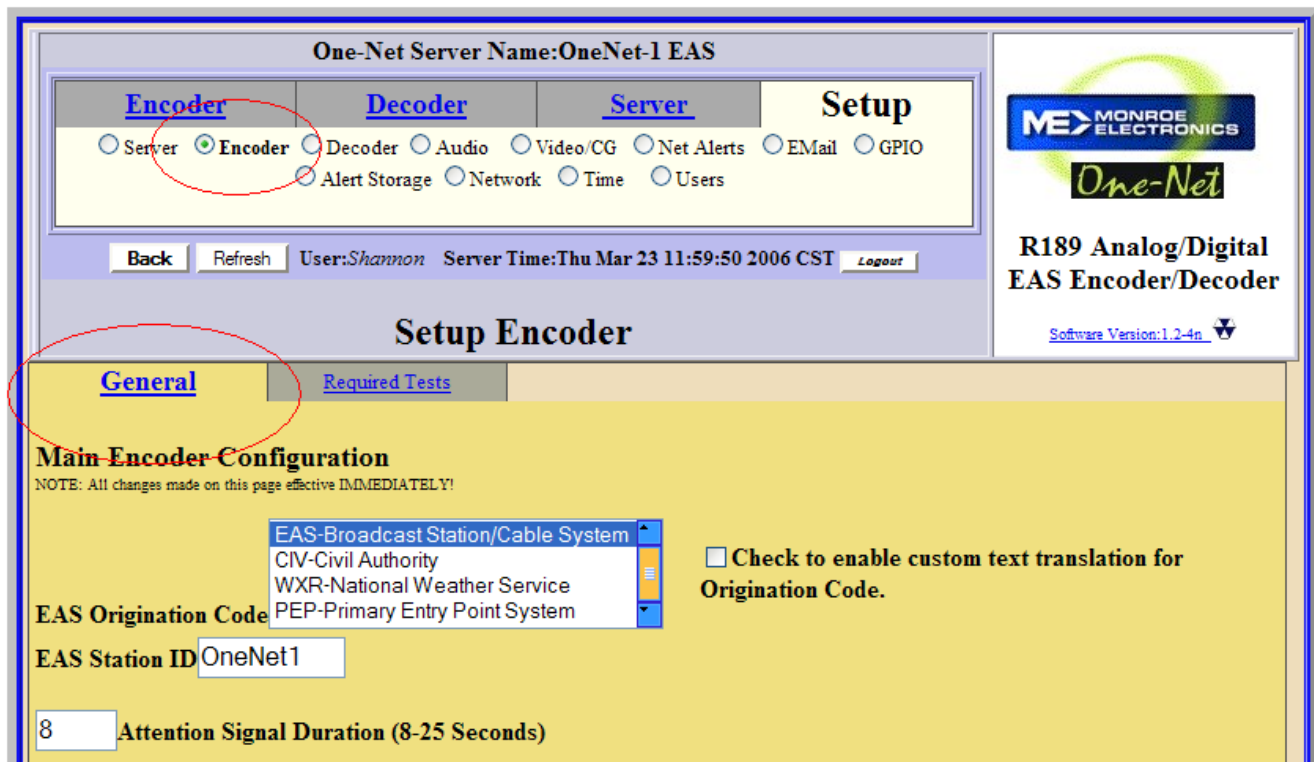


Figure 2

Select EAS-Broadcast Station/Cable System. (Figure 3)

General | **Required Tests**

Main Encoder Configuration

NOTE: All changes made on this page effective IMMEDIATELY!

EAS Broadcast Station/Cable System
EAS-Broadcast Station/Cable System
CIV-Civil Authority
WXR-National Weather Service
PEP-Primary Entry Point System

Check to enable custom text translation for Origination Code.

EAS Origination Code

EAS Station ID OneNet1

8 Attention Signal Duration (8-25 Seconds)

Figure 3

Add as many Configured Available Encoder EAS Codes and Configured Available Encoder FIPS Locations as you will need. (Figure 4) When you are sending an EAS message, you may only pick from items added on this page, not the full list.

Configure Available EAS Types for Encoder

Choose from All EAS Codes:

- NIC : NATIONAL INFORMATION CENTER
- NPT : NATIONAL PERIODIC TEST
- RMT : REQUIRED MONTHLY TEST
- RWT : REQUIRED WEEKLY TEST
- ADR : ADMINISTRATIVE MESSAGE
- AVW : AVALANCHE WARNING
- AVA : AVALANCHE WATCH
- BZW : BLIZZARD WARNING

OR

Add Emergencies | Add Warnings
Add Watches | Add Tests
Add Advisories

Add ->

Configured Available Encoder EAS Codes

These are the EAS Codes available in the encoder interface.

- DSW : DUST STORM WARNING
- FFA : FLASH FLOOD WATCH
- FRW : FIRE WARNING
- AVW : AVALANCHE WARNING
- BZW : BLIZZARD WARNING
- CFW : COASTAL FLOOD WARNING
- CFA : COASTAL FLOOD WATCH
- HMW : HAZARDOUS MATERIALS WARNING
- TSW : TSUNAMI WARNING

Remove Selected

Configure Available FIPS for Encoder

Choose FIPS Subdivision: All

Choose FIPS State: United States (US) (00)

Choose FIPS Counties: All (000)

Add ->

Configured Available Encoder FIPS Locations

These are the FIPS available in the encoder interface.

- California (006000)
- Santa Clara, CA (006085)
- Kansas (020000)
- Hawaii (015000)
- Montana (030000)
- Puerto Rico (072000)

Remove Selected

[Back](#) | [Refresh](#) | [Current Status](#) | [Op Log](#) | [Web Session Log](#)

Figure 4

Next, click on the Audio radio button and Select Encoder Audio.

- Make sure that the Auxiliary Audio is enabled.
- Set the Audio Output Level to desired volume.
- Set a delay if you wish.
- Choose the Line Input Left radio button.
- Set the Record Input Level.

See Figure 5 for example.

Encoder **Decoder** **Server** **Setup**

Server Encoder Decoder **Audio** Video/CG Net Alerts EMail GPIO
 Alert Storage Network Time Users

Back Refresh User:Shannon Server Time:Thu Mar 23 12:13:35 2006 CST Logout

Setup Audio

Decoder Audio **Encoder Audio** [Audio Output Levels/Tests](#) [Radio Tuners](#)

Alert Encoding Audio Configuration

This server can be configured to send the audio output from the encoder to selected sound card speaker output ports. This page allows enabling/disabling of these output ports as well as links for setting output levels. NOTE:Forwarding and encoding share the same output ports; level changes for one applies to the other.This page also provides for selecting the audio device used for audio recording. All changes on this page take effect immediately. On some browsers, hitting enter after setting the Mic Level will fail; on all browsers you can always click on the provided label next to the Mic level after editing to set the change.

Main Audio (Linux audio mixer device /dev/mixer0)

<u>Mono Audio Output Level</u> (1..100) (Click link to edit)	Encoder Output Enable
<u>75</u> This output is L Out on the rear panel audio connector block.	Main Audio device balanced audio output is always ENABLED. <input checked="" type="checkbox"/> Encoder Alert Origination on Main Audio Output ENABLED. Uncheck to disable.

Aux 1 Audio (Linux audio mixer device /dev/mixer2)

<u>Audio Output Level</u> (1..100) (Click link to edit)	Encoder Output Enable
<u>Left</u> <u>75</u>	<u>Right</u> <u>75</u>
<input checked="" type="checkbox"/> Encoder Alert Origination on Aux 1 Audio Output ENABLED. Uncheck to disable.	

Alert audio playback is delayed by a specified number of seconds.
This allows a time delay after closing the EAS broadcast relay in order to compensate for transmitter latency.
Uncheck to disable alert audio playback delay period.
Applies to both origination and forwarding. Seconds of Delay

Select audio device for alert audio file recording :

Main Audio (/dev/mixer0) **Auxiliary Audio 1 (/dev/mixer2)**

Input Source Microphone Input **Line Input Left**

Record Input Level (click here to activate changed value)

Figure 5

Next Click on the radio button Net Alerts and select the DVS644 (SCTE18) tab. (Figure 6)

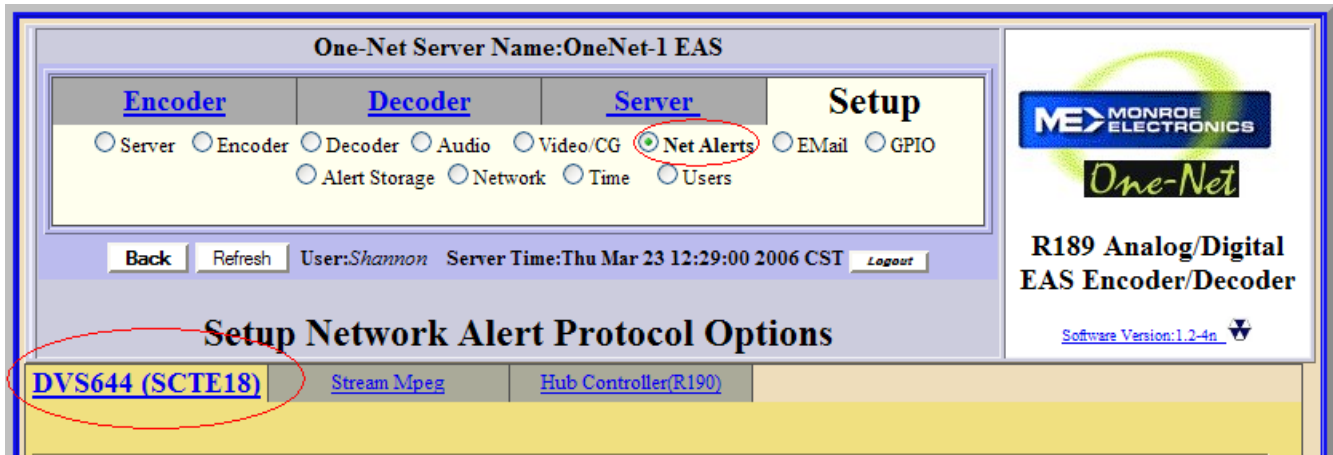


Figure 6

Select Alert Forwarding is Enabled and Encoder Alerts Sent. (Figure 7)

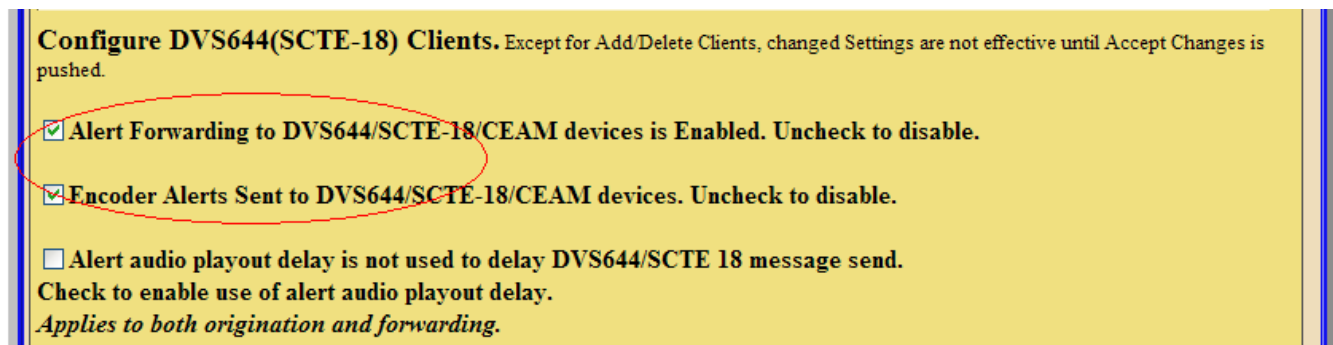


Figure 7

Click the Add DVS644(SCTE18) Client Interface button.

Set up the Client

- Fill in the Client Interface Name
- Make sure 'Client is ENABLED' (checkbox below name)
- Set remote host IP to match the Fast Ethernet IP of the Cablevista.
- Set the Remote Host Port to match the EAS port configured on the Cablevista.
- Set the TTL if the Cablevista is in multicast mode.
- Set to Standard MPEG2 Transport Stream Delivery
- Set to Using Out-Of-Band PID=1FFC.
- Set the Details and InBand information as necessary.

See Figure 8 for an example of these settings.

Configure DVS644(SCTE-18) CEAM Client Connection (client IP & program values apply to both Encoder and Decoder)

Client 0

There are 2 defined client interfaces (max is 32).

Client 0 Client Interface Name

Client is ENABLED. Uncheck to disable client.

Remote Host IP Address Details Video OOB ID

Remote Host Port Details Audio OOB ID

Multicast TTL (0..200) Details InBand Major Channel

Standard MPEG2 Transport Stream Delivery. Details InBand Minor Channel
Check to enable Advanced DSG Delivery.

Using Out-Of-Band PID=1FFC.
Check to enable In-Band PID=1FFB.

Figure 8

Next click to enable MPEG Audio Sync Private Descriptor.

- Set IP Address to the Fast Ethernet Address of the Cablevista if streaming a .wav file that has been internally loaded onto the OneNet otherwise set the IP Address to the address of the transport stream that contains the audio to be streamed as the EAS audio.
- Set the Port to the EAS port configured on the Cablevista if streaming a .wav file that has been internally loaded onto the OneNet otherwise set the Port to the same port as the transport stream that contains the audio to be streamed as the EAS audio.
- Set the audio pid to the default value (hex 45) if streaming internal audio, otherwise, if the audio is coming in through a separate transport stream, set the audio pid to the value of the audio pid (in hex) that will be the EAS audio.

See Figure 9 for an example setup.

Not Using Exception Channel List. *Check to enable Exception Channels.*

Using MPEG Audio Sync Private Descriptor. *Uncheck to disable.*
Provides MPEG audio start/stop signals in a private descriptor.
NOTE: Alert Repeat Control must be set to repeat the alert transmission for audio sync to function.

Audio/Video Stream Multicast IP Address *(set to empty for unicast stream)*

Audio/Video Stream Port

Audio Stream PID *(in Hex, default is 45)*

Figure 9

Set up the priority levels. Remember that priority 11 and below will display a crawl and priorities 12-15 will force tune to a details channel.

If using the private audio descriptor, make sure to set Alert Repeat to 'Always repeat alert send'. If this value is not selected, audio will not work with the crawl!

See Figure 10 for an example setup.

Not Using Generic Private Descriptor. Check to enable Generic Private Descriptor.

Alert type priority selection

Low:3	▼	Advisories
Low:3	▼	Tests
Medium:7	▼	Watches
High:11	▼	Warnings
Highest:15	▼	Emergencies

Alert Start Time on Receiving Device based on Encoder Clock Time.
Check to set immediate start time.

Send Alert Text at all priority levels ▼ Alert Text Control

Always repeat alert send ▼ Alert Repeat Control

10 Alert Message Repeat Period(6-60 seconds)

2 Alert Message Transmission Duplication Count (1-20)

0 Additional Start Delay Time (seconds).
Start Delay == (Audio Delay if enabled) + Additional Time DVS644/SCTE 18 message send delay time = 0 seconds.

20 Duration Extension Time (seconds).
Alert Duration == Audio Duration + Extension Time (max total is 120 seconds)

All FIPS locations will trigger DVS644/SCTE-18/CEAM device. Uncheck to choose specific triggering FIPS.

Figure 10

Make sure to click Accept Changes at the bottom of the page when finished.

Click the Stream Mpeg Tab.

Make sure Encoder Alerts stream MPEG is ENABLED.

Configure audio for streaming.

- Set Audio Format to MPEG1:Layer2
- Set MPEG Audio Bitrate.
- Click on button 'Add Streaming MPEG Client Interface' if there are no clients as of yet.
- Fill in Client Interface Name
- Make sure Client is ENABLED.
- Set IP Address to Fast Ethernet address of the Cablevista.
- Set Port to EAS Port value of the Cablevista.
- If Cablevista is in multicast mode then set the TTL to an appropriate value.

Make sure to click on 'Accept Changes' when finished.

See Figure 11 for an example of the setup.

Setup Network Alert Protocol Options Software Version: 1.2-4n

[DVS644 \(SCTE18\)](#) **Stream Mpeg** [Hub Controller\(R190\)](#)

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

Alert Forwarding to MPEG streaming is Enabled. Uncheck to disable.

Encoder Alerts stream MPEG. Uncheck to disable.

Configure MPEG Streaming Client Connection (client network connection values apply to both Encoder and Decoder)

Audio playout delay period is 10 seconds. Follow link to edit.

MPEG2:1/2-D1 Video Bitrate (100000-10000000) MPEG1:Layer2 MPEG Audio Format
MPEG Audio Bitrate

Client 1 Select Streaming MPEG client *Audio PID is 0x45, Video PID is 0x44*
There is 1 defined client interface (max is 2).

Client 1 Client Interface Name

Client is ENABLED. Uncheck to disable client.

Remote Host Unicast or Multicast
IP Address

Remote Host Port

Multicast TTL (1..200)

All FIPS locations will trigger MPEG streaming. Uncheck to choose specific triggering FIPS.

Figure 11

Sending an EAS Message

To send an EAS Message, click on the Encoder Tab. (Figure 12)

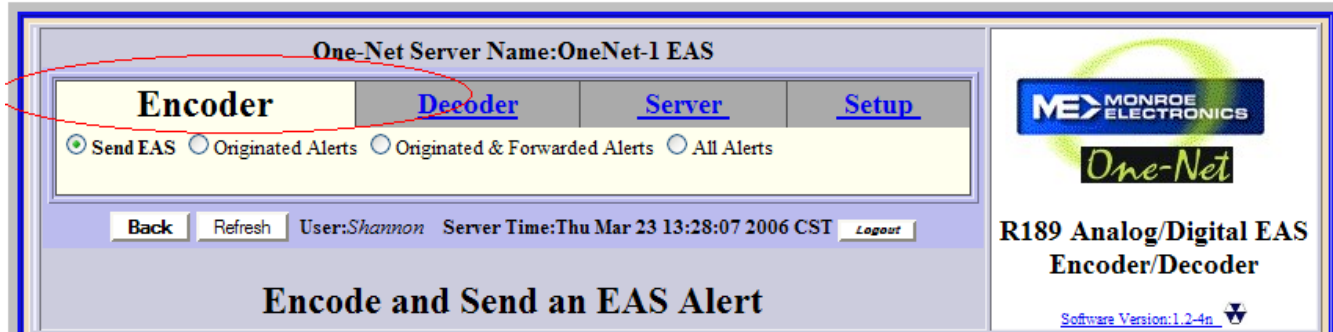


Figure 12

Select the General EAS tab.

- Select the Available EAS Code.
- Add the Selected FIPS.
- If audio is internal, Select Alert Audio.
- When all is configured appropriately, click the button 'Send Alert?'

See Figure 13 for an example.

General EAS [One-Button EAS](#)

Select Available EAS Code *(can be configured)*

VOW : VOLCANO WARNING

Optional Origination Code Override
EAS-Broadcast Station/Cable System

Alert Origination Action Table *(follow links to configure)*

Serial Protocol	EAS NET	DVS168	DVS644 (SCTE18)	Stream MP2	Analog Video	Main Audio
Monroe	U	U	ON	ON	ON	ON
CEMS						
500/1000 CG						

U:Unlicensed N/A:Unsupported

Check to Bypass Use of Serial Interface

Set Effective Start Time for alert :
 Mar 23 2006
 Mon:Day:Year
 13 :40
 Hrs:Mins

Set Alert Duration
 Hours 0 Mins 15

Available FIPS locations *(can be configured)*
 Select one or more FIPS locations, then press Add Selected FIPS to add these locations to the alert selection list.

California (006000)
 Santa Clara,CA (006085)
 Kansas (020000)
 Hawaii (015000)
 Montana (030000)
 Puerto Rico (072000)

Add Selected FIPS->

SELECTED FIPS Location Codes

Current FIPS locations for Alert

- All California (006000) Remove
- All Santa Clara,CA (006085) Remove
- All Hawaii (015000) Remove

EAS Encode String:
 ZCZC-EAS-VOW-006000-006085-015000+0015-0812321-OneNet1 -

EAS Standard Translation:
 'THE BROADCAST STATION OR CABLE SYSTEM HAS ISSUED A VOLCANO WARNING FOR THE FOLLOWING COUNTIES/AREAS: California; Santa Clara,CA; Hawaii; AT 5:21 PM ON MAR 22, 2006 EFFECTIVE UNTIL 5:36 PM. MESSAGE FROM OneNet1.'

Select Alert Audio
 thunder.wav
 Duration: 24.706 seconds
[Listen on Browser](#)
 Play->Front Panel Play->Main
 Delete Selected

Select Pre-Alert
 Audio Announcement (Optional)
 No Audio
 Record Audio File

Send Alert? Reset

[Goto to --> Setup Audio Output Levels](#)

Figure 13

A new screen will appear to verify sending the EAS Message. Click 'Yes, Send Alert!'. (Figure 14)

One-Net Server Name: OneNet-1 EAS

Encoder [Decoder](#) [Server](#) [Setup](#)

Send EAS Originated Alerts Originated & Forwarded Alerts All Alerts

[Back](#) [Refresh](#) User: *Shannon* Server Time: Thu Mar 23 13:51:00 2006 CST [Logout](#)

Encode and Send an EAS Alert

ME MONROE ELECTRONICS
One-Net
R189 Analog/Digital EAS Encoder/Decoder
Software Version: 1.2-4n

[General EAS](#) [One-Button EAS](#)

Review of Prepared Alert

'VOW : VOLCANO WARNING'
from 'EAS-Broadcast Station/Cable System'

Alert effective 'Thu Mar 23 13:50:00 2006' for 0 hrs 15 mins
for the following areas:

All California (006000)
All Santa Clara, CA (006085)
All Hawaii (015000)

Alert audio file : 'thunder.wav'

[Encoder STATION ID is : 'OneNet!'](#)

Yes, Send Alert! [Cancel Send Alert](#)

[Back](#) [Refresh](#) [Current Status](#) [Op Log](#) [Web Session Log](#)

