CiUGAA

Cinegy EAS Gateway 21.2

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EAS Gateway is a powerful tool introduced to enable receiving US emergency alert messages from TFT 911 device and play them automatically.

Cinegy EAS Gateway Config	х
EAS Settings Service Settings Air Servers Logging HTTP Audio Setup	
Port to listen: COM1 Autodetect CGEN Protocol:	r
Check Device every: 600 💲 sec	
EAS instruction	1
Stop Alert	
Stop Alert By Timeout: 120 C sec GPI Device: SEALEVEL	
Enable Stop Alert By GPI Bit: 0 🗘 Stop GPI bit state: 0 🌲	
Ok Cancel Apply	

Cinegy EAS Gateway allows Cinegy Air automatically play EAS audio and video data received from the following devices:

- TFT 911
- SAGE ENDEC 3644

Overview

The following diagram depicts the concept of Cinegy EAS Gateway Service and Cinegy Air Servers configuration:



There are two protocols supported. Using STD protocol the unit sends the START and STOP alarm commands. By using the 'generic' EAS protocol, there is no STOP command being sent via RS232, but GPI signaling is supported to stop the alarm (GPI connection is required).

The next diagram explains the Cinegy EAS Gateway interaction with Cinegy Air Server and CG overlay application:



Cinegy EAS Gateway Service repeats Analogue audio as RTP audio output and activates the predefined emergency Cinegy Titler template, passing the alarm text (if received).

Installation

To start the installation, run the Setup.exe file from your Cinegy EAS Gateway folder within Cinegy Air PRO installation package. The following wizard takes you through the installation steps:



Press "Next" to proceed with the installation or "Cancel" to abort and exit the setup wizard.

Select the checkbox to accept the license agreement and press "Next" to proceed:

🕼 Cinegy EAS Gateway Setup	_		×
End-User License Agreement Please read the following license agreement carefully	[iNQ	gy
Cinegy End-User License Agreement (EULA) Please read the following license agreement carefully before in opening the packet(s) containing the software or by installing the aforementioned software, you indicate your acceptance of the p this license agreement.	istallat ie irovisio	tion. By ons of	^
Terms Cinegy GmbH (Cinegy) is the owner or Licensor of the intellect (the Software) which it licenses under the conditions set below user (the Licensee).	ual pro	operty end-	~
\checkmark I accept the terms in the License Agreement			
Print < Back Next >		Cano	el

Press the "Change" button to change the installation folder for Cinegy EAS Gateway, if needed.

🞲 Cinegy EAS Gateway Setup	_		×
Destination Folder Click Next to install to the default folder or click Change to choose	e another	iNQ	gy
Install Cinegy EAS Gateway to:			
C:\Program Files (x86)\Cinegy\Cinegy EAS Gateway 21.2.0\			
Change			
< Back Ne	evt >	Cano	el
C DBCK	CAL 2	Canc	

Press "Next".

In the next dialog, press the "Install" button to begin the installation. A progress bar will show the progress of the installation process.

To complete the installation, press "Finish". Cinegy EAS Gateway application will be installed on your machine.

Configuration



To launch the Cinegy EAS Gateway configurator, go to Start > Cinegy > Cinegy EAS Gateway Config or use the corresponding shortcut on your desktop.

The following configuration window will be open:

Cinegy EAS Gateway Config	х
EAS Settings Service Settings Air Servers Logging HTTP Audio Setup	
Port to listen: COM1 Autodetect CGEN Protocol:	~
Check Device every: 600 💲 sec	
EAS instruction ———	
Stop Alert Stop Alert By Timeout: 120 _ sec GPI Device: SEALEVEL	
Stop Current Alert	
Enable Stop Alert By GPI Bit: 0 C Stop GPI bit state: 0 C	
Ok Cancel Apply	

Chapter 1. EAS Settings

On the "EAS Settings" tab define the following EAS receiver(s) settings:

- Port to listen choose the serial port to be listened to for emergency alert messages from connected EAS receiver(s).
- Autodetect press this button to automatically detect a connected TFT EAS 911 device.
- Check Device every define the time interval in seconds for the port to be checked for a connected TFT EAS 911 device.



The "Autodetect" and "Check Device every" features are only available for the standard CGEN protocol.

• CGEN Protocol – choose the CGEN protocol type: standard, generic or HTTP.



Please note that HTTP CGEN protocol type is currently under development.



When standard CGEN protocol is used for retrieving EAS messages, the port autodetection and automatic check for connected device become available.

- EAS instruction short technical EAS configuration instruction.
- Stop Alert the "Stop Current Alert" button is used to stop retrieving the current emergency alert message from a connected EAS receiver. To activate this button, select the "Enable" option, which protects this button from accidental clicking.
- Stop Alert By Timeout an optional timeout value, used to stop alert broadcasts that have not stopped by other means before the defined period.
- GPI Device select the available GPI device from the drop-down list.
- Stop Alert By GPI Bit optional GPI bit to use as a stop signal to indicate to the EAS service that an alert has stopped.
- Stop GPI bit state define the GPI bits state to indicate a stop message.



The "Stop Alert By Timeout", "Stop Alert By GPI Bit" and "Stop GPI bit state" options are topical only when generic CGEN protocol is used for retrieving EAS messages.

Chapter 2. Service Settings

On this tab EAS Gateway service authentication and management is performed.

Cinegy EAS Gateway Config			×
EAS Settings Service Settings	Air Servers Logging	HTTP Audio Setup	
Service Status : Not Installed			
Install Service	_ Service Logon ——		
	Local system accord	count	
Uninstall Service	This account		
	Password:		
Start Stop			J
		Ok	Cancel Apply

In the "Service Logon" settings section you can specify the account under which the service logs on. You can use the local system account or a specific account with sufficient permissions (including the "log on as a service" privilege). Using an account without sufficient permissions or rights will cause outright failure or faults, which will be tracked in the diagnostic logs. You need to enter the login name and password for this specific account in the corresponding fields.

Service logon changes will be applied only after the service restart.

The "Service Status" field indicates whether the Cinegy EAS Gateway service is installed, running or stopped.

Press the "Install Service" button to install the Cinegy EAS Gateway service. The service can be uninstalled by pressing the corresponding "Uninstall Service" button.

Once the service is installed, it should be started manually by pressing the "Start" button.

Cinegy EAS Gateway can also be monitored as a standard Windows service:

🌼 Services						- 🗆	×
File Action Viev	v Help						
In Internet in Int	o 🗟 🔀 📷 🕨 🖿 II 🕨						
🤍 Services (Local)	Services (Local)						
	Cinegy Alert Gateway Service	Name	Description	Status	Startup Type	Log On As	^
		🏟 Channel Relay Service		Running	Automatic	Local System	
	Stop the service	Cinegy Alert Gateway Service		Running	Manual	Local System	
	The service	Cinegy Archive Service (15.0.2734)	Cinegy Arc	Running	Automatic (D	MUNICH\bas	
		🎑 Cinegy Capture Archive Adapter	Cinegy Cap		Manual	Local System	
		🎑 Cinegy Capture Planner Host	Cinegy Cap	Running	Automatic	Local System	
		🎑 Cinegy Convert Watch Service	Bridge servi	Running	Automatic (D	Local System	
		🎑 Cinegy License Service (21.0.33245)		Running	Automatic	Local System	
		🎑 Cinegy Process Coordination Service	Cinegy Proc		Automatic	Local System	
		🎑 Cinegy Time Manager Logging Service		Running	Automatic (D	Local System	
		🎑 Cinegy Time Manager Synchronization Service		Running	Automatic (D	Local System	
		Cinegy.TrafficGatewayService(5.0.255.12285)	TrafficGate		Manual	Local System	
		🎑 Client License Service (ClipSVC)	Provides inf		Manual (Trig	Local System	
		🎑 CNG Key Isolation	The CNG ke	Running	Manual (Trig	Local System	
		🖏 COM+ Event System	Supports Sy	Running	Automatic	Local Service	
		🤹 COM+ System Application	Manages th		Manual	Local System	
		🎑 Connected Devices Platform Service	This service	Running	Automatic (D	Local Service	
		Connected Devices Platform User Service_2ce1d	This user se	Running	Automatic	Local System	
		Connected User Experiences and Telemetry	The Connec	Running	Automatic	Local System	~
	L	<					>
	Extended Standard						

Chapter 3. Air Servers

Here you can specify the alarm notification settings individually for each specified Cinegy Air server instance.

Cinegy EAS Gateway Config	x
EAS Settings Service Settings	Air Servers Logging HTTP Audio Setup
localhost	Setting
Instance #U	Server: localhost # 0 Alarm Template:
	D:\Cinegy Titler templates\Alert template.cintitle
	CG branding option: Cinegy Titler
Add Remove	Heartbeat interval: 60 🗧 sec
	Ok Cancel Apply

Press the "Add" button to add a new Cinegy Air server instance that will receive EAS alarm messages. Press the "Remove" button to delete the currently selected Cinegy Air server instance.

Within the "Settings" configuration group set up the following parameters:

- Server enter the Cinegy Air server name or its IP address and port and define what Engine instance will be used for processing.
- Alarm Template used to define an alert template, in *.cintitle format. Pressing the "..." button will start a dialog for browsing to select an appropriate Cinegy Titler template.
- CG branding option Cinegy Titler templates are used as alarm templates.
- Alarm Text Variable used to define the specific variable name which is related to whatever text elements in the template are required to receive the actual alert message body.
- Heartbeat interval define the time interval in seconds before Cinegy EAS Gateway is put in a warning state.

Chapter 4. Logging

Here you can define Cinegy EAS Gateway logging settings:

Cinegy EAS Gate	way Config					Х
EAS Settings	Service Settings	Air Servers Log	ging HTTP	Audio Setup		
Logging Level :	Info	- Soun	d Logging	Sound Logging Level :	200 🗘	
Log Folder :	C:\ProgramD	ata\Cinegy\EASGa	iteway			
New Log Every:	24 📜 H	rs				
				Ok Cancel	Apply	

Define the following logging parameters:

- Logging Level specify the level of errors to be reported; you can choose an "Info", "Warning" or "Error" level type.
- Sound Logging check the "Sound Logging" option to enable the sound logging level for debugging purposes.
- **Sound Logging Level** the minimal sound level (other than the background noise) to be reflected in the log. Here enter the value from 0 to 32767.

This is useful in debugging purposes to ensure the service is successfully accepting the sound from the selected device.

- Log Folder define the location of the log file where the sequence of operations is recorded. Press the "..." button to locate the folder where the debug log file in the text format will be stored or simply enter the file path via the keyboard.
- New Log Every define the frequency of a new log file creation (in hours).

Chapter 5. HTTP

On this tab the HTTP server settings should be defined.

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	-	•	I

To enable HTTP server settings CGEN Protocol should be set to HTTP.

Cinegy EAS Gateway Config X
EAS Settings Service Settings Air Servers Logging HTTP Audio Setup
HTTP Server settings
Port: 8090 🗘 💿 Enable HTTP GPIOUT Events
Synthetic Alarm Voice: 🔤 Synthetic Alarm
Audio mode: None Duration: 0
Text to display: Alert Message Text
Text to sneech. Alert Message sneech
Start Stop
Ok Cancel Apply

5.1. HTTP Server Settings

Select the "Enable HTTP GPIOUT Events" option and define the port number of the HTTP server to receive alerts.

Synthetic Alarm Voice – synthesized system voice to be used for announcing the alert message on condition that "Synthetic" audio mode is enabled in the HTTP alert script.

Refer to the HTTP Alert Sample Scripts article to get information on the HTTP alert script format.

Enable Tone Alarm – select this option to initiate audio notice attention signals before the alert message is announced.

The voice availability depends on the system "Speech" settings.

5.2. HTTP Alarm Test

Here you can define the HTTP alarm test settings to check your system if a physical EAS device is not available:

- Audio mode alarm audio mode: "synthetic", "bypass" or none.
- Duration duration of the alarm test.
- Text to display text of the alert message on the display.
- Text to speech text of the voice alert message.

Start

Press the "Start" button to start the alarm test.

Stop

Press the "Stop" button to stop the alarm test.

Chapter 6. Audio Setup

Here the audio settings can be configured.

Cinegy EAS Gatewa	ay Config	×
EAS Settings S	ervice Settings Air Servers Logging HTTP Audio Setup	
Audio Device:		
IP & port:	239.0.0.1 1 RTP	
Primary IP:	0 . 0 . 0 . 0 🔲 Multicast	
Backup IP:	0.0.0 TTL: 1	
Audio type:	MPEG Audio Tit Rate: 320 kbit/s T	
Audio Profiles fil	le:	
Audio Profile:	Generate Control Audio Beeps	
	Ok Cancel Ap	ply

Define the following parameters:

- Audio Device choose the corresponding audio input device from the drop-down list, which should be connected to the audio output from the physical EAS device.
- **IP** and port enter a destination multicast address and port, which will be used to re-stream the EAS audio output to the network. Define the stream protocol type by choosing either RTP or UDP from the drop-down list (RTP is recommended).
- **Multicast** define the broadcast transmission method (unicast or multicast). Multicast is enabled when this option is selected.
- Primary IP enter the IP address of the primary local network adapter that will be used for multicasting.
- **Backup IP** optionally enter the IP address of a secondary local network adapter that will be used for multicasting as well as the primary IP.

It is recommended to set up a static IP address for these local adapters. The "Primary IP" and "Backup IP" parameters affect multicast mode only.

• **TTL** – define the number of routers (hops) that multicast traffic is permitted to pass through before expiring on the network.

The "TTL" parameter affects multicast mode only.

Refer to this documentation for more information on the TTL option.

• Audio type – define the audio type and its associated audio bitrate by choosing the desired options from the corresponding drop-down lists.

- Audio Profiles file select an XML audio profile file, that has been previously created in the Cinegy Air audio matrix editor. Press "..." to browse for the needed file using the common "Open" dialog.
- Audio Profile select the audio profile from the drop-down list:

Audio Profile:	Ducking Normal 🗾 🗖 Generate Control Audio Beeps					
	Ducking Normal Ducking More Custom ducking	k		Ok	Cancel	Apply

Refer to the **Audio Profile Editor** article in the Cinegy Air Manual to get more information on creating audio profiles.

• Generate Control Audio Beeps – select this option to produce the corresponding sounds in case of audio failure.

Once the settings are configured, press the "Apply" button for the changes to take effect.

HTTP Alert Sample Scripts

The Cinegy EAS Gateway service supports a simple HTTP protocol for triggering an EAS event. This is provided for easy testing of the system when a physical EAS device is not available.

The below samples of PowerShell scripts demonstrate how to raise and terminate HTTP alerts.

.1. Raise Alert

```
function Invoke-HTTPMethod($MethodUrl, $Method="GET", $Body="")
{
    $web = new-object net.webclient
    # $web.Headers.add("Accept", "application/json, text/javascript, */*; q=0.01")
    if($Method -eq "GET")
    {
        $web.DownloadString(${MethodUrl})
    }
    if($Method -eq "POST")
    {
        $web.UploadString(${MethodUrl},$Body)
    }
}
$body = "<HTTPAlert TextToDisplay=`"Alert Message Text`" Duration=`"30`"><Audio</pre>
Mode=`"Synthetic`" TextToSpeech=`"EAS voice alarm!`" /></HTTPAlert>"
Invoke-HTTPMethod -MethodUrl "http://localhost:8090/EASGateway/RaiseAlert" -Method
"POST" -Body $body
pause
```

.2. Stop Alert

```
function Invoke-HTTPMethod($MethodUrl, $Method="GET", $Body="")
{
    $web = new-object net.webclient
    # $web.Headers.add("Accept", "application/json, text/javascript, */*; q=0.01")
    if($Method -eq "GET")
    {
        $web.DownloadString(${MethodUrl})
    }
    if($Method -eq "POST")
    {
        $web.UploadString(${MethodUrl},$Body)
    }
}
Invoke-HTTPMethod -MethodUrl "http://localhost:8090/EASGateway/StopAlert" -Method
"POST" -Body ""
pause
```

.3. Syntax

Parameter	Value			
	"Synthetic"			
Audio Mode	"Bypass"			
	"None"			
TextToSpeech	"Displayed" In the given example the alert message text from the "TextToDisplay" string will be announced.			
TextToDisplay	Alert message text			
Duration	Alert message duration Alert will be activated before StopAlert if Duration = 0			