



Cinegy EAS Gateway 21.2

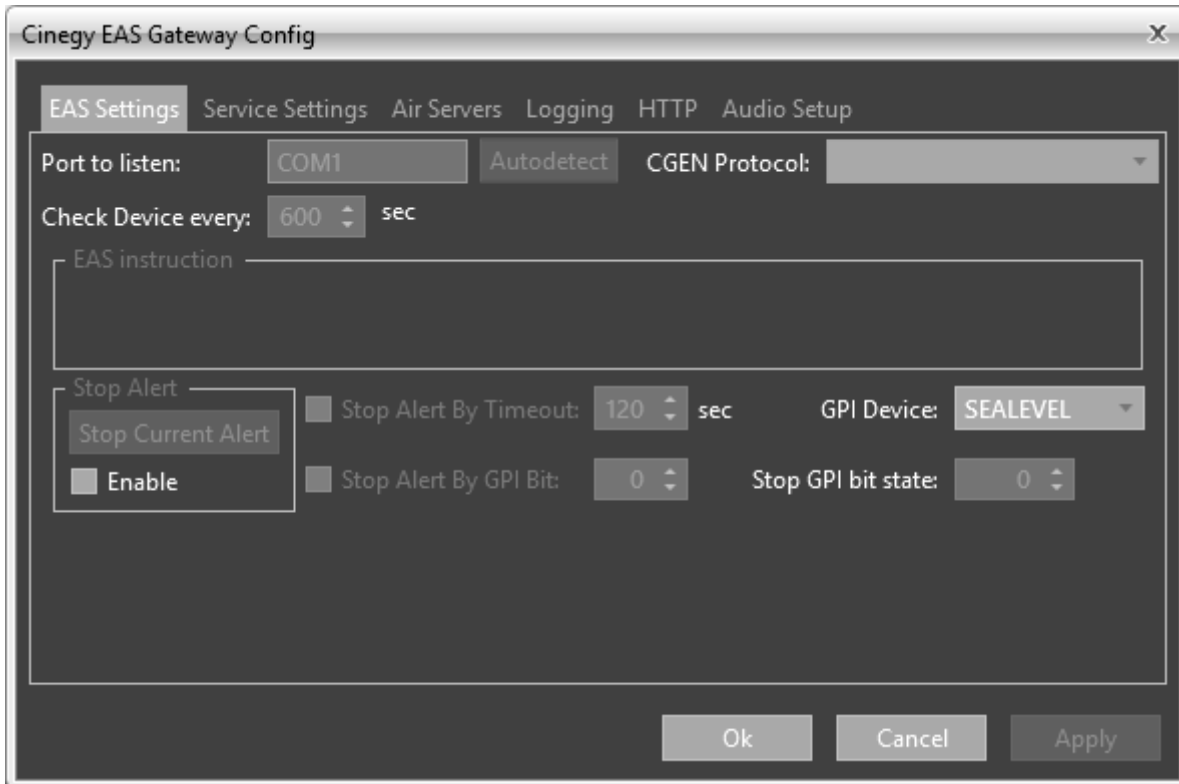
© Cinegy GmbH

Document version: b4b4221

Table of Contents

Overview	2
Installation	3
Configuration	5
1. EAS Settings	6
2. Service Settings	7
3. Air Servers	9
4. Logging	10
5. HTTP	11
5.1. HTTP Server Settings	11
5.2. HTTP Alarm Test	11
6. Audio Setup	13
HTTP Alert Sample Scripts	15
.1. Raise Alert	15
.2. Stop Alert	15
.3. Syntax	16

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

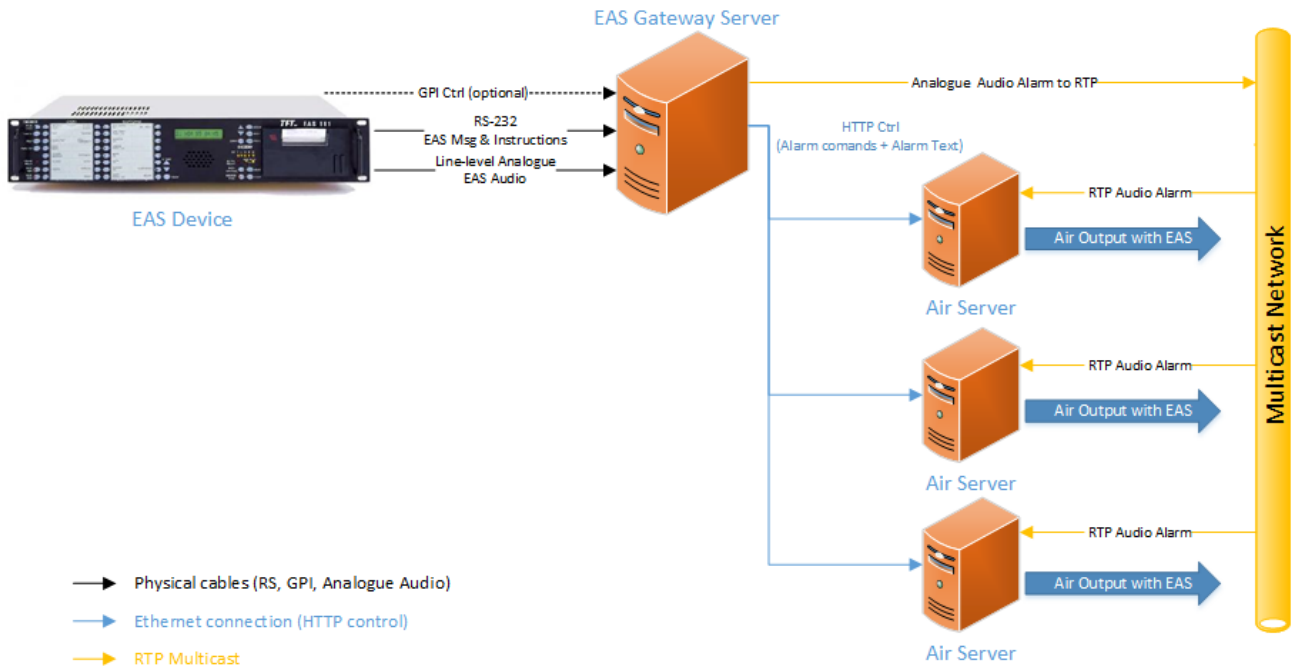


Cinegy EAS Gateway allows [Cinegy Air](#) automatically play EAS audio and video data received from the following devices:

- TFT 911
- SAGE ENDEC 3644

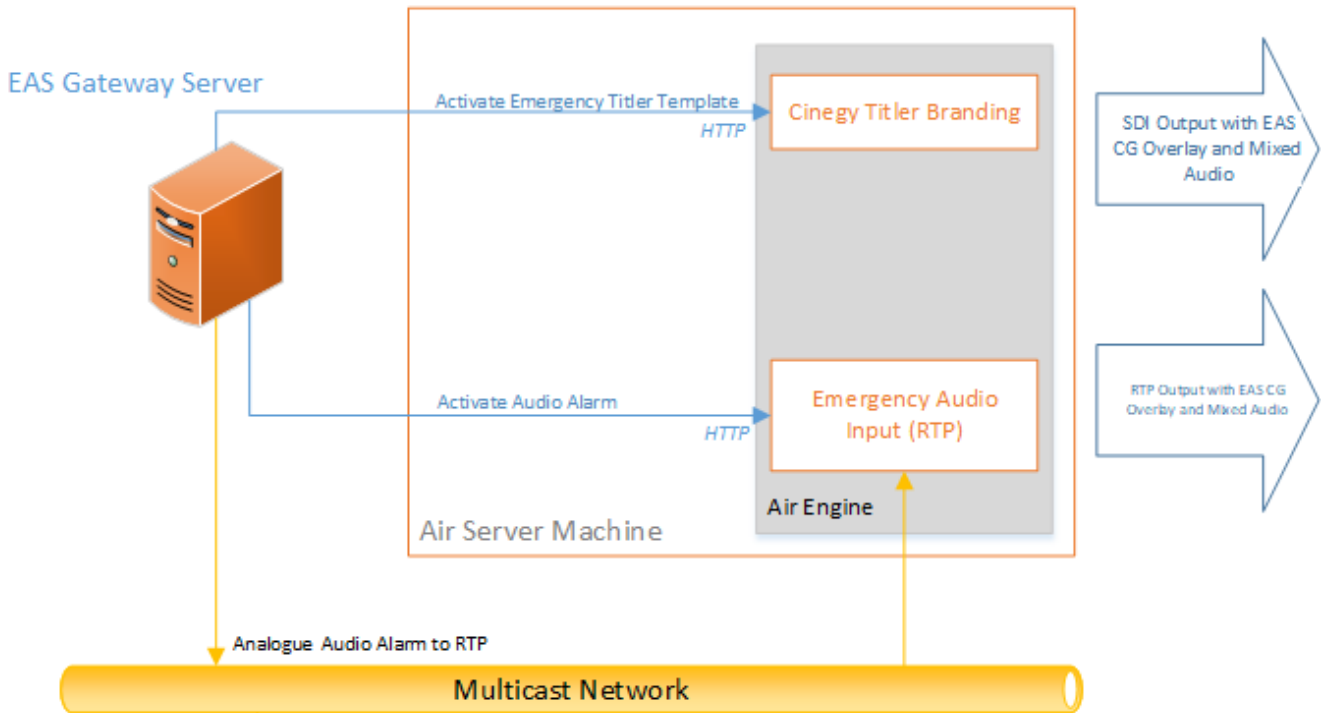
Overview

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).

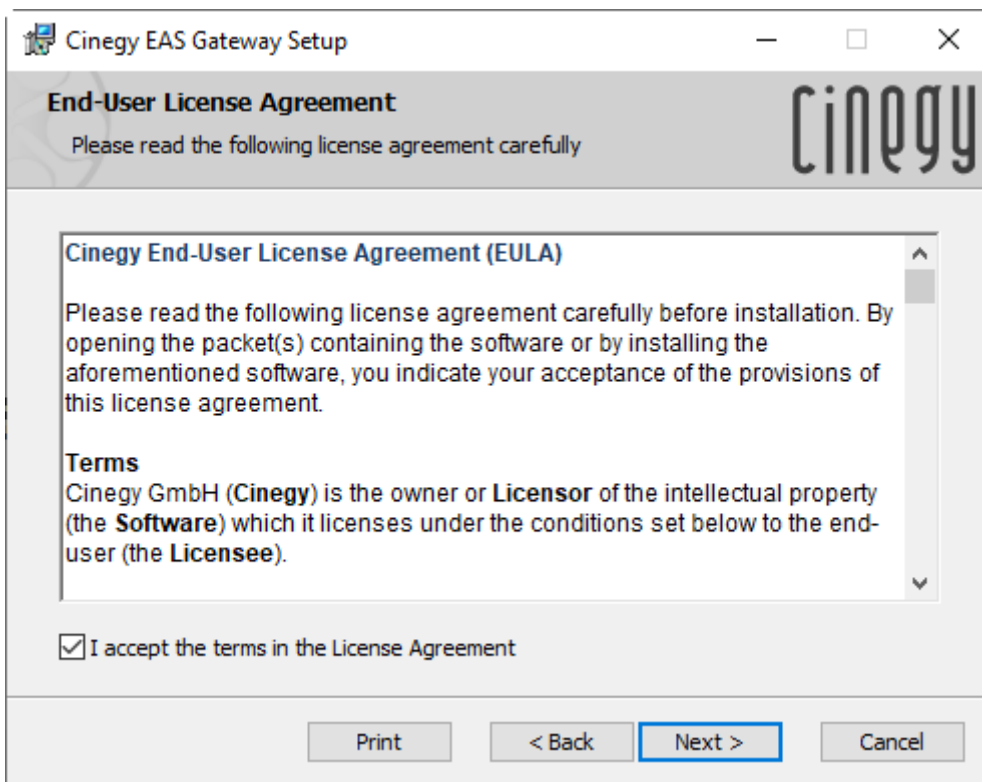
Installation

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:

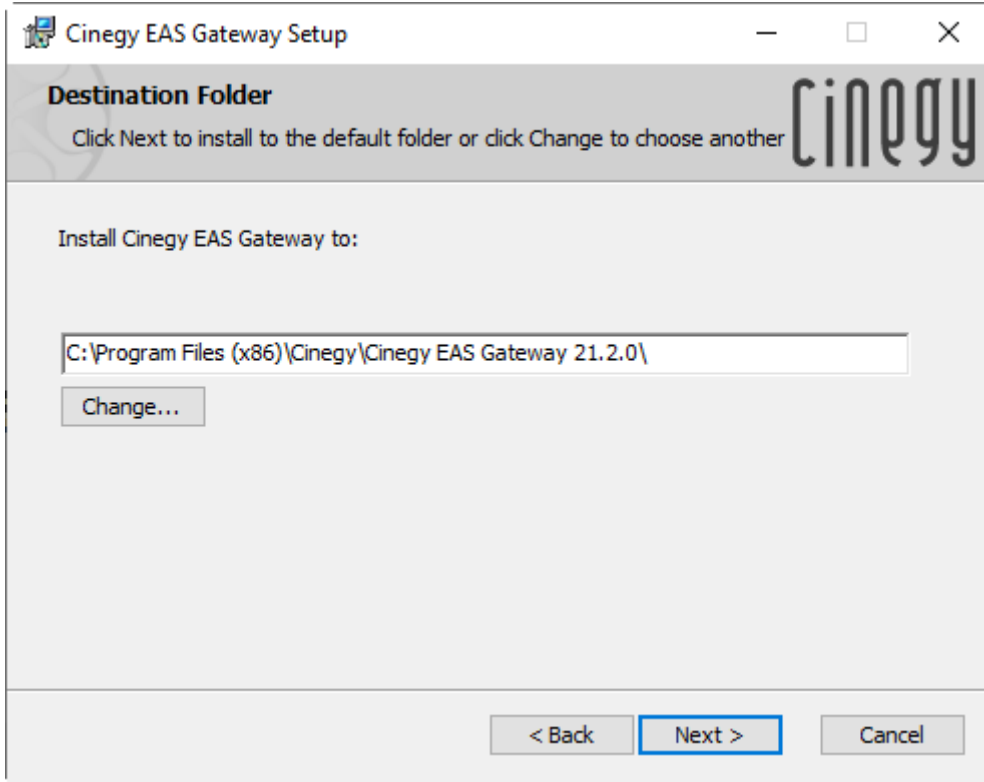


Press "Next" to proceed with the installation or "Cancel" to abort and exit the setup wizard.

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



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



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.

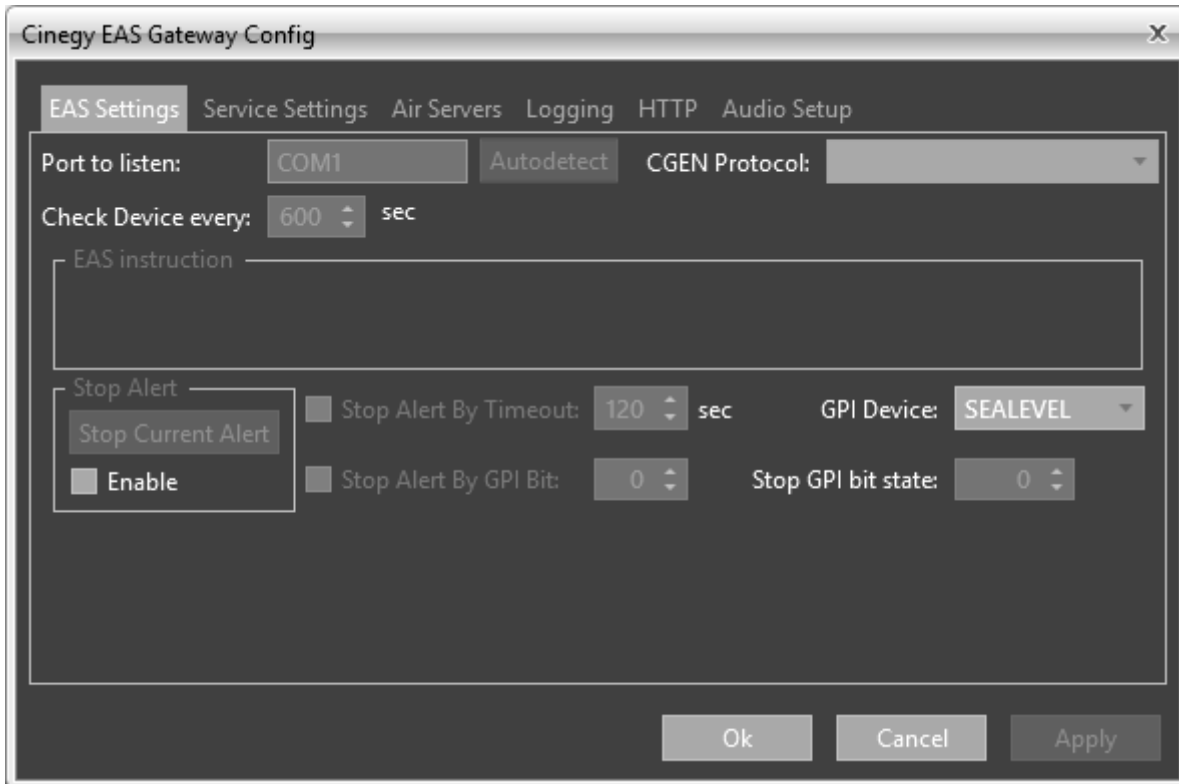
To complete the installation, press "Finish". Cinegy EAS Gateway application will be installed on your machine.

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:



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.

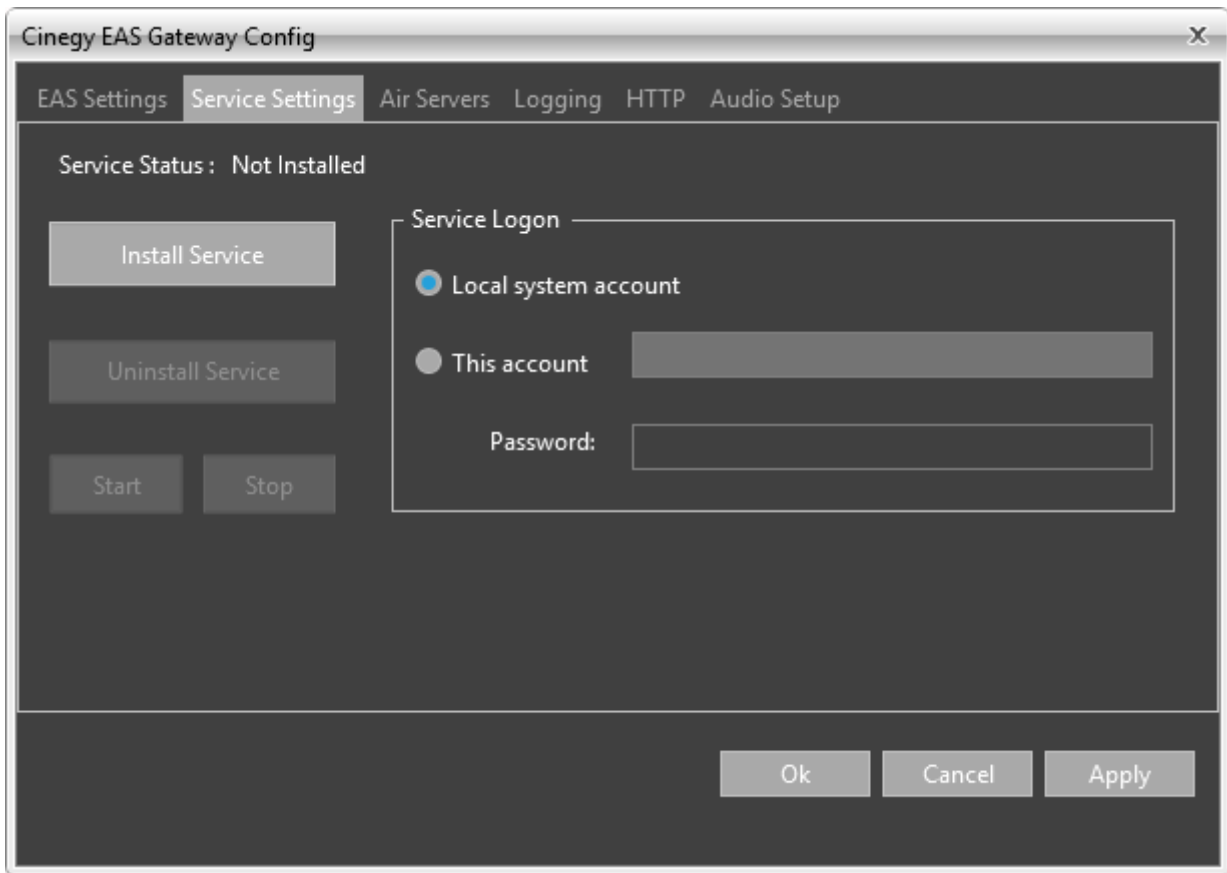
- **EAS instruction** – short technical EAS configuration instruction.
- **Stop Alert** – the "Stop Current Alert" button is used to stop retrieving the current emergency alert message from a connected EAS receiver. To activate this button, select the "Enable" option, which protects this button from 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.

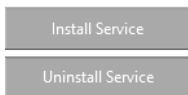


In the "Service Logon" settings section you can specify the account under which the service logs on. You can use the local system account or a specific account with sufficient permissions (including the "log on as a service" privilege). Using an account without sufficient permissions or rights will cause 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.

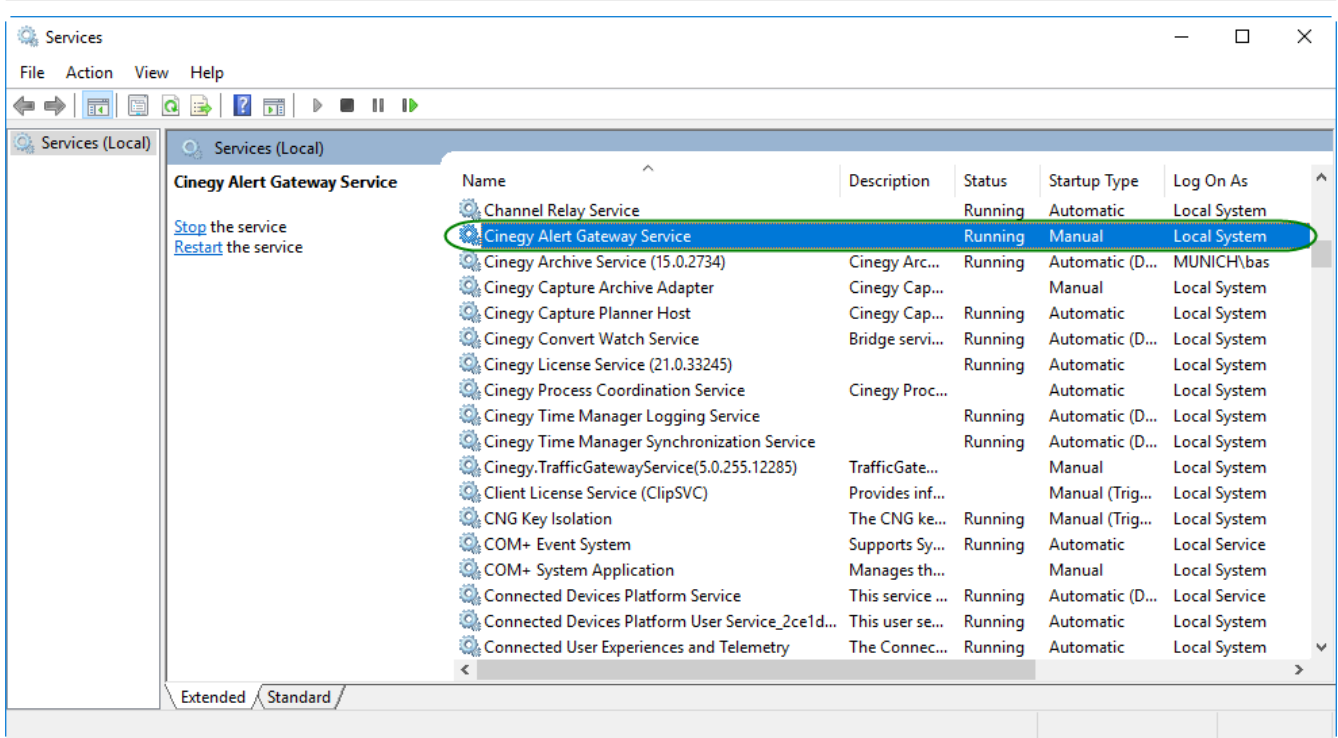
The "Service Status" field indicates whether the Cinegy EAS Gateway service is installed, running or stopped.



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

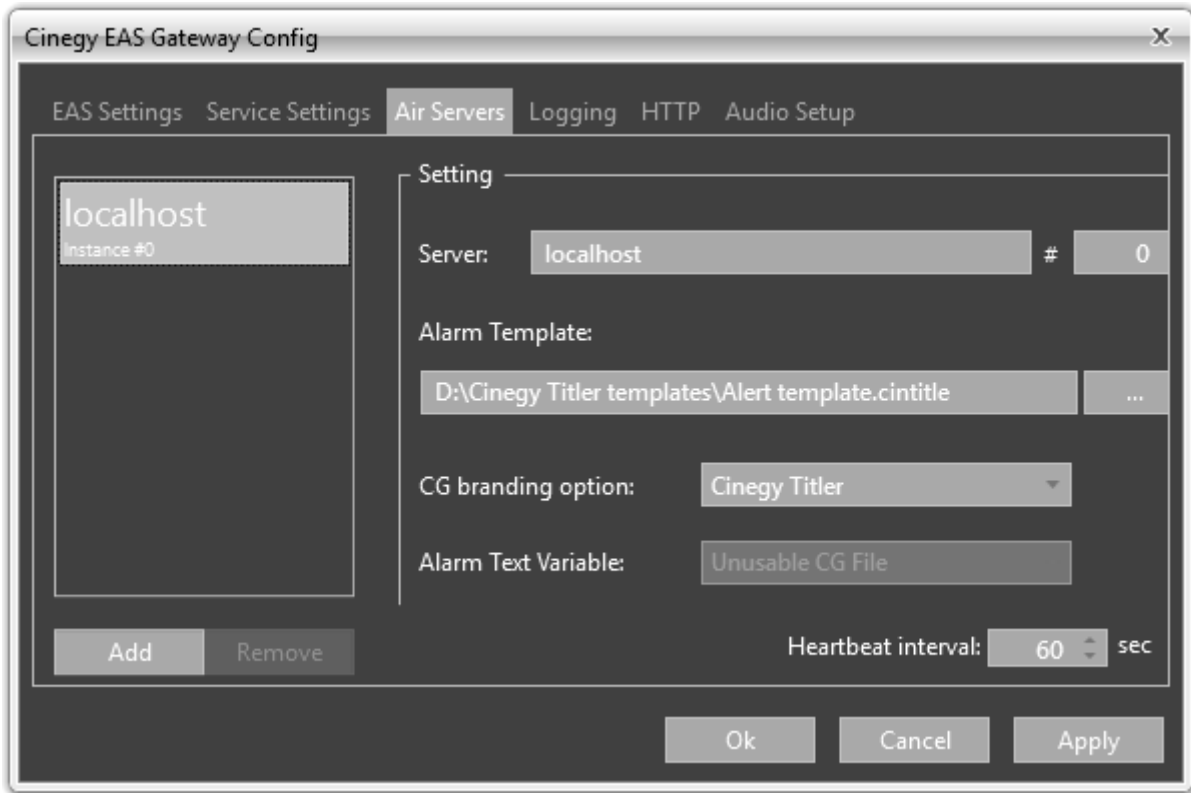
Once the service is installed, it should be started manually by pressing the "Start" button.

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



Chapter 3. Air Servers

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



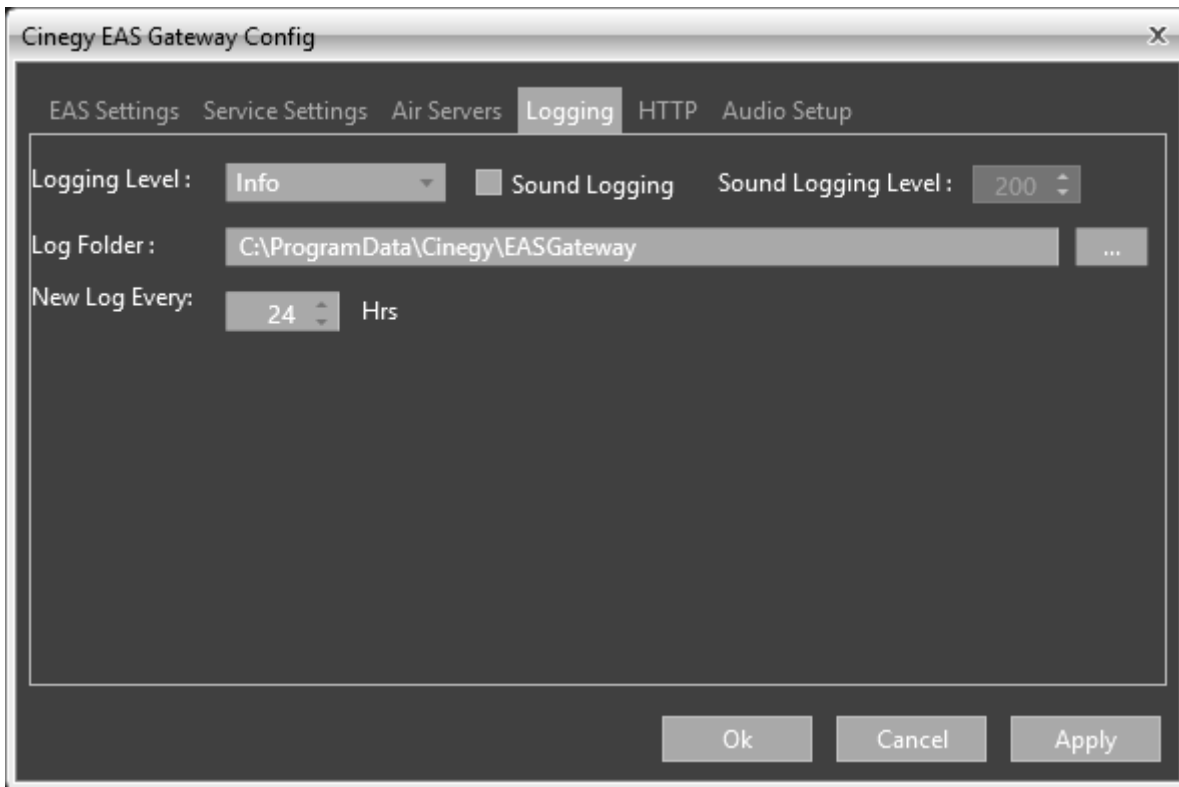
Press the "Add" button to add a new Cinegy Air server instance that will receive EAS alarm messages. Press the "Remove" button to delete the currently selected Cinegy Air server instance.

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:



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.

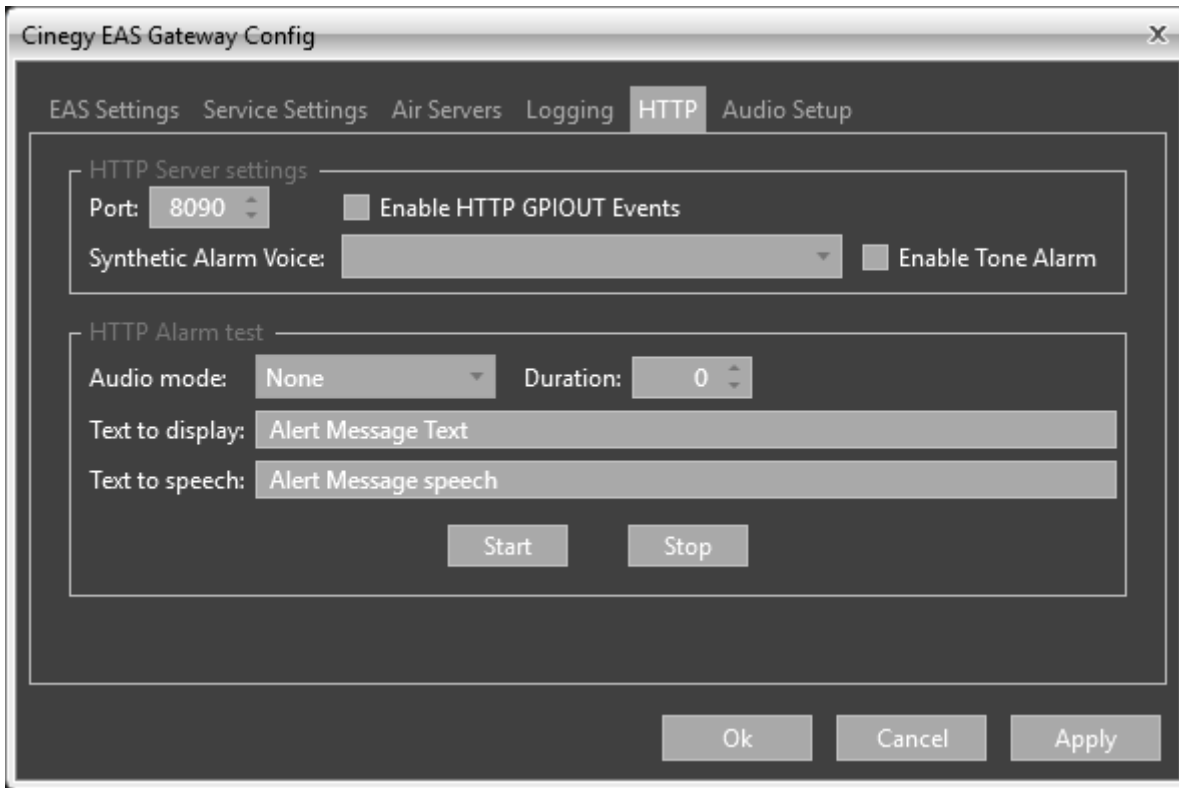
- **Log Folder** – define the location of the log file where the sequence of operations is recorded. Press the "..." button to locate the folder where the debug log file in the text format will be stored or simply enter the file path via the keyboard.
- **New Log Every** – define the frequency of a new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

Chapter 5. HTTP

On this tab the HTTP server settings should be defined.



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



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

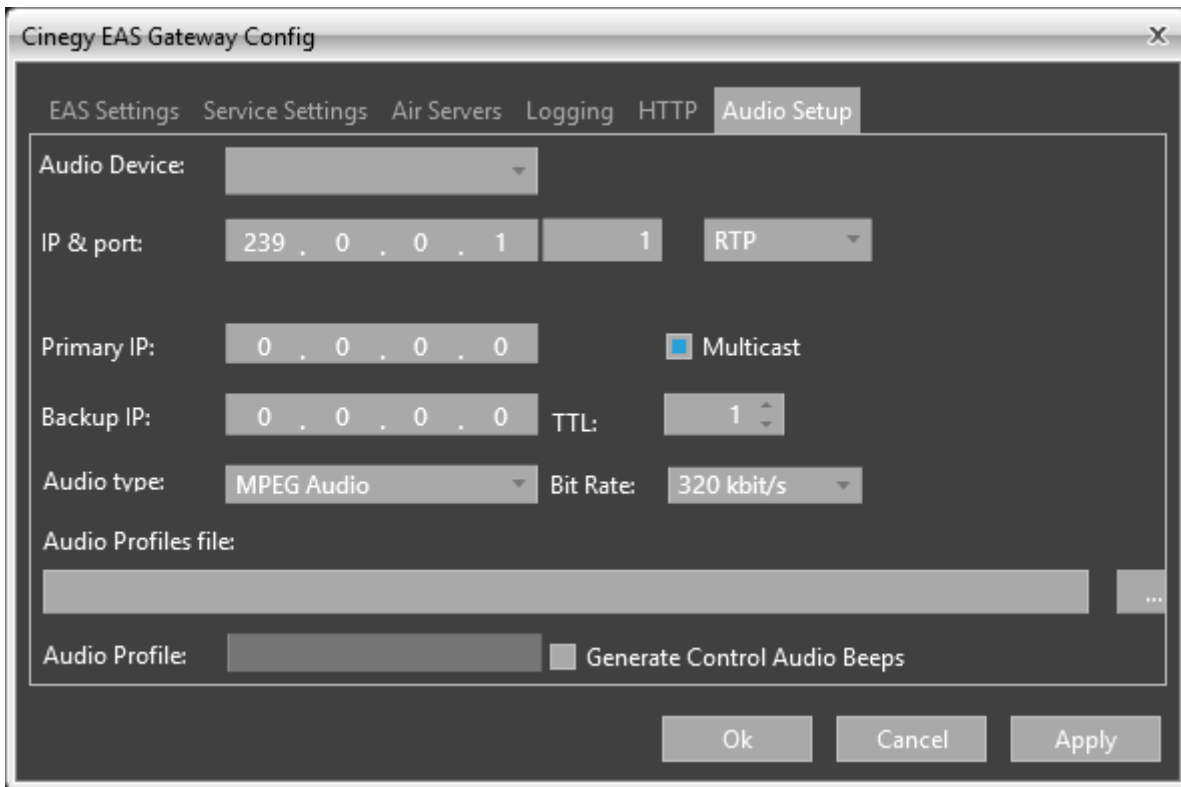
Press the "Start" button to start the alarm test.

Stop

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

Chapter 6. Audio Setup

Here the audio settings can be configured.



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.



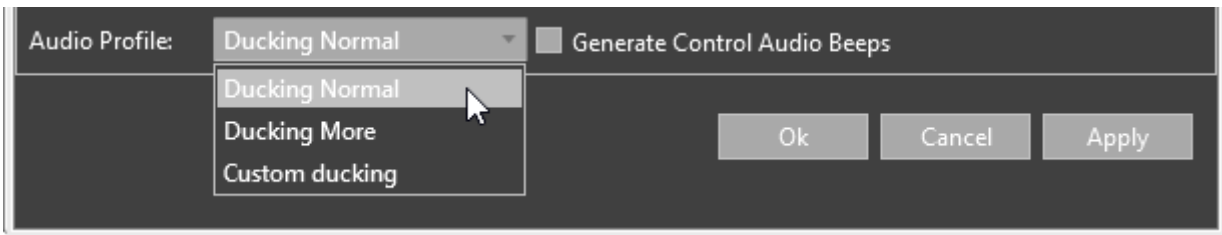
Refer to [this documentation](#) for more information on the TTL option.

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



The "Bit Rate" option is available only for MPEG and AAC audio types.

- **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:



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
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
Audio Mode	"Synthetic"
	"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