



Asgard Edge Plugin

Recorder | Annotator | File Transfer

User Manual Plugin v1.5.1.4

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Revision History

Document Version	Issued	Notes	Comments
1.1.0	24 February 2023	Plugin v1.1.0.0	First release to QSC Asset Manager.
1.1.1	17 May 2024	Plugin v1.2.3.5	Updated to current functionality, expanded overview and installation sections.
1.1.2	1 February 2025	Plugin v1.2.5.0	Added “File Seal” functionality. Updated plugin dependency on QDS 9.10 and higher.
1.2.3	27 March 2025	Plugin v1.3.0.0	Added Jurisdiction and Backup recorder functionality.
1.3.0.3	18 August 2025	Plugin v1.3.0.3	Added File Transfer Upload Spacing.
1.3.0.6	21 November 2025	Plugin v1.3.0.6	Added File Transfer Throttling.
1.4.0.0	30 November 2025	Plugin v1.4.0.0	No changes to user manual.
1.5.0.0	7 April 2026	Plugin v1.5.0.0	Added JSON API debug property.
1.5.1.0	15 April 2026	Plugin v1.5.1.0	Added recorder “Quantize” control.
1.5.1.4	05 July 2026	Plugin v1.5.1.4	Added recorder startup initialisation. Updated software requirements – Q-Sys licenses. Updated offline installation paths. Documented Auto Start Recorder setting.

Introduction

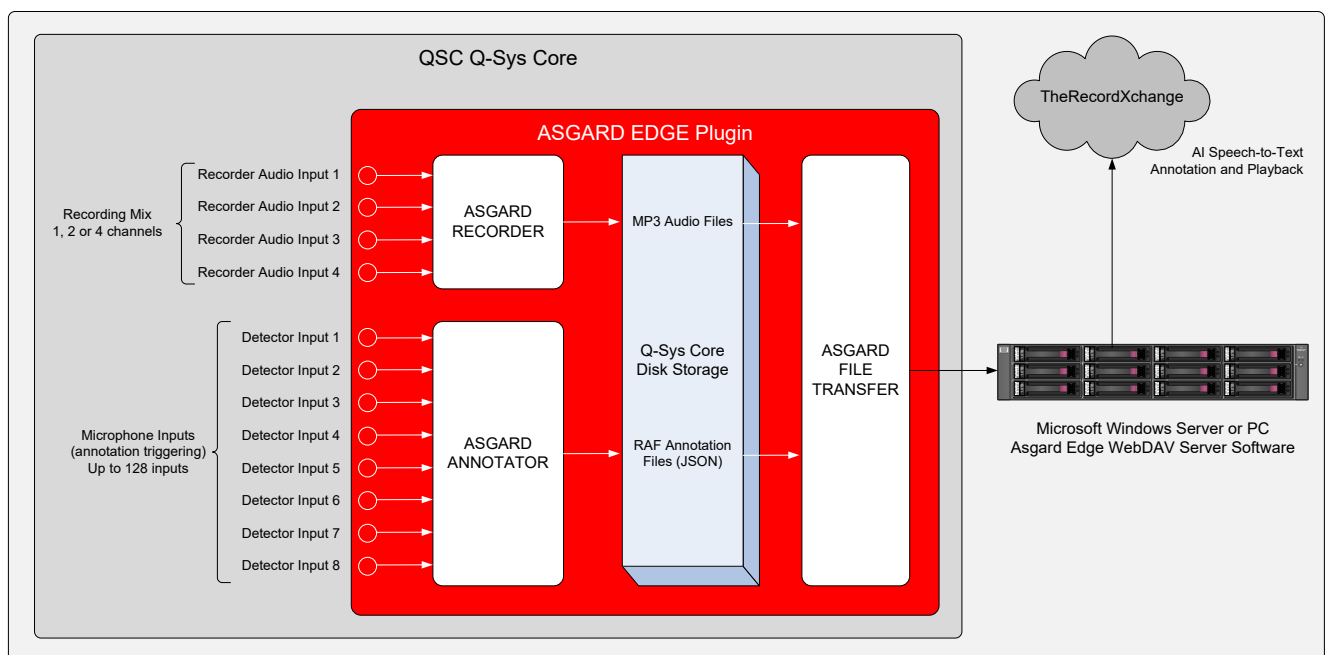
ASGARD EDGE is a licensed Q-SYS Plugin providing three core elements, ASGARD Annotator, ASGARD Recorder and ASGARD File Transfer.

ASGARD Annotator and Recorder provides a multi-channel audio recording capable of synchronized multi-channel recording from up-to 128 microphone inputs with annotation metadata synchronized with the audio recording, providing high grade evidential recording that can be used for the creation of transcription via traditional methods or via automated speech to text AI engines.

ASGARD EDGE File Transfer provides a WebDAV transfer client paired with the ASGARD WebDAV Windows Server, moving the recordings and meta-data from the Q-SYS platform to a central data server as each recording block is completed. Once files are successfully moved to a Windows Server, the recorded files are then available to any 3rdparty platform for the purpose of production of the final transcription. Files may be removed from the Q-SYS Core platform once transferred successfully to the Windows Server or they may be retained on the Core for a period, satisfying regulatory requirements.

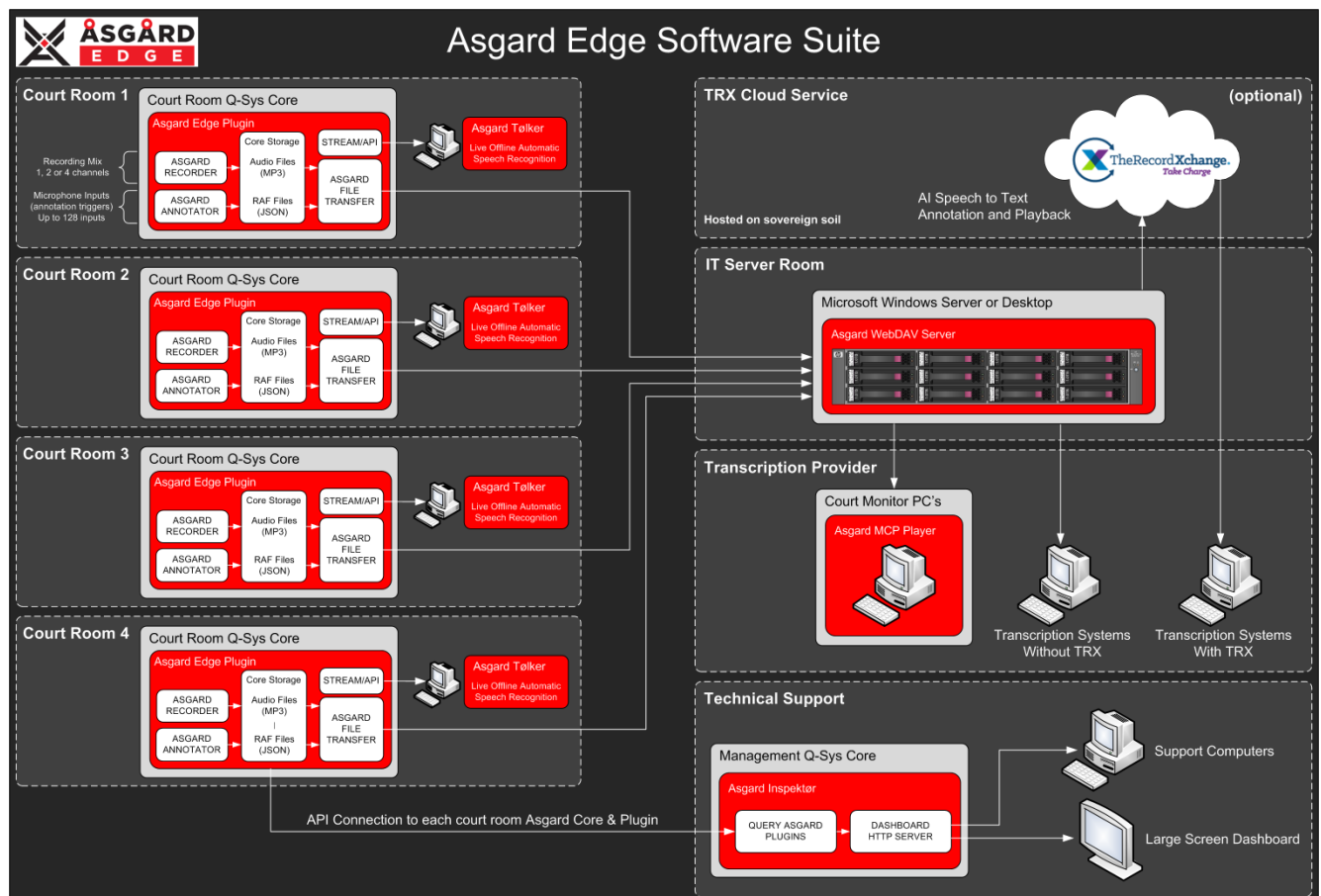
Additionally, ASGARD EDGE recordings and metadata are supported by TheRecordXchange (<https://trxchange.com/>), a cloud-based transcription and production system that provides automated speech recognition using Amazon Web Services, cloud-based playback facilities and file management.

The Asgard Multi-Channel Player (MCP) may also be used to playback the recorder audio and meta-data.



ASGARD EDGE plugin is the heart of the Asgard Edge Software Suite, comprising the following software products:

- ▶ ASGARD EDGE Plug – Capture room audio with metadata and automated file transfer to Asgard WebDAV Server.
- ▶ ASGARD EDGE WebDAV Server – ASGARD EDGE central file storage.
- ▶ ASGARD EDGE MCP Player – Multi-channel playback of ASGARD EDGE recordings with variable speed playback, meta-data and annotation editing.
- ▶ ASGARD EDGE Inspektør – Global monitoring and control of multiple Q-Sys Cores running the ASGARD EDGE Plugin. Inspektør provides health reporting, status monitoring and control of each Asgard Edge room recorder and file transfer settings.
- ▶ ASGARD EDGE Tølker – Real-time off-line Speech Recognition with integration into the ASGARD EDGE Plugin.
- ▶ TheRecordXchange - Cloud-based transcription system that provides automated speech recognition, producing accurate transcription documents.



Hardware & Software Requirements

- ▶ QSC Q-Sys Core Processor
- ▶ QSC Q-Sys Designer Software QDS v9.10 or higher
- ▶ For Q-Sys Designer v9 the following Q-Sys licenses are required:
 - ▶ QSC Q-Sys Core Scripting License (SLQUD)
 - ▶ QSC Q-Sys Core UCI License (SLQSE) if a Q-Sys operator interface is required
- ▶ Asgard Edge Activation License
- ▶ Asgard Edge WebDAV Server (running on a Windows based PC or Server)

Supported Q-Sys Versions

Asgard Edge has been tested and verified for the following Q-Sys Designer releases:

- ▶ QSC Q-Sys Designer Software QDS v9.10.2
- ▶ QSC Q-Sys Designer Software QDS v9.13.1 LTS
- ▶ QSC Q-Sys Designer Software QDS v10.2.1

Installation

The ASGARD EDGE plugin is released as an encrypted plugin “AsgardEdge.qplugx2” and may be installed on a Windows PC running Q-Sys Designer using either of two methods:

- i. Online installation from within Q-Sys Designer Asset Manager
- ii. Offline manual installation

Commencing with v1.2.4.0 the plugin is released using v2 encryption as supported by QDS 9.10. The plugin will not function with QDS versions prior to 9.10.

Online Asset Manager

The ASGARD EDGE plugin is available online from the Q-Sys Asset Manager from within Q-Sys Designer, installed to the following path:

`Documents\QSC\Q-Sys Designer\Assets\qsc-managed-plugins`

Note: When using the online Asset Manager installation, delete any previous ASGARD EDGE plugin that may reside in the “plugins” folder, assuming an offline manual installation was previously performed.

Offline Manual Installation

For offline installation, the plugin can be copied to the following path:

`Documents\QSC\Q-Sys Designer\AsgardEdge\Plugins`

Note: When using the offline manual installation, delete any previous ASGARD EDGE plugin that may reside in the “qsc-managed-plugins” folder, assuming an online Asset Manager installation was previously performed.

Note: remove any previous plugin installation in the path “Documents\QSC\Q-Sys Designer\Plugins”.

Q-Sys Licensing

Asgard Edge with Q-Sys Designer v9 requires the following Q-Sys licenses:

- ▶ QSC Q-Sys Core Scripting License (SLQUD)
- ▶ QSC Q-Sys Core UCI License (SLQSE) if a Q-Sys operator interface is required

Q-SYS eliminated the need for standalone feature licenses (like UCI Deployment and Scripting Engine) for systems running Q-SYS Designer v10 and above. These control and UI capabilities are now included natively with the Core processors without requiring separate paid licenses.

For legacy systems running Q-SYS Designer v9.x or lower, UCI and Scripting licenses are still required. Q-SYS now provide these licenses free of charge with the following Entitlement ID's.

Q-SYS Core Model	Scripting/UCI Entitlement ID (QDS < v10)
Core Nano / Core 8 Flex / NV-32-H (Core Capable)	95571811-1af6-48ea-a658-c8737b10737f
Core 110f / Core 110c	d6053d03-b13c-4827-8336-f0dc2b69c06c
Core 510i / Core 510c	940770c3-fbad-4c0a-8be8-3c280d245a67
Core 610	bfdc4894-7c94-4605-be0c-3089b824a40b
Other Q-SYS Cores	No license required

Asgard Licensing

The ASGARD EDGE Plugin requires an activation license to be fully functional.

Licenses are provided on a tiered subscription basis according to the number of detector channels required.

Contact Asgard Edge for license enquiries and purchase, the Core Hardware Locking ID will be required for each core to be licensed.

Once purchased, licenses are delivered by email. To install the license, copy the supplied Asgard Edge License code to the Asgard Plugin properties "License Key" field. The license will be validated when the Design is run on the core and may be confirmed on the Annotator page of the running plugin.

Asgard Feature Add-ons

Feature license add-ons were incorporated into Asgard licenses from Asgard Edge v1.5.1.2. The following feature licenses are available when ordering Asgard Edge plugin licenses.

Plugin License Feature add-on	Minimum Plugin	Feature Description
Asagrd Tølker	1.5.1.2	Automatic Speech Recognition application

Overview

Overview - Properties

The Asgard Properties are available in the right-hand pane when the design is offline (disconnected).

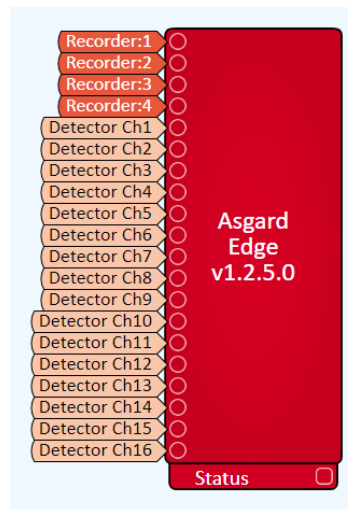
Properties	
Asgard Edge Properties	
License Key	
Recorder Channels	1 ▼
Detector Channels	8
Debug Print	None ▼
Show Debug	Yes ▼
Graphic Properties	
Position	736,57
Fill	

Properties	Range	Description
Asgard Edge Properties		
License Key		The license activation key
Recorder Channels	1, 2, 4	Number of recorder channels
Detector Channels	8 - 128	Number of annotator detector channels
Debug Print (Available only when "Show Debug" is set to Yes).	None Tx/Rx Tx Rx Annotator Calls Recorder Calls File Transfer Calls File Transfer Verbose JSON API All Function Calls All	No specific debug output (LUA errors only) Debug File Transfer Tx and Rx messages Debug File Transfer Rx messages only Debug File Transfer Rx messages only Debug Annotator module function calls Debug Recorder module function calls Debug File Transfer function calls Debug File Transfer function calls (verbose) Debug JSON API messages Debug All function calls Debug all messages
Show Debug	No Yes	Hide the debug window Display the debug window
Graphic Properties		
Position	(X,Y)	The screen coordinates for the plugin
Fill		The block colour for the plugin

Overview - Plugin Block

The plugin block provides a number of audio inputs providing the following input facilities:

- Recorder audio inputs, 1, 2 or 4 channels as configured in the Properties.
- Detector audio inputs, between 8 and 128 inputs as configured in the Properties.



Recorder Audio Inputs

Wire the Recorder Audio Inputs to the audio paths dedicated to mixing and processing the recordings in your design.

Detector Audio Inputs

The Detector Audio Inputs are used only to generate the Annotation file and should be wired to your individual microphone signals.

If mute controls are provided on each microphone signal prior to mixing down to the Recorder then ideally the Detector signals should be post these mute controls so that muted microphones are both muted in the recording and in the annotation detector.

AEC Processing

It is recommended that the Asgard Edge detector inputs are wired post-AEC processing, as this removes any far-end audio source from the detector input signals, avoiding false triggering of signals when far-end participants are speaking. Best practice is to route all far-end and in-room high level signals such as evidence playback to the AEC reference input.

Plugin Control Pins

Plugin control pins are provided covering the majority of controls within the plugin. The Plugin Status pin is always enabled, proving the connection status for the File Transfer module. Refer to the later chapter covering the available control pins and their function.

Reference Designs

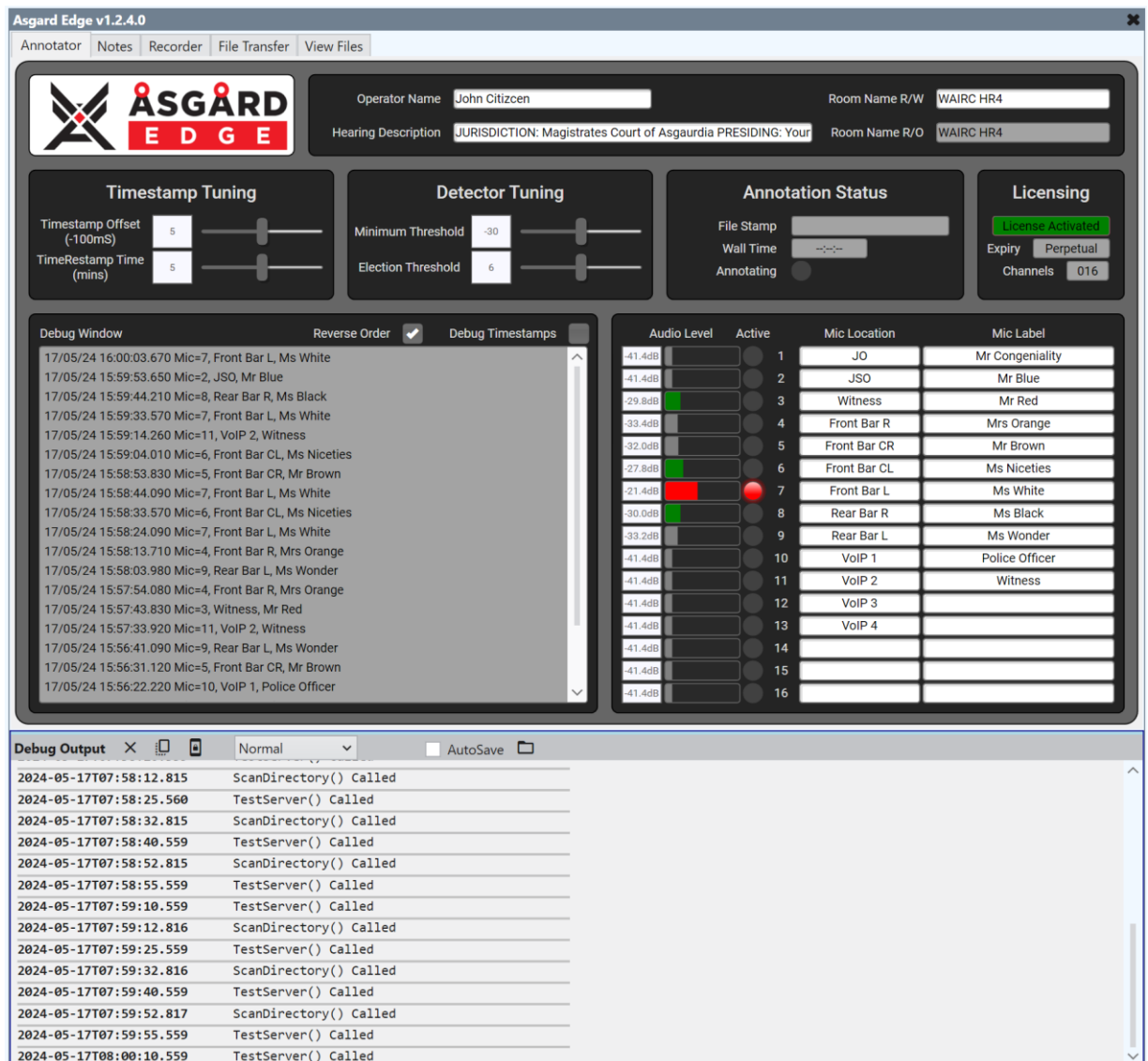
Contact Asgard Edge for Q-Sys Reference Designs demonstrating best-practice DSP layout with Asgard Edge.

Plugin Pages

The ASGARD EDGE Plugin interface is comprises the following 5 pages:

1. Annotator
2. Notes
3. Recorder
4. File Transfer
5. View Files

When enabled in the properties, an optional Debug window appears below the tabbed pages.



ASGARD EDGE v1.2.4.0

Operator Name: John Citizen Room Name R/W: WAIRC HR4
Hearing Description: JURISDICTION: Magistrates Court of Asgardia PRESIDING: Your Room Name R/O: WAIRC HR4

Timestamp Tuning
Timestamp Offset (-100ms): 5
TimeRestamp Time (mins): 5

Detector Tuning
Minimum Threshold: -30
Election Threshold: 6

Annotation Status
File Stamp:
Wall Time:
Annotating: ☐

Licensing
License Activated:
Expiry: Perpetual
Channels: 016

Debug Window
Reverse Order: ☒ Debug Timestamps: ☐

Audio Level	Active	Mic Location	Mic Label
-41.4dB	☐	1 JO	Mr Congeniality
-41.4dB	☐	2 JSO	Mr Blue
-29.8dB	☐	3 Witness	Mr Red
-33.4dB	☐	4 Front Bar R	Mrs Orange
-32.0dB	☐	5 Front Bar CR	Mr Brown
-27.8dB	☐	6 Front Bar CL	Ms Niceties
-21.4dB	☒	7 Front Bar L	Ms White
-30.0dB	☐	8 Rear Bar R	Ms Black
-33.2dB	☐	9 Rear Bar L	Ms Wonder
-41.4dB	☐	10 VoIP 1	Police Officer
-41.4dB	☐	11 VoIP 2	Witness
-41.4dB	☐	12 VoIP 3	
-41.4dB	☐	13 VoIP 4	
-41.4dB	☐	14	
-41.4dB	☐	15	
-41.4dB	☐	16	

Debug Output X ☐ ☐ Normal ☐ AutoSave

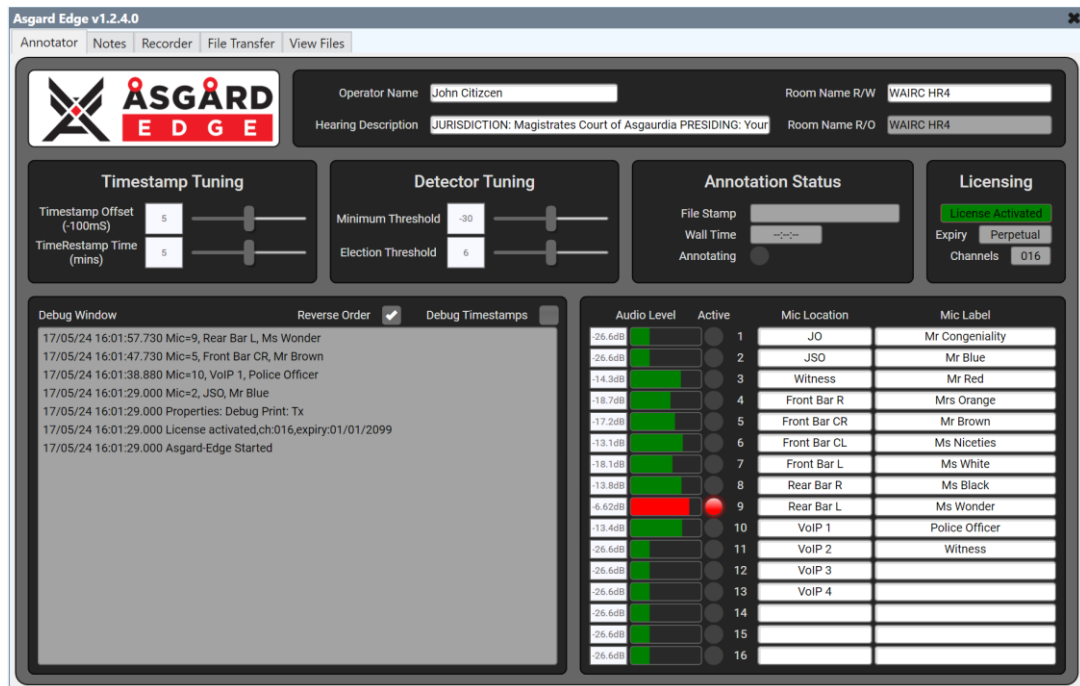
```

2024-05-17T07:58:12.815 ScanDirectory() Called
2024-05-17T07:58:25.560 TestServer() Called
2024-05-17T07:58:32.815 ScanDirectory() Called
2024-05-17T07:58:40.559 TestServer() Called
2024-05-17T07:58:52.815 ScanDirectory() Called
2024-05-17T07:58:55.559 TestServer() Called
2024-05-17T07:59:10.559 TestServer() Called
2024-05-17T07:59:12.816 ScanDirectory() Called
2024-05-17T07:59:25.559 TestServer() Called
2024-05-17T07:59:32.816 ScanDirectory() Called
2024-05-17T07:59:40.559 TestServer() Called
2024-05-17T07:59:52.817 ScanDirectory() Called
2024-05-17T07:59:55.559 TestServer() Called
2024-05-17T08:00:10.559 TestServer() Called

```

Plugin Pages - Annotator

The Annotator page provides the audio detection and annotation as speech is detected. The annotation meta-data is recorded in the RAF files associated with the recording.

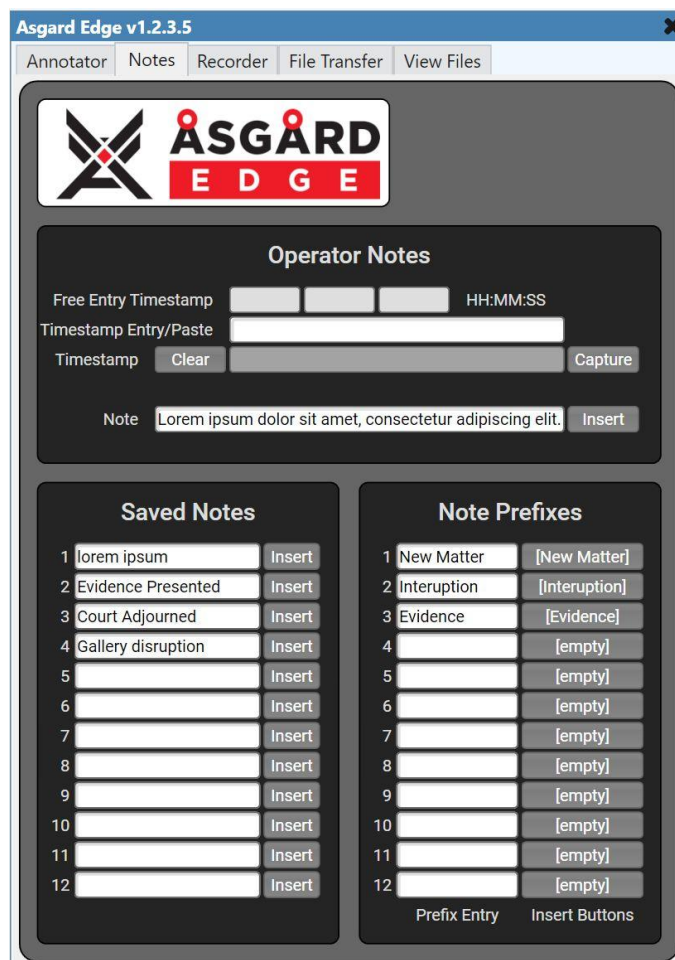


The interface provides the following elements:

- Operator Name – Text entry of the operator manning the recording session.
- Hearing Description – Text entry description of the hearing or session.
- Room Name R/W – Text entry of the Room Name, Room Name R/O – Display of the Room Name.
- Timestamp Tuning, Offset – A negative time offset for the timestamp recorded in the RAF file.
- Timestamp Tuning, Restamp Time – Timestamped entries are repeated in the RAF file should a single microphone be active for a long period of time.
- Detector Tuning, Minimum Threshold – Sets the minimum audio level detected as active speech.
- Detector Tuning, Election Threshold – Determines how aggressive the detection algorithm detects a change of active microphone.
- Annotation Status – The current annotation file timestamp, Wall Time (clock) and Annotation status.
- Licensing – Displays the Asgard Edge License status (Activated/Expired, number of licensed channels).
- Debug Window – Annotator status log. Entries may be sorted chronologically or reverse chronological.
- Audio Level – Input metering for each Detector Input. Green = Above Minimum threshold, Red = Current Active microphone.
- Active – Indicates when a microphone input is detected as active.
- Mic Location – Free text entry to describe the microphone location (for use in the RAF file).
- Mic Label – Free text entry to identify the person at each microphone (for use in the RAF file).

Plugin Pages - Notes

The Notes page provides a manual user facility to record manual notes in the RAF meta-data file associated with the recording. The various fields and buttons provided may be copied to a custom User Interface provided to the operator.



The interface provides the following elements:

- Free Entry Timestamp – Permits manual entry of historic timestamps via drop down lists for hours, minutes and seconds.
- Timestamp Entry/Paste – A drop area for pasting timestamps from other systems such as Asgard MCP.
- Timestamp – Displays the captured timestamp.
- Capture – Records the current date and time in the Timestamp window, for use in a recorded timestamped user note.
- Clear – Clears the Timestamp field.
- Note – Free entry text entry of a user entered timestamped note, the Insert button will record the TS Note along with the timestamp to the RAF meta-data file.
- Saved Notes – Free entry text entry of user notes that may be re-used repeatedly. Saved Notes are recorded in the RAF file with the current timestamp by pressing the associated Insert button.
- Note Prefixes – Free entry text entry of note prefixes. The prefix insert button inserts the note entered in the “Note” field prefixed with the Note Prefix.

Plugin Pages - Recorder

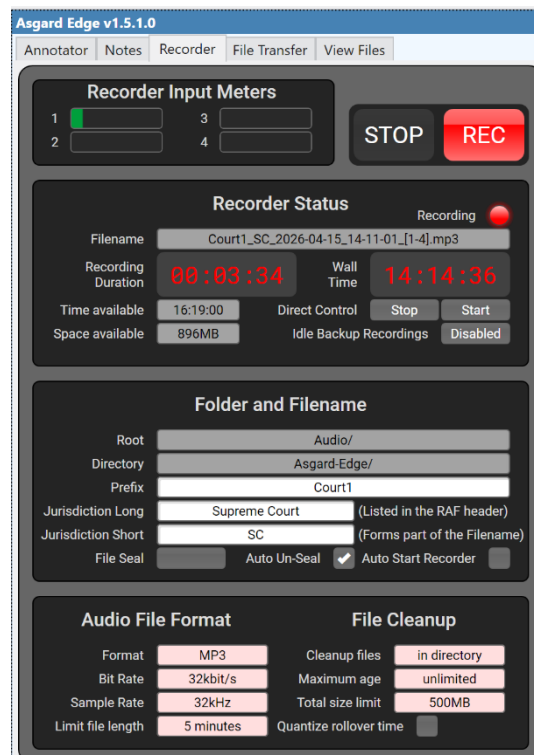
The Recorder page provides a control interface to the Asgard Recorder. The various recorder fields and buttons provided may be copied to a custom User Interface for use by an operator.

The STOP and REC buttons provided also double as YES/NO confirmation buttons when STOP is selected while the Recorder is recording.

The STOP button is hidden whenever a backup recording is running.

Direct Stop/Start buttons are provided for control via the control pins, these controls do not provide user prompting to stop the recorder.

Backup recordings may be run whenever the user stops a user initiated recording by enabling the “Idle Backup Recordings” button. Backup recordings are stopped when a user starts a new user recording with the REC button or when the Direct Control Start button is pressed.



Asgard Edge v1.5.1.0

Annotations | Notes | Recorder | File Transfer | View Files

Recorder Input Meters

1 3
2 4

STOP **REC**

Recorder Status Recording ●

Filename: Court1_SC_2026-04-15_14-11-01_[1-4].mp3

Recording Duration: 00:03:34 Wall Time: 14:14:36

Time available: 16:19:00 Direct Control: **Stop** **Start**

Space available: 896MB Idle Backup Recordings: **Disabled**

Folder and Filename

Root: Audio/
Directory: Asgard-Edge/
Prefix: Court1

Jurisdiction Long: Supreme Court (Listed in the RAF header)
Jurisdiction Short: SC (Forms part of the Filename)

File Seal: ☐ Auto Un-Seal: ☒ Auto Start Recorder: ☐

Audio File Format

Format: MP3
Bit Rate: 32kbit/s
Sample Rate: 32kHz
Limit file length: 5 minutes

File Cleanup

Cleanup files: in directory
Maximum age: unlimited
Total size limit: 500MB
Quantize rollover time: ☐

Recording filenames are constructed using the Recorder Prefix and Jurisdiction Short fields.

User Recordings are named as PREFIX_JURIS_DATE_TIME where PREFIX is the Prefix field and JURIS is the Jurisdiction Short field.

Backup filenames are named as PREFIX_BACKUP_DATE_TIME where PREFIX is the Prefix field.

Refer to the Asgard Edge RAF File Format document for more information on the filename naming conventions.

The Audio and RAF files may be “Sealed” by activating the “File Seal” button. Sealing the room audio momentarily stops and restarts the Asgard Recorder with the filenames appended with “-SEALED” following the Jurisdiction, isolating sensitive “Sealed” audio recordings into separate uniquely named files. Deselecting the “File Seal” button reverses the process, momentarily restarting the Recorder with “-SEALED” removed from the filenames.

The Recorder interface provides the following elements:

- Recorder Input Meters – Displays the audio input levels to the recorder.
- STOP/REC – User controls to stop and start the recorder.
- Recorder Status:
 - Filename – Displays the current Filename.
 - Recording Duration – Displays the recording duration of an active recording.
 - Wall Time – Displays the current time of day.
 - Time Available – Displays the recording time available on the Core.
 - Space Available – Displays the recording storage space available on the Core.
 - Direct Control – Direct recorder Stop/Start control intended for 3rd party control.
 - Idle Backup Recordings – When enabled, provides Backup recording when the user-initiated recording is not active (the user has Stopped the Primary recording with the STOP button).
- Folder & Filename:
 - Root – Displays the recording location root folder (fixed).
 - Directory – Displays the recording location folder (fixed).
 - Prefix – Free text entry to define the recording filename prefix.
 - Jurisdiction Long – Free text entry, recorded in the RAF file header.
 - Jurisdiction Short – Free text entry to define the recording filename jurisdiction.
 - File Seal – Seal/Un-Seal audio recordings.
 - Auto Un-Seal – When checked, File Seal is disabled when a user stops the Recorder.
 - Auto Start Recorder – When checked, normal user recording is started when the plugin starts following a Core start or reboot.
- Audio File Format:
 - Format – Selects the audio file format (MP3, WAV).
 - Bit Rate – Selects the recording bit rate (32, 64, 128 kbps).
 - Sample Rate – Selects the recording sample rate (16, 32, 44.1, 48 kHz).
 - Limit file length – Selects the recording length (5, 15, 30, 60 Minutes).
 - Quantize rollover time – When checked, recordings start the new "rolled over" file on a multiple of the Limit Length selection. Minute long files start on the minute, hour long files start on the hour, and so on. When not checked (default) recordings roll over at the Limit Length.
- File Clean-up:
 - Clean-up files – Displays the Clean-up method (fixes as "in directory").
 - Maximum age – Selects the maximum age that recordings are retained on the core.
 - Total size limit – Selects the total size of all recordings retained on the core.

Plugin Pages - File Transfer

The File Transfer page provides a configuration and status interface to the Asgard File Transfer engine and the Windows based Asgard WebDAV Server Application.

The Upload Status section displays the status information and transfer counters.

The Core Config section provides configuration of the Asgard File Transfer engine within the plugin.

The Server Config section provided configuration of the external Asgard WebDAV sever application, running on a Windows server or PC.

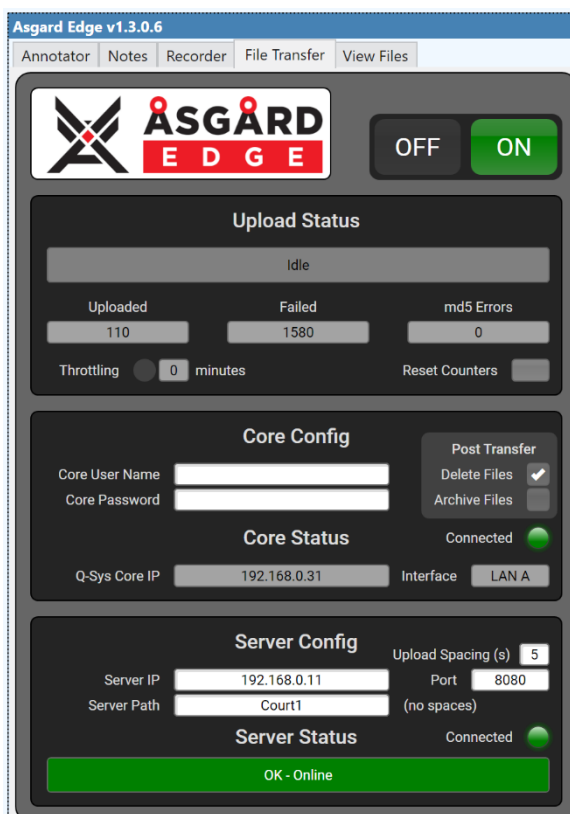
Upload Spacing

From plugin v1.3.0.3 the tuning parameter Upload Spacing was added to space out the transfer of individual files within a recording set, to optimise the Asgard Edge Server thread utilisation by avoiding parallel transfers. Upload spacing may be set in the range of 1 to 10 seconds. The default and recommended setting is 5 seconds.

From plugin v1.3.0.3 completed recordings are transferred one set per minute (previously 20 seconds).

Upload Throttling

From plugin v1.3.0.6 file transfers are throttled when server upload errors are encountered. The throttling period is randomly selected in the range of 2 to 5 minutes, to reduce the server load. This feature reduces the server load in situations where a network or server outage results in many un-transferred files residing on a core or cores from flooding the server with transfer requests when the network or server connection is restored.



The screenshot shows the 'File Transfer' tab of the Asgard Edge v1.3.0.6 interface. It features a top navigation bar with 'Annotator', 'Notes', 'Recorder', 'File Transfer', and 'View Files'. The main content area is divided into three sections: 'Upload Status', 'Core Config', and 'Server Config'. The 'Upload Status' section shows the system is 'Idle' with 110 files uploaded, 1580 failed, and 0 md5 errors. It also includes a 'Throttling' toggle set to 0 minutes and a 'Reset Counters' button. The 'Core Config' section contains fields for 'Core User Name' and 'Core Password', and checkboxes for 'Post Transfer' actions like 'Delete Files' (checked) and 'Archive Files'. The 'Core Status' section shows the system is 'Connected' with a 'Q-Sys Core IP' of 192.168.0.31 and 'Interface' set to 'LAN A'. The 'Server Config' section includes fields for 'Server IP' (192.168.0.11), 'Server Path' (Court1), 'Upload Spacing (s)' (5), and 'Port' (8080). The 'Server Status' section shows the system is 'Connected' with a green 'OK - Online' indicator.

The interface provides the following elements:

- OFF/ON – Disable and Enable the File Transfer engine.
- Upload Status:
 - Status – The status of the current file transfer process.
 - Uploaded Counter – The total number of successful file transfers (since the plugin was started).
 - Failed Counter – The total number of failed file transfers (since the plugin was started).
 - md5 Counter – The total number of failed transfers due to corruption in the transfer process.
 - Reset Counters – Resets all counters to zero.
 - Throttling Indicator – Indicates when the file transfers are throttled due to server errors. The throttling wait time is displayed in minutes.
- Core Config:
 - Core User Name – Free text entry to define the core user account (required only if Access Management is enabled on the core).
 - Core Password – Free text entry to define the core user account password (required only if Access Management is enabled on the core).
 - Delete Files / Archive Files – Selects the post-transfer action once files are successfully transferred (archived files are renamed with “archived” suffix and left on the core for aging).
 - Q-Sys Core IP – Displays the detected Core IP address to be used by the Transfer engine.
 - Interface – Displays the detected Core network interface to be used by the Transfer engine.
 - Connected – Displays Green when the transfer engine is connected with the Q-Sys core.
- Server Config:
 - Server IP – Free text entry to define the external Asgard WebDAV server IP Address.
 - Port – Free text entry to define the Asgard WebDAV server Port Address (default 8080).
 - Server Path – Free text entry to define the folder location on the WebDAV server for the storage of transferred files. Note: The folder must exist on the WebDAV server and must not contain whitespace characters.
 - Status – Displays the connection status with the Asgard WebDAV server.
 - Connected – Displays Green when connected with the Asgard WebDAV server.
 - Upload Spacing (s) – Configures the pause between the transfer of individual files within a recording to ensure the serial transfer of files and re-use of a single server connection. May be configured in the range of 1 to 10 seconds. The recommended setting is as follows:
 - 3 – for low bit rate and or 5 minute recordings no larger than 10MB in size.
 - 10 – for high bit rate and or 60 minute recordings larger than 10MB in size.
 - Adjust this parameter while observing the number of open TCP connections during the transfer of recordings. Monitoring of the Apache access log located in the path Asgard Edge Server\server\logs\access.log will provide more detailed information as to the number of concurrent connections utilised by a single Core during file transfers.

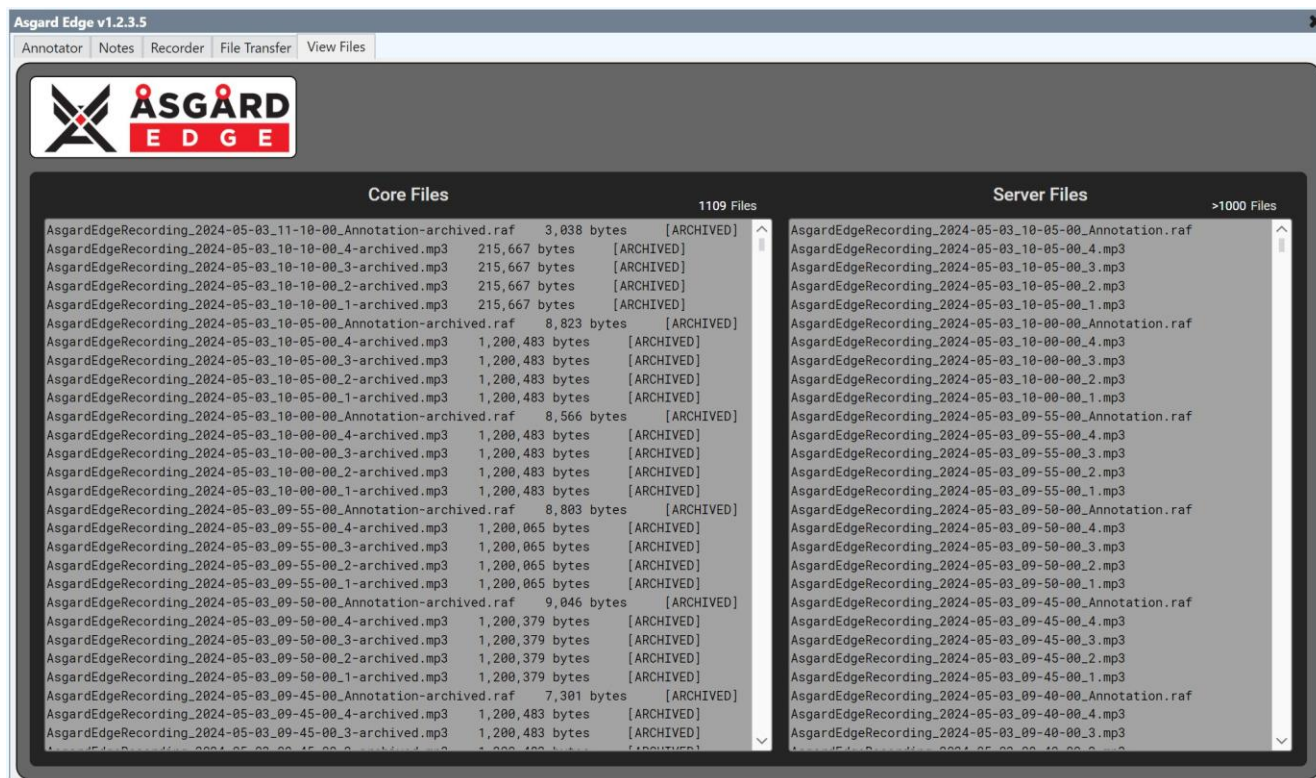
Plugin Pages - View Files

The View Files page provides a dual-pane window displaying the list of files located on the core (left pane) and the Asgard WebDAV server (right pane).

The file lists are sorted in reverse time order.

The total number of files is shown for both Core Files and Server Files.

The file listings are updated once per minute.



Asgard Edge v1.2.3.5

Annotations | Notes | Recorder | File Transfer | **View Files**

Core Files 1109 Files

File Name	Size	Status
AsgardEdgeRecording_2024-05-03_11-10-00_Annotation-archived.raf	3,038 bytes	[ARCHIVED]
AsgardEdgeRecording_2024-05-03_10-10-00_4-archived.mp3	215,667 bytes	[ARCHIVED]
AsgardEdgeRecording_2024-05-03_10-10-00_3-archived.mp3	215,667 bytes	[ARCHIVED]
AsgardEdgeRecording_2024-05-03_10-10-00_2-archived.mp3	215,667 bytes	[ARCHIVED]
AsgardEdgeRecording_2024-05-03_10-10-00_1-archived.mp3	215,667 bytes	[ARCHIVED]
AsgardEdgeRecording_2024-05-03_10-05-00_Annotation-archived.raf	8,823 bytes	[ARCHIVED]
AsgardEdgeRecording_2024-05-03_10-05-00_4-archived.mp3	1,200,483 bytes	[ARCHIVED]
AsgardEdgeRecording_2024-05-03_10-05-00_3-archived.mp3	1,200,483 bytes	[ARCHIVED]
AsgardEdgeRecording_2024-05-03_10-05-00_2-archived.mp3	1,200,483 bytes	[ARCHIVED]
AsgardEdgeRecording_2024-05-03_10-05-00_1-archived.mp3	1,200,483 bytes	[ARCHIVED]
AsgardEdgeRecording_2024-05-03_10-00-00_Annotation-archived.raf	8,566 bytes	[ARCHIVED]
AsgardEdgeRecording_2024-05-03_10-00-00_4-archived.mp3	1,200,483 bytes	[ARCHIVED]
AsgardEdgeRecording_2024-05-03_10-00-00_3-archived.mp3	1,200,483 bytes	[ARCHIVED]
AsgardEdgeRecording_2024-05-03_10-00-00_2-archived.mp3	1,200,483 bytes	[ARCHIVED]
AsgardEdgeRecording_2024-05-03_10-00-00_1-archived.mp3	1,200,483 bytes	[ARCHIVED]
AsgardEdgeRecording_2024-05-03_09-55-00_Annotation-archived.raf	8,803 bytes	[ARCHIVED]
AsgardEdgeRecording_2024-05-03_09-55-00_4-archived.mp3	1,200,065 bytes	[ARCHIVED]
AsgardEdgeRecording_2024-05-03_09-55-00_3-archived.mp3	1,200,065 bytes	[ARCHIVED]
AsgardEdgeRecording_2024-05-03_09-55-00_2-archived.mp3	1,200,065 bytes	[ARCHIVED]
AsgardEdgeRecording_2024-05-03_09-55-00_1-archived.mp3	1,200,065 bytes	[ARCHIVED]
AsgardEdgeRecording_2024-05-03_09-50-00_Annotation-archived.raf	9,046 bytes	[ARCHIVED]
AsgardEdgeRecording_2024-05-03_09-50-00_4-archived.mp3	1,200,379 bytes	[ARCHIVED]
AsgardEdgeRecording_2024-05-03_09-50-00_3-archived.mp3	1,200,379 bytes	[ARCHIVED]
AsgardEdgeRecording_2024-05-03_09-50-00_2-archived.mp3	1,200,379 bytes	[ARCHIVED]
AsgardEdgeRecording_2024-05-03_09-50-00_1-archived.mp3	1,200,379 bytes	[ARCHIVED]
AsgardEdgeRecording_2024-05-03_09-45-00_Annotation-archived.raf	7,301 bytes	[ARCHIVED]
AsgardEdgeRecording_2024-05-03_09-45-00_4-archived.mp3	1,200,483 bytes	[ARCHIVED]
AsgardEdgeRecording_2024-05-03_09-45-00_3-archived.mp3	1,200,483 bytes	[ARCHIVED]

Server Files >1000 Files

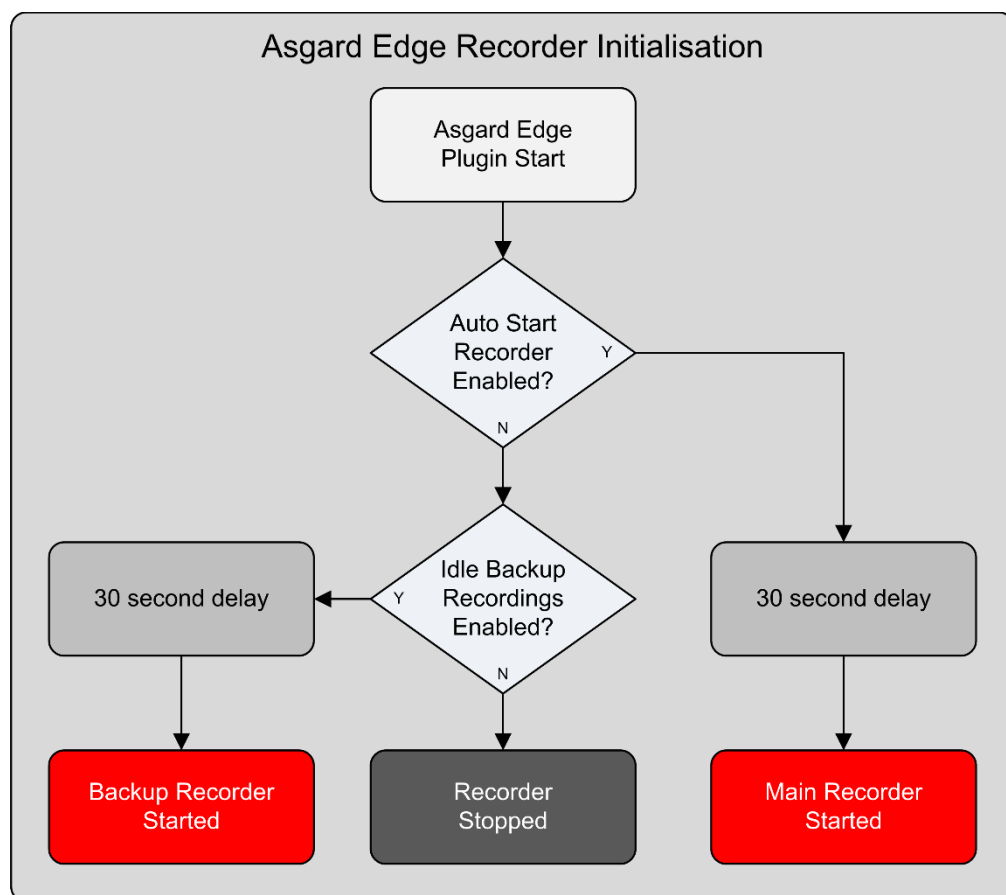
File Name
AsgardEdgeRecording_2024-05-03_10-05-00_Annotation.raf
AsgardEdgeRecording_2024-05-03_10-05-00_4.mp3
AsgardEdgeRecording_2024-05-03_10-05-00_3.mp3
AsgardEdgeRecording_2024-05-03_10-05-00_2.mp3
AsgardEdgeRecording_2024-05-03_10-05-00_1.mp3
AsgardEdgeRecording_2024-05-03_10-00-00_Annotation.raf
AsgardEdgeRecording_2024-05-03_10-00-00_4.mp3
AsgardEdgeRecording_2024-05-03_10-00-00_3.mp3
AsgardEdgeRecording_2024-05-03_10-00-00_2.mp3
AsgardEdgeRecording_2024-05-03_10-00-00_1.mp3
AsgardEdgeRecording_2024-05-03_09-55-00_Annotation.raf
AsgardEdgeRecording_2024-05-03_09-55-00_4.mp3
AsgardEdgeRecording_2024-05-03_09-55-00_3.mp3
AsgardEdgeRecording_2024-05-03_09-55-00_2.mp3
AsgardEdgeRecording_2024-05-03_09-55-00_1.mp3
AsgardEdgeRecording_2024-05-03_09-50-00_Annotation.raf
AsgardEdgeRecording_2024-05-03_09-50-00_4.mp3
AsgardEdgeRecording_2024-05-03_09-50-00_3.mp3
AsgardEdgeRecording_2024-05-03_09-50-00_2.mp3
AsgardEdgeRecording_2024-05-03_09-50-00_1.mp3
AsgardEdgeRecording_2024-05-03_09-45-00_Annotation.raf
AsgardEdgeRecording_2024-05-03_09-45-00_4.mp3
AsgardEdgeRecording_2024-05-03_09-45-00_3.mp3

Recorder Initialisation

The recorder operational state following a Core start or reboot is determined by the following Recorder controls:

- Auto Start Recorder – When enabled, the main recorder starts following a core reboot, regardless of the idle Backup Recordings setting.
- Idle Backup Recordings – When enabled, the backup recorder starts following a core reboot if Auto Start Recorder is not enabled.
- The recorder remains stopped following a core reboot if both Auto Start Recorder and idle Backup Recordings are disabled.

When either recorder is automatically started following a core reboot, a 30 second delay ensures the Asgard Plugin and any third-party external control has settled and is fully initialised prior to starting either recorder.



Note: Any active recordings following a core reboot will be incomplete, the partial audio recordings may be corrupt and the RAF file will not be present.

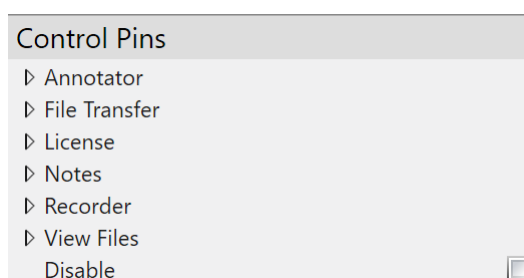
Control Pins

Control Pins - Plugin

A number of control pins are provided covering the majority of controls within the plugin.

The control pin options are available in the right-hand pane when the design is offline (disconnected).

Besides the Disable pin, the remaining pins are categorised by the individual modules/tabbed pages provided by the plugin.



Pin Name	Value/Range	Comments	Pins Available
Disable	Boolean	When true, disables the plugin	Input/Output
Status (always enabled and not listed)	Status	The server connection status	Output

Annotator

Control Pins	
▲ Annotator	
▲ Debug	
Timestamp	☐
Window	☐
▲ Detector Tuning	
Election Threshold	☐
Minimum Threshold	☐
▲ Microphone	
▷ Active	
▷ Label	
▷ Level	
▷ Location	
▲ Timestamp Tuning	
Offset	☐
Restamp	☐
Annotating	☐
File Stamp	☐
Hearing Description	☐
Operator Name	☐
Room Name R/O	☐
Room Name R/W	☐

File Transfer

Control Pins	
▷ Annotator	
▲ File Transfer	
▲ Core	
Archive post Upload	☐
Connected	☐
Delete post Upload	☐
IP Address	☐
LAN Port	☐
Password Entry	☐
Username	☐
▲ Counters	
Failed	☐
Hash Errors	☐
Reset	☐
Uploaded	☐
▲ Server	
Connected	☐
IP Address	☐
Path	☐
Port	☐
Spacing	☐
Progress Bar	☐
Throttling	☐
Throttling Value	☐
Upload ON	☐
Upload Status	☐

License

Control Pins	
▷ Annotator	
▷ File Transfer	
▲ License	
Activated	☐
Channels	☐
Debug	☐
Expiry	☐

View Files

Control Pins	
▷ Annotator	
▷ File Transfer	
▷ License	
▷ Notes	
▷ Recorder	
▲ View Files	
▲ Core	
File Count	☐
File List	☐
▲ Server	
File Count	☐
File List	☐

Recorder

Control Pins	
▷ Annotator	
▷ File Transfer	
▷ License	
▷ Notes	
▲ Recorder	
▲ Folder & File	
Directory	☐
Jurisdiction Long Name	☒
Jurisdiction Short Name	☒
Prefix	☐
Root Folder	☐
▲ Status	
Filename	☐
Length	☐
Recording	☐
Space Available	☐
Time Available	☐
Wall Time	☐
Auto Start	☐
Auto Un-Seal	☐
Idle Backup	☐
Quantize Rollover Time	☐
RMS Level 1	☐
RMS Level 2	☐
RMS Level 3	☐
RMS Level 4	☐
Seal	☐
Start	☐
Stop	☐

Notes

Control Pins	
▷ Annotator	
▷ File Transfer	
▷ License	
▲ Notes	
▲ Note Prefix	
Insert Note with Prefix 1	☐
Insert Note with Prefix 2	☐
Insert Note with Prefix 3	☐
Insert Note with Prefix 4	☐
Insert Note with Prefix 5	☐
Insert Note with Prefix 6	☐
Insert Note with Prefix 7	☐
Insert Note with Prefix 8	☐
Insert Note with Prefix 9	☐
Insert Note with Prefix 10	☐
Insert Note with Prefix 11	☐
Insert Note with Prefix 12	☐
Prefix Text1	☐
Prefix Text2	☐
Prefix Text3	☐
Prefix Text4	☐
Prefix Text5	☐
Prefix Text6	☐
Prefix Text7	☐
Prefix Text8	☐
Prefix Text9	☐
Prefix Text10	☐
Prefix Text11	☐
Prefix Text12	☐
▲ Operator Notes	
Capture Timestamp	☐
Clear Timestamp	☐
Insert Note	☐
Note	☐
Timestamp	☐
▷ Saved Notes	

Notes cont.

Control Pins	
▷ Annotator	
▷ File Transfer	
▷ License	
▲ Notes	
▷ Note Prefix	
▷ Operator Notes	
▲ Saved Notes	
Insert Saved Note 1	☐
Insert Saved Note 2	☐
Insert Saved Note 3	☐
Insert Saved Note 4	☐
Insert Saved Note 5	☐
Insert Saved Note 6	☐
Insert Saved Note 7	☐
Insert Saved Note 8	☐
Insert Saved Note 9	☐
Insert Saved Note 10	☐
Insert Saved Note 11	☐
Insert Saved Note 12	☐
Saved Notes 1	☐
Saved Notes 2	☐
Saved Notes 3	☐
Saved Notes 4	☐
Saved Notes 5	☐
Saved Notes 6	☐
Saved Notes 7	☐
Saved Notes 8	☐
Saved Notes 9	☐
Saved Notes 10	☐
Saved Notes 11	☐
Saved Notes 12	☐

Control Pins - Annotator

Pin Name	Value/Range	Comments	Pins Available
Annotator Debug Timestamp	Boolean	Enables the display of timestamp information in the debug window	Input/Output
Annotator Debug Window	String	The debug window	Output
Annotator Detector Tuning Election Threshold	0 to 12	Determines how aggressive the detection algorithm detects a change of active microphone	Input/Output
Annotator Detector Tuning Minimum Threshold	-50 to -10 dB	Minimum audio level detected as active speech	Input/Output
Annotator Microphone Active [1..n]	Boolean	Indicates when a microphone input is detected as active	Output
Annotator Microphone Label [1..n]	String	The microphone label	Input/Output
Annotator Microphone Level [1..n]	-120dB to 0dB	The Microphone input level	Output
Annotator Microphone Location [1..n]	String	The Microphone location	Input/Output
Annotator Timestamp Tuning Offset	0 to 10 (-100mS steps)	Negative time offset for the timestamp recorded in the RAF file	Input/Output
Annotator Timestamp Tuning Restamp	0 to 10 (mins)	Timestamped entries are repeated in the RAF file	Input/Output
Annotator Annotating	Boolean	The Annotator is annotating	Output
Annotator File Stamp	String	The current RAF filestamp	Output
Annotator Hearing Description	String	The Hearing description	Input/Output
Annotator Operator Name	String	The Operator Name	Input/Output
Annotator Room Name R/O	String	Room Name read only	Output
Annotator Room Name R/W	String	Room Name read/write	Input/Output

Where:

[n] = the number of detector channels configured in the properties.

Control Pins - File Transfer

Pin Name	Value/Range	Comments	Pins Available
File Transfer Core Archive post Upload	Boolean	Archive core files post upload	Input/Output
File Transfer Core Connected	Boolean	True when the Core is connected (Media API)	Output
File Transfer Core IP Address	String	Displays the Core IP address	Output
File Transfer Core Password Entry	String	The Core password	Input/Output
File Transfer Core Username	String	The Core username	Input/Output
File Transfer Core Delete post Upload	Boolean	Delete core files post upload	Input/Output
File Transfer Core LAN Port	String	Displays the Core LAN port	Output
File Transfer Counters Failed	String	Count of failed transfers	Output
File Transfer Counters Hash Errors	String	Count of md5 hash errors	Output
File Transfer Counters Uploaded	String	Count of uploaded files	Output
File Transfer Counters Reset	Trigger	Reset all counters	Input
File Transfer Server Connected	Boolean	True when connected	Output
File Transfer Server IP Address	String	The Server IP address	Input/Output
File Transfer Server Path	String	The Server storage path	Input/Output
File Transfer Server Port	String	The Server port address	Input/Output
File Transfer Server Spacing	1 to 10 (seconds)	The Server transfer spacing	Input/Output
File Transfer Progress Bar	0 to 1	File transfer progress bar	Output
File Transfer Throttling	Boolean	True when Throttling	Output
File Transfer Throttling Value	String	Throttling wait time (mins)	Output
File Transfer Upload ON	Boolean	Enables file transfer	Input/Output
File Transfer Upload Status	Status	File transfer status	Output

Control Pins - License

Pin Name	Value/Range	Comments	Pins Available
License Activated	Boolean	True when the license is valid	Output
License Channels	String	The number of licensed channels	Output
License Debug	String	Human readable license status	Output
License Expiry	String	The license expiry date (demo) or "Perpetual" for perpetual licenses	Output

Control Pins - Notes

Pin Name	Value/Range	Comments	Pins Available
Notes Note Prefix Insert Note with Prefix [1..12]	Trigger	Insert a Note Prefix & note	Input
Notes Note Prefix Prefix Text [1..12]	String	Note prefix text	Input/Output
Notes Operator Notes Capture Timestamp	Trigger	Capture current timestamp	Input
Notes Operator Notes Clear Timestamp	Trigger	Clear current timestamp	Input
Notes Operator Notes Insert Note	Trigger	Insert a note	Input
Notes Operator Notes Note	String	The note text	Input/Output
Notes Operator Notes Timestamp	String	The captured timestamp	Output
Notes Saved Notes Insert Saved Note [1..12]	Trigger	Insert a saved note	Input
Notes Saved Notes Saved Notes [1..12]	String	Saved note text	Input/Output

Control Pins - View Files

Pin Name	Value/Range	Comments	Pins Available
View Files Core File Count	String	Count of files on the core	Output
View Files Core File List	String	The Core file list	Output
View Files Server File Count	String	Count of files on the server	Output
View Files Server File List	String	The Server file list	Output

Control Pins - Recorder

Pin Name	Value/Range	Comments	Pins Available
Recorder Folder & File Directory	String	Displays the sub-folder	Input
Recorder Folder & File Jurisdiction Long Name	String	Jurisdiction in the RAF file	Input/Output
Recorder Folder & File Jurisdiction Short Name	String	Audio file jurisdiction entry	Input/Output
Recorder Folder & File Prefix	String	Audio file prefix entry	Input/Output
Recorder Folder & File Root Folder	String	Displays the root folder	Input
Recorder Status Filename	String	Displays the full audio file filename	Output
Recorder Status Length	String	Displays the duration of the recording	Output
Recorder Status Recording	Boolean	True when recording	Output
Recorder Status Space Available	String	Displays the core available storage space	Output
Recorder Status Time Available	String	Displays the core available storage space as time	Output
Recorder Status Wall Time	String	The current time	Output
Recorder Auto Idle Backup	Boolean	When true, the plugin will start Backup recording Backup recording is stopped when setting false	Input/Output
Recorder Quantize Rollover Time	Boolean	When true, the recorder will align roll-over recordings to the Limit File Length	Input/Output
Recorder Auto Start	Boolean	When true, the plugin will start recording when the design starts	Input/Output
Recorder Auto Un-Seal	Boolean	When true, the plugin will force "File Seal" off when the recorder is stopped	Input/Output
Recorder RMS Level [1..4]	String	Recorder input level meters	Output
Recorder Seal	Boolean	When true, enables "File Seal" isolation or recordings-	Input/Output
Recorder Start	Trigger	Triggers the recorder to start	Input
Recorder Stop	Trigger	Triggers the recorder to stop	Input

Troubleshooting

File Transfer

The Plugin Status (Server Status) displays the connection status with the Asgard WebDAV server. The status is available as a control pin output (Status), the status value and text strings are documented in the table below.

Server Status Bar				
Status Value	Status	Status Bar Colour	Status String	Comments
0	OK	Green	OK - Online	The Server is connected
4	MISSING	Red	MISSING - [Message]	See the table below for possible status messages and their meaning
5	INITIALISING	Blue	INITIALISING	The core is initializing at design startup

Successful configuration of the File Transfer engine along with the external Asgard WebDAV Server requires a correctly configured network and firewall on the Windows WebDAV Server.

The following errors may be encountered, a description of the possible causes of each are provided with a possible solution.

Server Status Messages	
Message	Cause
"Disabled"	The Asgard File Transfer module is disabled (Off).
"Code 0, No route to host"	There is no device online at the configured Server IP address, the Server/PC is off or unplugged or does not exist.
"Code 0, Connection timed out after 10000 milliseconds"	Most likely the Asgard WebDAV Server is blocked by a firewall.
"Code 0, Failed to connect to xxx.xxx.xxx.xxx port 8080: Connection Refused"	The Asgard WebDAV Server is not running on the Server. Also, check the Port is configured correctly (8080 by default).
"Code 404, Server Path not found"	The configured Server Path was not found on the WebDAV Server.



User Notes

[illegible]

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