JMSAC Configuration

and

Station Logo/PSD Posting

Overview

CS**Lite** is a free utility from Arctic Palm and HD Radio to assist with HD Radio's JMSAC configuration and for stations not using a data casting application such as Arctic Palm's Center Stage Live, CSLite will send Station Logos and Static PSD to selected HD channels.

For stations using a data casting utility the CSLite utility can be used to configure the jmsacCfg.properties and mpClient file using the CSLite GUI interface. Once enter and updated, CSLite will update the necessary configuration files and add a shortcut to the desktop to start the JMSAC module. At this point we can exit CSLite as the data casting application will post metadata and artwork to the HD system. If necessary, simply restart CSLite to make any JMSAC configuration changes.

Note: the JMSAC module must run 24x7 to post information to the HD system and the shortcut should be added to the Startup menu,

For stations not using a data casting application we can configure CSLite to send station logos and PSD to selected HD channels using the "***PAD and Logo Posting***" Option for any channels not using a datacasting application. When selected, CSLite will open the PAD/PSD Window where we enter the station PSD and select the artwork for the Station Logo. CSLite will verify and rename the selected artwork to meet the HD Logo Specifications. (170x170 pixels to 200x200 pixels and 24kb or less)

Note: CSLite must run 24x7 to send station logo and PSDs to your HD System. When using this feature you can minimize CSLite but it ***MUST*** *be running,*

Installation

When installing JMSAC and CSLite be sure the installation Directory is the C:\Program Files\ directory. This will ensure CSLite can find and access the JMSAC configuration files.

Access Rights

The JMSAC is installed in the C:\Program Files directory which is a MS Windows protected directory which requires the appropriate rights to update the configuration files. Since CSLite will be updating the JSMAC configuration files it you will need the necessary rights to update the configurations. Depending on your O/S configuration logging in as an Administrator may not provide these rights. If not, you may need to right click the CSLite shortcut and select "Run As Administrator".

Once the configurations are updated CSLite can run as a standard user but will need the Admin level to modify the configuration settings.

CSLite

The first time CSLite is started it will display a CSLite Notice with info about running CSLite. Once displayed, click the green Continue button to close the Notice. To review the notice, select "About" from the Help Menu. This window has basic information about CSLite as well as the installation paths for both CSLite and JMSAC.
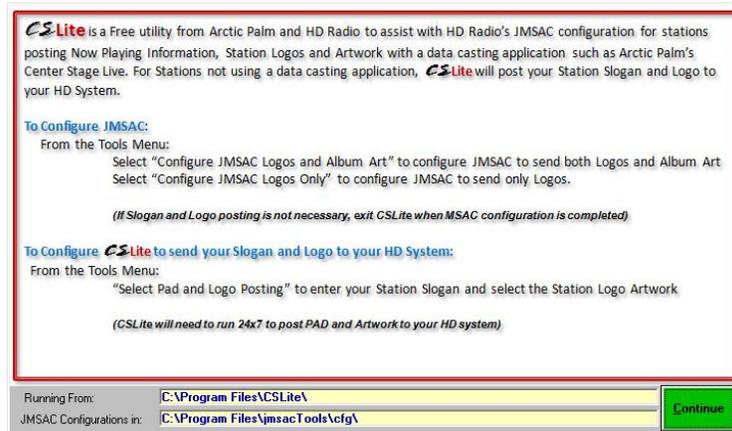
Event Log

When CSLite is started the Event log will be displayed showing the last events posted in CSLite. For JMSAC configurations only, this will show the last time CSLite was started and ended. For others the log will show the details of each logo and PSD posted to the JMSAC module for the last several hours. This information can be used to verify what was sent and when it was posted. The event log will also show the data returned from the JMSAC module.
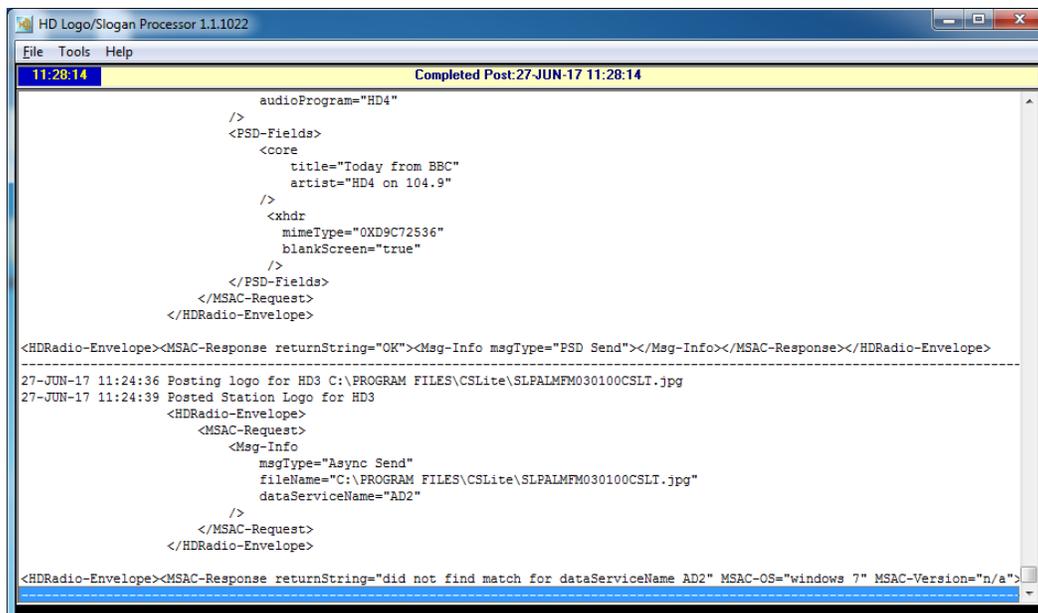
JMSAC Configuration

To modify the JMSAC configurations From the Tools Menu:

1. Select "**Configure JMSAC for Logos and Album Art**" if you are configuring the HD system for the complete Artist Experience.
2. Select "**Configure JMSAC for Logos Only**" if you are not using album art. When selected, the Artwork Configurations will NOT be available.

JMSAC Configuration Window for jmsacCfg.Properties and mpClient.xml

Commands

Defaults	Use this command to reset the properties to the factory default settings.
ReSet	Use this command to re-load the existing settings ignoring any changes that were made.
Update	Use this command to update the configuration settings. The first time this command is issued CSLite will create a shortcut on the desktop to the jmsacRunApp.exe. This shortcut can be used to start the JMSAC module and should be added to the startup menu as JMSAC MUST run all of the time.
Close	Use this command to close the JMSAC Properties window and return to the Main Event Log window.

***Note: Fields in yellow are locked and cannot be changed.**

jmsacCfg.Properties Configuration Settings

Exporter IP Address	The Exporter IP Address is not directly used by the JMSAC module but can be referenced in the PSD Send message if necessary and will be used by CSLite for sending the Station PSD PSD message.
Importer Version	Importer version number as a float value, like 3.1 or 4.46.
Importer IP Address	Importer IP Address is a full ip address of the listener port for clients of the importer, this is information the MSAC needs, since it is a client of the Importer. Port 8020 is the required port for the Listener Port and will be automatically added in the configuration file.
UDP Input Port	The UDP Input/Output Ports used for the Client/MSAC XML Request/Response API exchange.
UDP Output Port	The UDP Input/Output Ports used for the Client/MSAC XML Request/Response API exchange.
Last Lot ID	The Last Lot Id is a persistence of the last Lot Id used for all services.
TCP Listen Port	The TCP Listen Port is the port that the Client/MSAC XML Request/Response API will use if it is desired to use TCP instead of UDP. (Default 7777)
TCP Listen Port Timeout	The TCP Listen Port is the port that the Client/MSAC XML Request/Response API will use if it is desired to use TCP instead of UDP, and the timeout will be the number of seconds that the msac will wait for a request after the tcp connection. If no requests come in within this number of seconds, the tcp connection is broken.
TCP or UDP	CP or UDP refers to the protocol used for the Client/MSAC Request/Response XML API will use.
Importer TCP Connection Keep Alive	The Importer TCP Connection Keep Alive refers the the MSAC to Importer XML Interface, this can only be TCP and if the Keep Alive is true means that even if there is not data to be sent to the Importer, null packets will be sent in order to keep the connection alive, if it is false, then after 5 null packets, the MSAC as a client to the Importer will disconnect and only reconnect when it has data necessary to send to Importer.
Seconds To Retry Importer Connection	If this many seconds goes by with out an indication for data from the Importer, the MSAC will break tcp connection and restart, this will befault to 1 hour or 3600 seconds if it is not found in this properties file.
Remote Expiration in Days	Remote Expiration in Days referrs to files copied into the managed Remote File Directory. If these files have not been accessed in this many days, they will be deleted from the Remote File Directory where the MSAC is running, if this is set to 0 it does not delete the files at all.
Duty Cycle For Number Of Repeat Calculation	Fraction of the song duration that will be used to compute the number of repeats along with channel bandwidth and file size, will only have an effect when song duration is > 0 as an attribute in Sync Pre Send Message.
Maximum Number Of Repeats	Max number of repeats allowed from internal calculation, will only have an effect when song duration is > 0 as an attribute in Sync Pre Send Message
File Overwrite	By default this will be set to false which is the behaviour before this element was added. If this element is set to true, then for the data services album art and station logo, if a file exists with the same name as the one being sent in for that service, MSAC will overwrite it. In the past, if the file existed it would not have been overwritten.
Start MSAC with Station Logo Client	Historically the station logo client would start an MSAC internally. Now, if this key is false, it will presumed there is already an MSAC running or there will be in the future. If this is true then the station logo client will start the MSAC as always. If this key is not found it will default to old behaviour and start the MSAC. The MSAC server does not use this key for anything, only the station logo client.
Increase Async Send Rate On Error	If a sync event or the sync pre-send error out the default behaviour will be to not instance a new data object and return the error(this element set to false).If this element is true it will take the bandwidth that would have been allocated to that album art and increase the async send rate until the duration has expired and it will then revert back to its described bit rate. The calculation is based on a 15000 byte image send twice. The songDuration MUST be present to determine the appropriate bit rate increase. If it is not present no increase will occur. If no async Sends are active when the error happens noting happens.

mpClient.XML and mpClient.config.properties Configuration Settings

The mpClient configuration contains the Data Service Names for Station Logos as well as Album Art. These Data service names MUST be configured on the Importer.
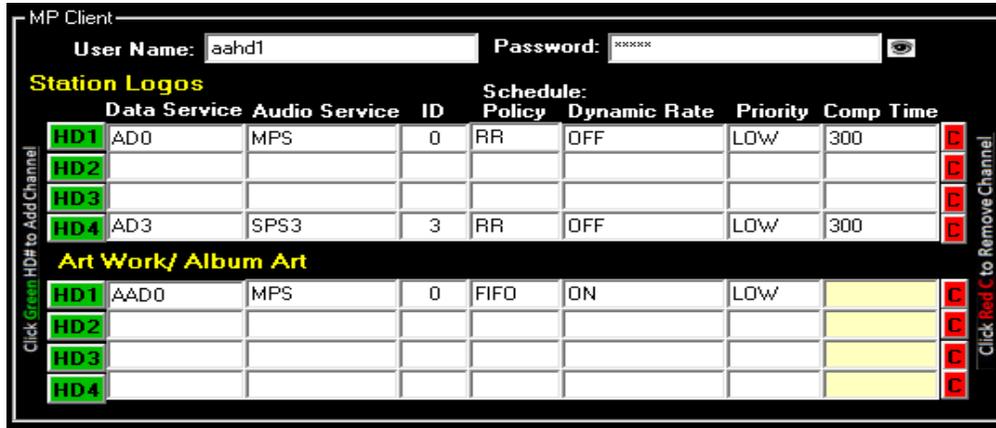
Username	Multiport Username from the Importer Configuration.
Password	Multiport Password from the Importer Configuration.
Green HD#	Use this command to use the default configurations for this channel. Once selected you may change the configuration as required for your system
dataServiceName	as specified on the Importer.
audioServiceName	(optional) as specified on Importer.
ID	Program ID as specified on the Importer. progam Id if any is this dataServiceName associated with.
schedulePolicy	either First In First Out(FIFO) or Round Robin (RR).
scheduleDynamicRate	either ON or OFF.
schedulePriority	either LOW, MID, or HIGH.
scheduleCompleteTime	number of seconds to complete file send in. Only applies to ASYNC and will only be close if dynamic send is off.
Red "C"	Use this command to clear the settings for this channel.

Logo and PSD Scheduling

CSLite will send Station Logo and PSDs to the HD channels not supported by a data casting application such as Arctic Palm's Center Stage Live with CSRDS. Select PAD and Logo Schedule from the Tools Menu to configure one or more stations using the station area for the desired channel. When available, enter your ConRad Hybrid username and password to post your logo and PSD to the ConRad Hybrid Radio system.

PAD and Logo Scheduling

Commands

Save	Use this command to save the HD PAD and Logo settings. Once updated, CSLite will resend the Logo every few minutes based on the Importer/Exporter IP, Ports and Completion Time specified in the JMSAC configuration settings
ReSet	Restore to the last saved configuration
Close	Use this command to close the configuration window and return to the main event window.

Station PSD and Logo Configuration

Station ID	Enter the Station ID (Call Letters) for this HD System.
ConRad User Name	(Optional) Station User ID as supplied by ConRad Hybrid Radio.
ConRad Password	(Optional) Password as supplied by ConRad Hybrid Radio.
PSD "Title"	Enter the Station PSD for the HD Radio Display. This will appear in the Title Field on HD Receivers.
"Artist"	(Optional) Enter additional information to appear in the Artist field on HD Receivers.
Logo "Browse"	Use the Green Browse command to select the logo artwork for this station. The file must be a PNG or JPG, 170x170 pixels to 200x200 pixels and 24kb or less. Once selected, CSLite will rename the file to meet the HD Radio specifications based on the Station ID and HD Channel. Once selected, CSLite will display the artwork file name, the filename in the HD Format and the file details.