JGater ADSys

Ad Insertion Systems

REV 1.6



DTMF (Dual Tone Multi-frequency)

- These are the tones you hear when you press a key on your telephone. When you press a key a pair of tones are generated.
- In the phone system the pairs of tones (dualtone) are used to trigger the switching equipment to "dial" a specific number.
 Different pairs of tones (Multi Frequency) represent different numbers.

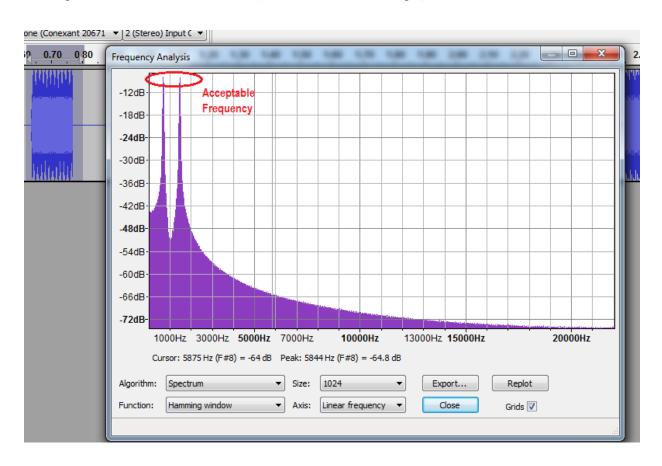
DTMF Frequencies

DTMF keypad frequencies (with sound clips)

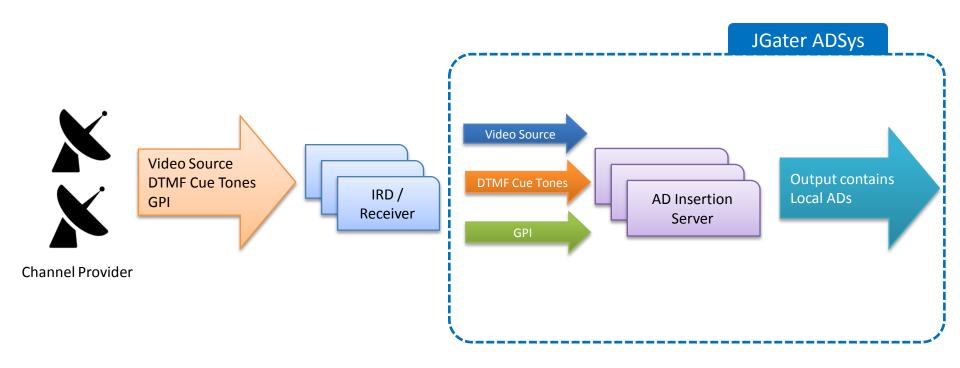
	1209 Hz	1336 Hz	1477 Hz	1633 Hz
697 Hz	1	2	3	А
770 Hz	4	5	6	В
852 Hz	7	8	9	С
941 Hz	*	0	#	D

Acceptable Frequency

3rd Party Software (Audacity)



AD Insertions



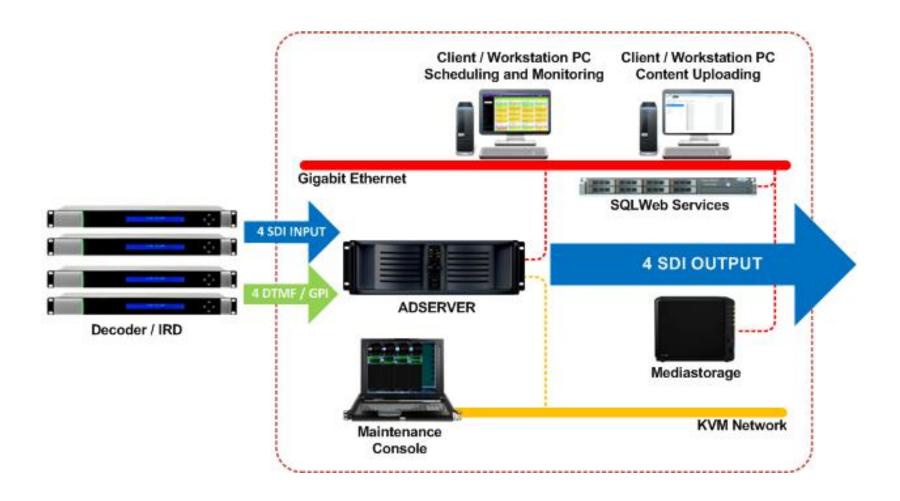
Examples of DTMF code sequences

Channels	Start Tone	Stop Tone
Starworld	251*	-
FOX	251*	-
CNN	024*	024#
CNBC	359*	359#
Nickoledeon	128*	128#
AXN	444*	444#
National Geographic	251*	251#
I	i i	

JGater ADSys

- Four SD or HD SDI video input / output
- Built-in DTMF Decoder and GPI
- Seamlessly switching between program and commercial contents
- Web based scheduling
- Support CSV and text base schedule file
- Real time monitoring
- Wider range DTMF tone recognition
- Programmable pre-roll time
- Generate as-run logs and cue tone log automatically as well as by request.

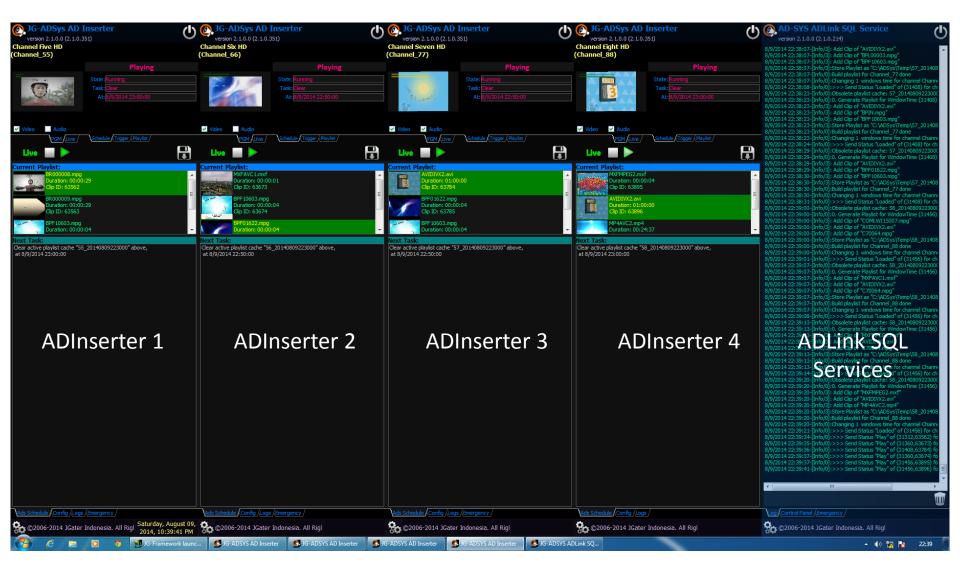
ADSys Schematic Diagram



ADServer

- Four SDI video input / output
- Built-in four DTMF Decoder / GPI module (Switchable)
- Real-time monitoring module status
- Adjustable DTMF gain
- Adjustable DTMF timming (up to 40 milliseconds)
- Input source preview
- Output preview
- Real-time events trap Log

ADSys Applications



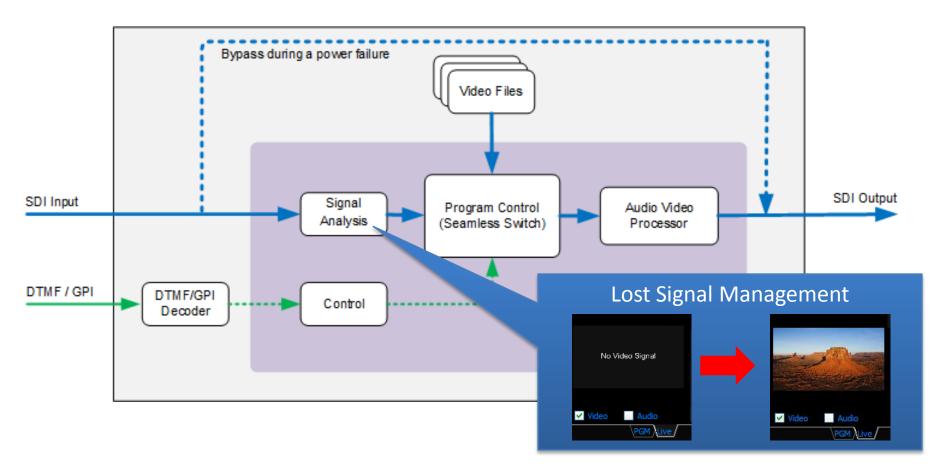
ADInserter



- Four ADInserter, available to handle SDI video Input and Output
- Running schedules that available on each channels.
- Make changes from the Input Source / live source to a video clip / local commercials.
- Accept DTMF or GPI, then trigger the application to perform content replacement.

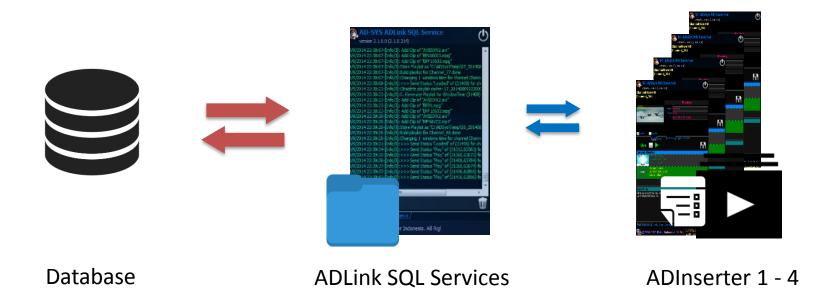
Video Processing Diagram

The following block diagram shows the functionality of the ADsys video processing.



ADLink SQL Services

ADLink SQL Services is responsible for managing the data communication or as a bridge from the Database Server and the ADServer



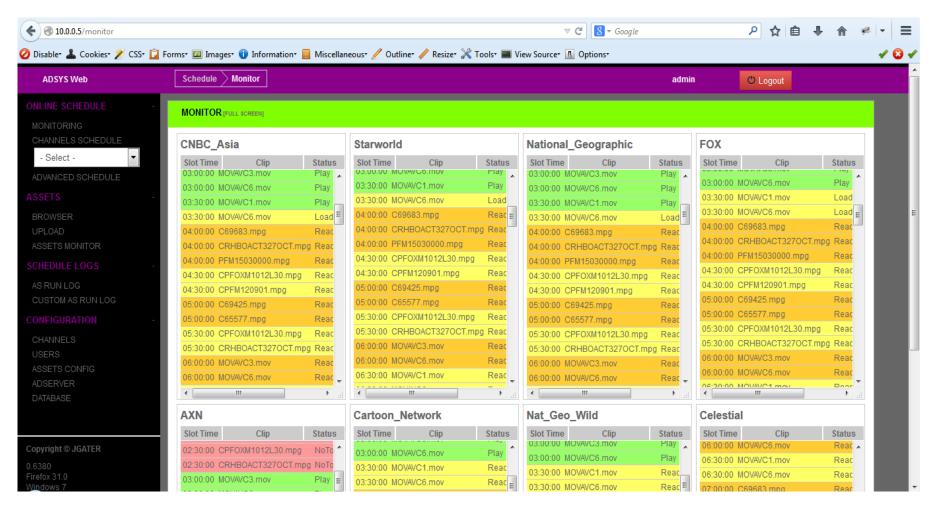
ADLink SQL Services

- Data schedules on each channel. Schedule that you have uploaded or created, and will be stored on Database Server.
- Data channels includes, channel name, channel code, cue mode, the DTMF digits, slot margin, pre-roll, and the data related to the other channel configurations.
- Event Data Services contains data sent by ADLink into the Database to build Schedule Logs. Schedule As-Run Logs contains information about video clips status inside of the schedule, ie Play, NoTone, Loaded, Error, and Cancel. You can download Schedule Logs via ADSys Web Application.

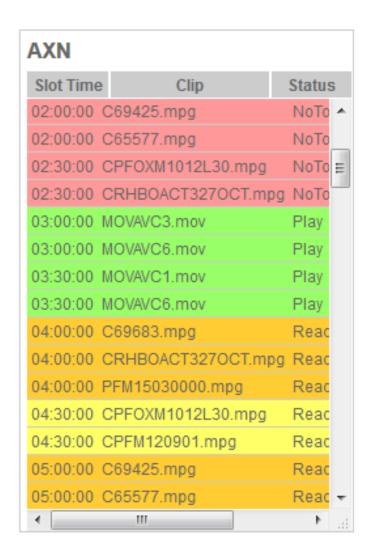
ADSys Web

- Real-time monitoring schedule for each channels
- ADsys Server configuration
- Upload schedule (CSV or SCH file)
- Maintain schedule / make good
- Export as-run log to XLS/TXT
- Media Library / Assets browser
- Using last browser technology (HTML 5 support)

ADSys Web Layout

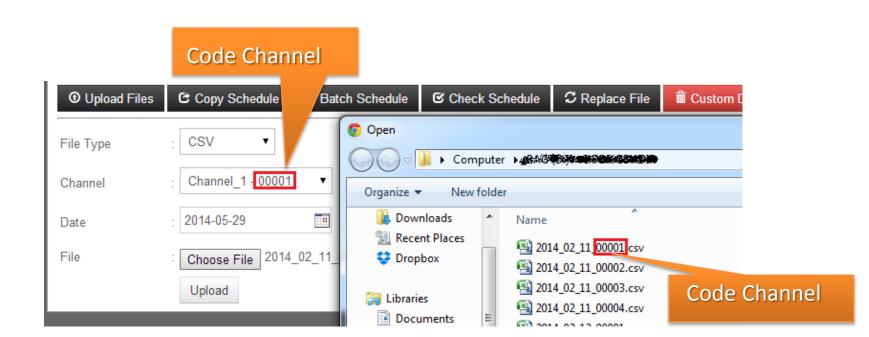


Real-time Monitoring

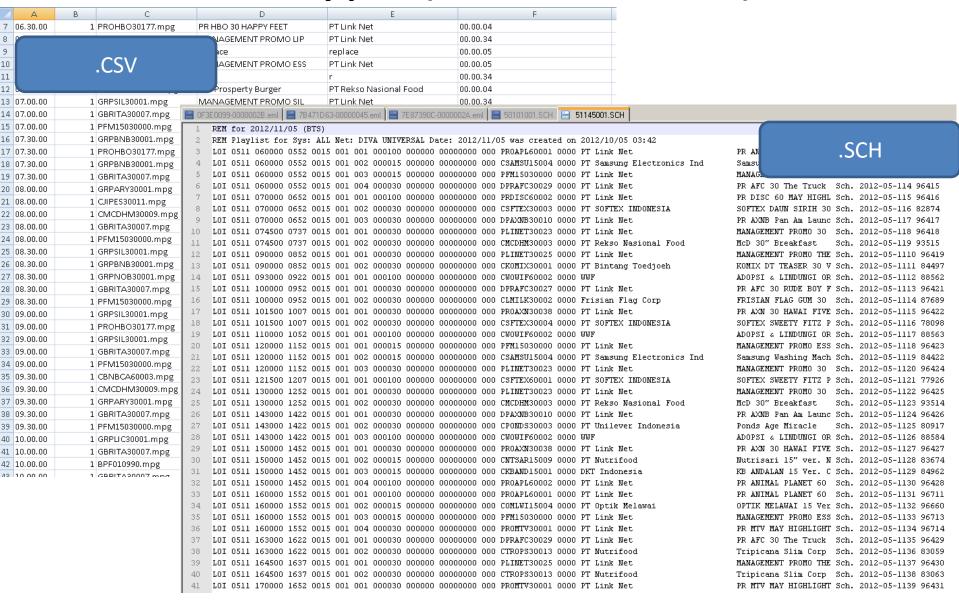


- Ready The video clip is ready to play, the video clips already in MediaStorage.
- Missing: Video material is not in MediaStorage and will be skipped.
- Play: The video clip started and already successfully played. At the time one of the video clips in a Windows Time played, the Windows Time is already locked and may not be edited.
- Load: Schedule is loaded by the system.
- **NoTone**: Schedule has expired and does not played the video clip.
- Error: The video clip is fail to play. This may
 happen because the video clips erased from
 MediaStorage or video codec is not supported by
 the system.
- Cancel: Video clip stops played or the system receiving cue tone stop.

Upload Schedule

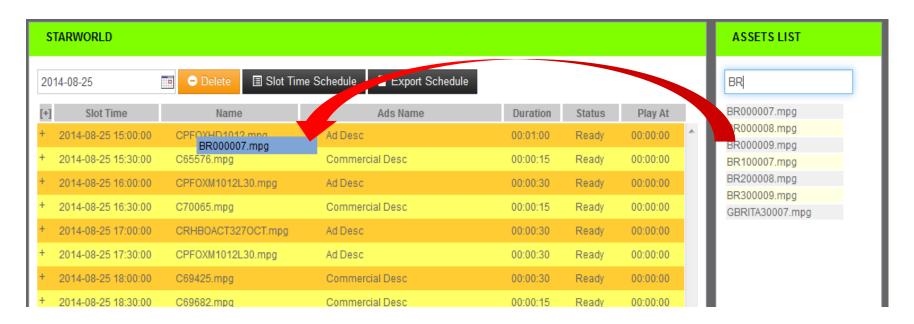


File type (text base file)



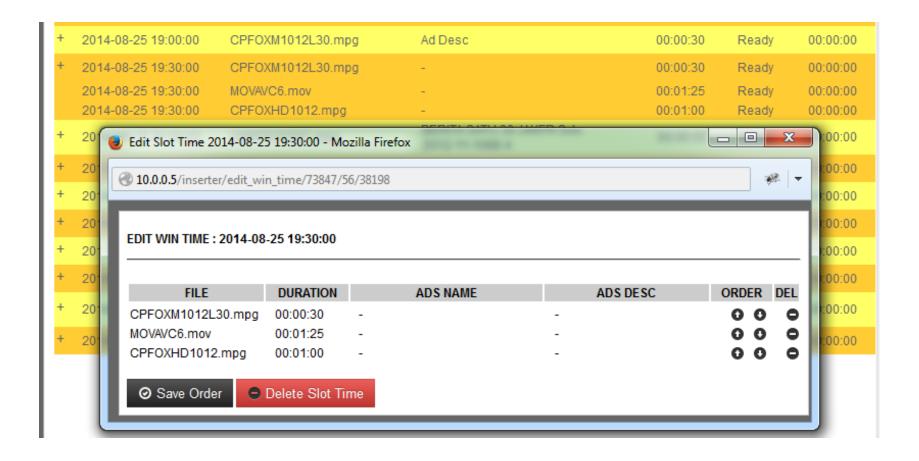
Maintain Schedule

Replace File by drag and drop



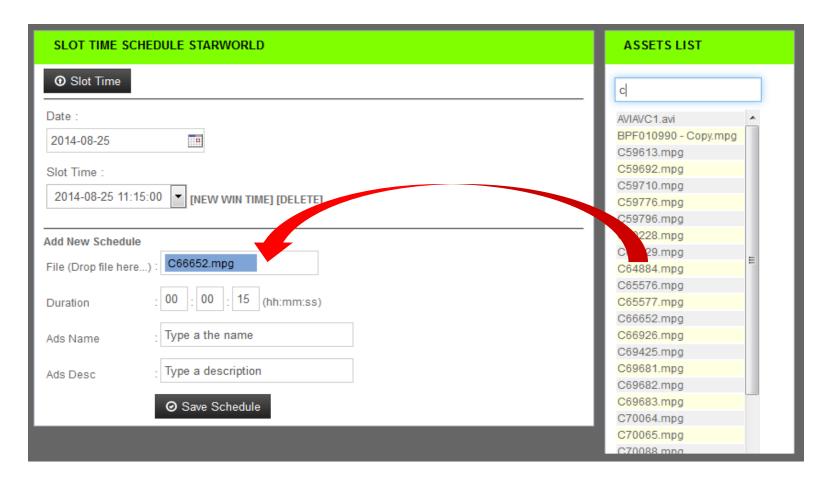
Maintain Schedule

Re-ordering



Maintain Schedule

Adding Files



0171	. (3-2						
A	В	С	D E	F	G	As run-logs a		es
112 CNN	5/25/2013 19:00	1	0:00:15 Error	5/25/2013 18:4	7 MD 15 Breakfast The	s sch. _A mi Rekso Nasional F	о смсртэго.mpg	
113 CNN	5/25/2013 19:00	1	0:00:17 Play	5/25/2013 18:4	7 MANAGEMENT PRO	MO ES: PT Link Net	PFM15030000.mpg	,
114 CNN	5/25/2013 19:30	1	0:00:15 Error	5/25/2013 18:5	0 MD 15 Breakfast The	Sch. 1PT Rekso Nasional F	o CMCD1520.mpg	
115 CNN	5/25/2013 19:30	1	0:00:05 Play	5/25/2013 18:5	0 OPTIK MELAWAI 15 V	Ver SchPT Optik Melawai	COMLWI15007.mpg	3
116 CNN	5/25/2013 19:30	1	0:01:08 Play	5/25/2013 18:5	1 rep	rep	CBNBCA60003.mpg	5
117 CNN	5/25/2013 20:00	1	0:00:05 Play	5/25/2013 18:5	2 BERITA SATU 30 JAKI	FR Sch. Berita Satu	GBRITA30007.mpg	
118 CNN	5/25/2013 20:00	1	0:00:15 Error	5/25/2013 18:5	2 MD 15 Breakfast The	Sch. 1PT Rekso Nasional F	o CMCD1520.mpg	
119 CNN	5/25/2013 20:00	1	0:00:17 Play	5/25/2013 18:5	2 MANAGEMENT PROI	MO ES: PT Link Net	PFM15030000.mpg	
120 CNN	5/25/2013 20:30	1	0:00:30 Play	5/25/2013 18:5	2 rep	rep	C70101.mpg	
121 CNN	5/25/2013 20:30	1	0:00:34 Play	5/25/2013 18:5	3 MANAGEMENT PRO	MO HC PT Link Net	PLINET30036.mpg	
122 CNN	5/25/2013 21:00	1	0:00:15 Play	5/25/2013 18:5	4 rep	rep	C60229.mpg	
123 CNN	5/25/2013 21:00	1	0:00:34 Play	5/25/2013 18:5	4 rep	rep	CPIZZA30007.mpg	
124 CNN	5/25/2013 21:30	1	0:00:30 Play	5/25/2013 18:5	6 rep	rep	C70101.mpg	
125 CNN	5/25/2013 21:30	1	0:00:34 Play	5/25/2013 18:5	6 MITSUBISHI PAJERO	SP Sch Mitsubishi	CMITSU30001.mpg	
126 CNN	5/25/2013 22:00	1	0:00:30 Error	5/25/2013 18:5	8 FIESTA NUGGET 30 V	er Sch Prima Food	CNUGET30003.mpg	Ş
127 CNN	5/25/2013 22:00	1	0:00:05 Play	5/25/2013 18:5	8 OPTIK MELAWAI 15 V	ver Scł PT Optik Melawai	COMLWI15007.mpg	g
128 CNN	5/25/2013 22:00	1	0:00:17 Play	5/25/2013 18:5	8 MANAGEMENT PRO	MO ES: PT Link Net	PFM15030000.mpg	,
129 CNN	5/25/2013 22:30	1	0:00:05 Play	5/25/2013 19:0	0 OPTIK MELAWAI 15 V	ver SchPT Optik Melawai	COMLWI15007.mpg	g
130 CNN	5/25/2013 22:30	1	0:00:15 Error	5/25/2013 19:0	0 MD 15 Breakfast The	Sch. 1PT Rekso Nasional F	o CMCD1520.mpg	
131 CNN	5/25/2013 22:30	1	0:00:05 Play	5/25/2013 19:0	0 rep	rep	C70064.mpg	
132 CNN	Λο	logo oo	TVT book		BC2 30 Ver. Con Sch. 2012-			ZBK30003.mpg
133 CNN	AS run	-logs as	TXT base f	O13-05-25 18:46:54 rep		rep rep		577.mpg LO1.mpg
134 CNN	112 2013-05-25 19	9:00:00 00:00:	:15 Err	-	Breakfast The Sch. 2012-)1520.mpg
	113 2013-05-25 19 114 2013-05-25 19				EMENT PROMO ESS Sch. 2012-			L5030000.mpg
135 CNN	114 2013-05-25 19 115 2013-05-25 19				: Breaktast Ine - 5ch. 2012- : MELAWAI 15 Ver Sch. 2012-)1520.mpg JWI15007.mpg
136 CNN	116 2013-05-25 19					rep		3CA60003.mpg
137	117 2013-05-25 20				A SATU 30 JAKFR Sch. 2012-			TA30007.mpg
	118 2013-05-25 20				Breakfast The Sch. 2012-)1520.mpg
	119 2013-05-25 20 120 2013-05-25 20	0:00:00 00:00: 0:30:00 00:00:			eneni Prumu Ess sch. 2012-	-11-1090 4 PT Link Net rep		L5030000.mpg L01.mpg
		0:30:00 00:00: 0:30:00 00:00:	· ·		EMENT PROMO HD Sch. 2012-	=		JET30036.mpg
	122 2013-05-25 21					rep		229.mpg
	123 2013-05-25 21	1:00:00 00:00:	:34 Play	2013-05-25 18:54:35 rep		rep	CPIZ	ZZA30007.mpg
	124 2013-05-25 21			-		rep		LO1.mpg
		1:30:00 00:00:	· ·					CSU30001.mpg
		2:00:00 00:00: 2:00:00 00:00:						ET30003.mpg JWI15007.mpg
	128 2013-05-25 22							.w113007.mpg L5030000.mpg
	129 2013-05-25 22							WI15007.mpg
	130 2013-05-25 22	2:30:00 00:00:	:15 Err	r 2013-05-25 19:00:10 MD 15	Breakfast The Sch. 2012-	-11-10101 PT Rekso Nasiona	al Food CMCD)1520.mpg
		2:30:00 00:00:				rep		064.mpg
		3:00:00 00:00:						TA30007.mpg
		3:00:00 00:00: 3:00:00 00:00:)1520.mpg
		3:00:00 00:00: 3:30:00 00:00:			enewi rkono esa sun. 2012-	rep		L5030000.mpg L01.mpg
		3:30:00 00:00:		-		rep		125.mpg
	r 137							

Hardware Specifications

ADServer

- Last Generation Intel Core i7 CPU
- 16 GB Memory DDR3
- SSD System Storage
- Four SDI video input / output
- Built-in DTMF / GPI decoder devices
- 2 RU Rackmount Case for SD / 4RU for HD
- GigE Network Interfaces
- Microsoft Windows 7 Pro 64 Bit

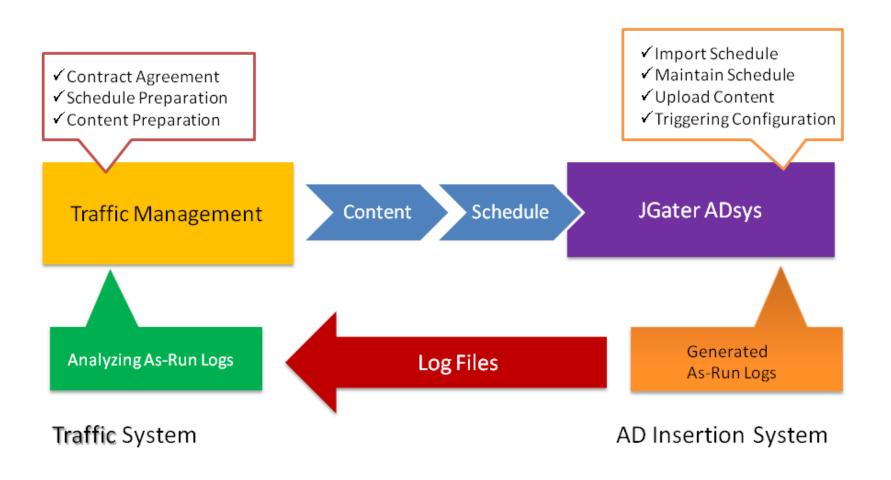
Database

- IBM System X3530M4 / System X Series
- Intel Xeon E5-2430 2.20 GHz
- 16 GB Memory DDR3 ECC
- Storage SAS 300 GB (Raid 1 Mirroring Hot-Swappable)
- 1 RU Rackmount Case
- GigE Network Interfaces
- Linux Operating System

Mediastorage

- Last Generation Intel Dual Core CPU
- CPU Passive Cooling Technology & System Fan Redundancy
- 2 GB Memory DDR3
- 4 TB Hot-swappable Hard Drive Design with RAID
 10
- 2 GigE with Failover and Link Aggregation Support
- Windows® AD and ACL Support
- Embedded Linux Operating System

Scheduling Workflow



Slot Time



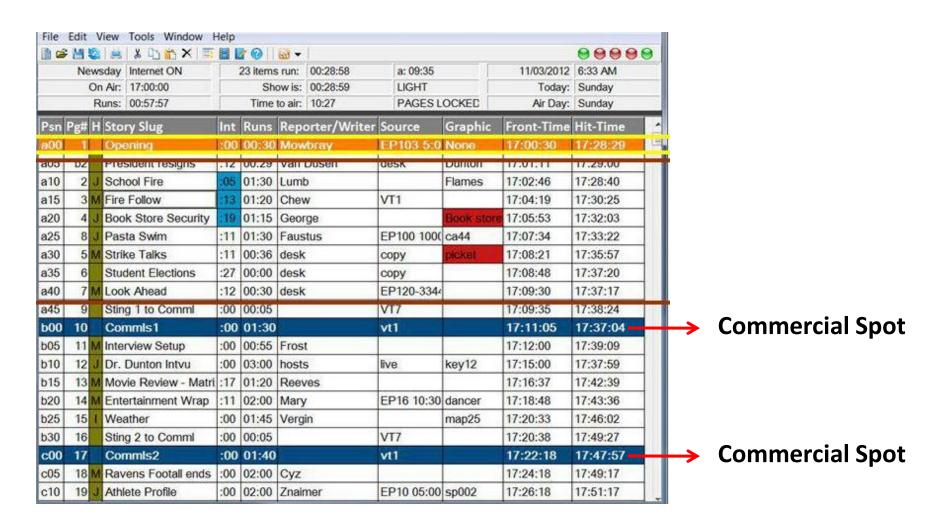
- Slot time is the time position that is used to insert playlist.
- Is implementation of the schedule pattern (commercial spot) from TV Provider

	Α	В	С	D	Е	
7	06.30.00	1	PROHBO30177.mpg	PR HBO 30 HAPPY FEET	PT Link Net	Slot 1 at 06:30:00
8	06.30.00	1	GRPLIC30001.mpg	Disulist	CT Link Net	310t 1 at 00.30.00
9	06.30.00	1	GBRITA30007.mpg	Playlist	place	00.00.05
10	06.30.00	1	PFM15030000.mpg	MANAGEMENT PROMO ESS	PT Link Net	00.00.05
11	07.00.00	1	GRPBNB30001.mpg	r	r	Slot 2 at 07:00:00
12	07.00.00	1	CMCDHM30009.mpg	MD Prosperty Burger	PT Rekso Nasional	310t 2 at 07.00.00
13	07.00.00	1	GRPSIL30001.mpg	Playlist	Link Net	00.00.34
14	07.00.00	1	GBRITA30007.mpg	replace	replace	00.00.05
15	07.00.00	1	PFM15030000.mpg	MANAGEMENT PROMO ESS	PT Link Net	00.00.05
16	07.30.00	1	GRPBNB30001.mpg	r	r	Slot 3 at 07:30:00
17	07.30.00	1	PROHBO30177.mpg	DO HBO 30 HADDY EFFT	PT Link Net	5100 5 40 67.50.00
18	07.30.00	1	GRPBNB30001.mpg	Playlist	Link Net	00.00.34
19	07.30.00	1	GBRITA30007.mpg	replace	replace	00.00.05

Correspondence with the TV Provider

- Cue Trigger Type (GPI or DTMF)
- Cue Tone / DTMF Digits
- Cue Trigger Port on IRD (Audio Channel / Cue Trigger Port)
- Commercial Spot / Pattern / Schedule
- Pre-roll
- Live Event (no commercial break)
- Device replacement / maintenance

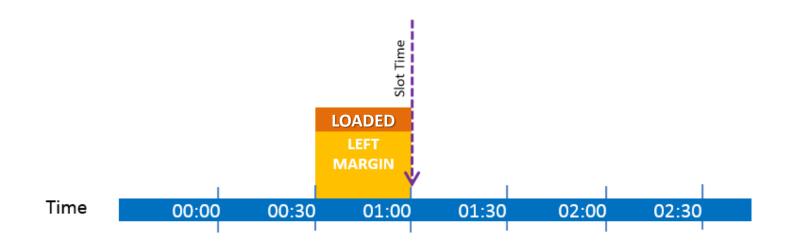
Commercial Spot



Slot Margin

Left Margin

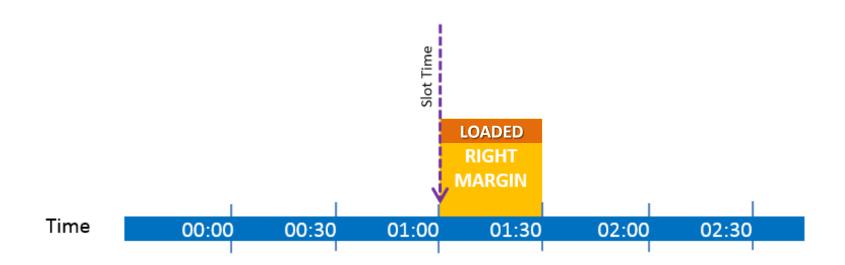
It is a duration that will subtract time of Slot Time so it will make a new time before Slot Time.



Slot Margin

Right Margin

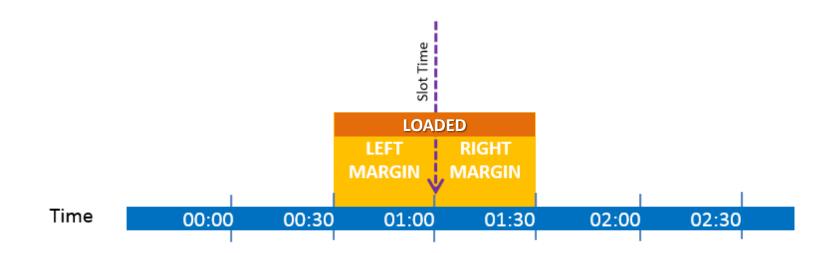
Right Margin will adding a time of Slot Time so it will make a new time after Slot Time.



Slot Margin

Balanced Margin

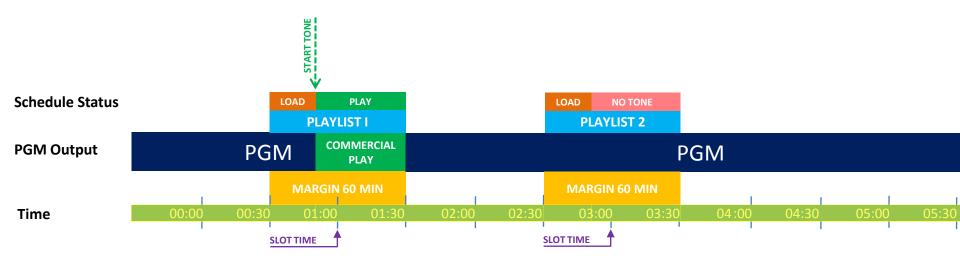
It is the combination of Left Margin and Right Margin. The duration of Left Margin will subtracting and adding the time of Slot Time.



Running Schedule

Margin Left: 30 Min (Balanced)

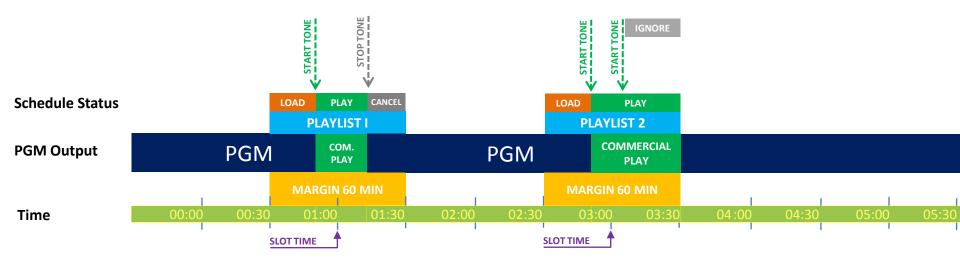
Slot 1 at : 01:00Slot 2 at : 03:00



Running Schedule

Margin Left: 30 Min (Balanced)

Slot 1 at : 01:00Slot 2 at : 03:00



Key benefits

- Straight forward operational workflow
- Support DTMF and GPI as trigger
- Each channel configurable independently
- Web base with user friendly interface
- Detect new Adsys units automatically

Our Clients

- FirstMedia, 36 Ch SD, 12 Ch HD (2012,2014)
- NexMedia, 12 Ch SD (2013)
- Transvision, 36 Ch SD (2014, planed to upgraded HD in 2016)
- Big TV, 36 Ch SD/HD (2014)
- Telkom IP TV, 40 Ch SD/HD (2016)

Our Support

- Warranty
 - Full support; includes: configuration, maintenance, update software, one to one replacement on hardware failures, on-site or by phone support (24 x 7 on critical issue) and remote support
- Extended warranty
 Service Level Agreement
- Our support are available locally in Indonesia
 Fast response, On-site support as client requirement anytime, anywhere