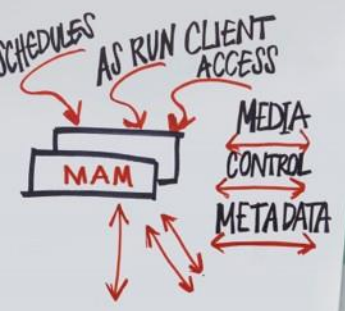
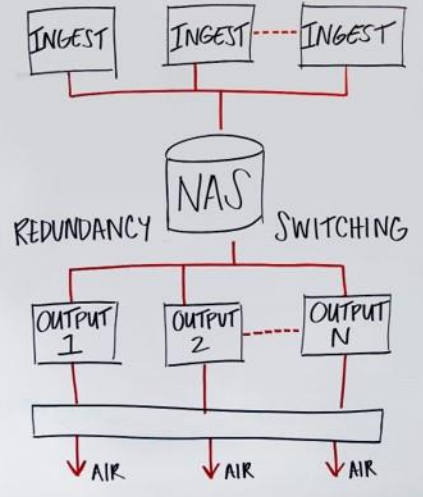


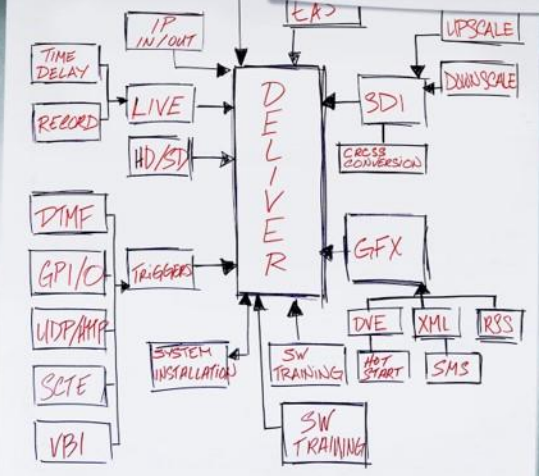
- Focus grp A-E...
- Tech support to resellers today/troubleshoot

MOD VII-XII
 About resellers before formulating strategy
 G4TV...

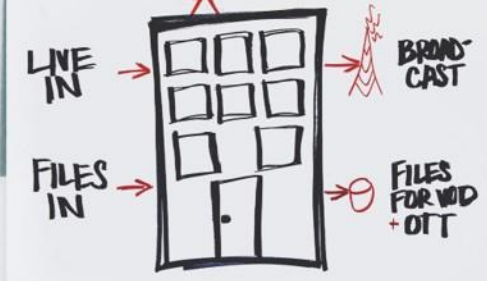
- Identify new growth areas
- Formulate
- Initiate



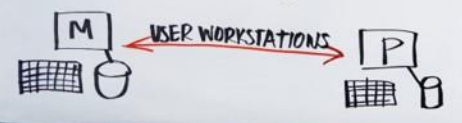
Create
 Manage
 Deliver
 Report



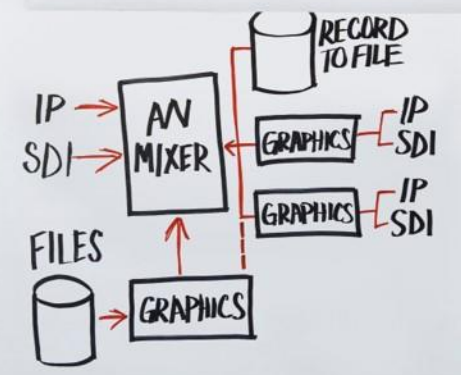
CONTENT DELIVERY FACTORY



FILES



AUTOMATION





BroadStream
SOLUTIONS

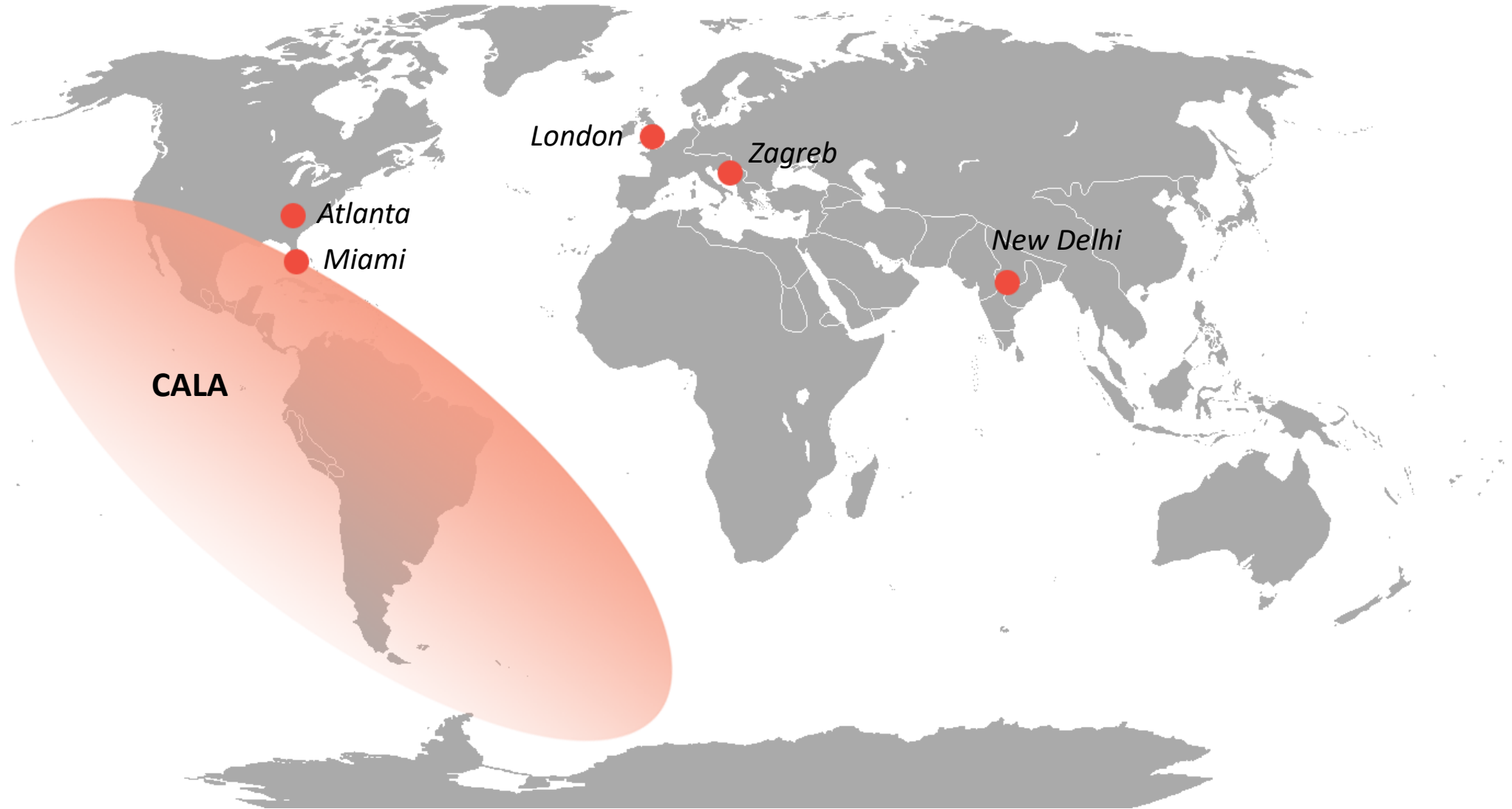
PLAYOUT – PROVEN – PERFECTED

6 September 2016

Juan Carlos Ortolan
Business Development Director - CALA

- **BroadStream**
 - Delivering reliable software playout solutions for over 25 years to broadcasters and media organizations
 - Strong in EMEA, successful now in USA and recently opening Asia and Latin America
- **Vision**
 - To establish BroadStream as the Most Trusted and Respected Solutions Partner to Broadcasters World Wide
- **Mission**
 - We deliver Flexible Solutions, Improved Workflows and Operational Efficiency to our customers
- **Values**
 - Integrity and Respect...we always do our Best

Worldwide Organization



Worldwide Organization



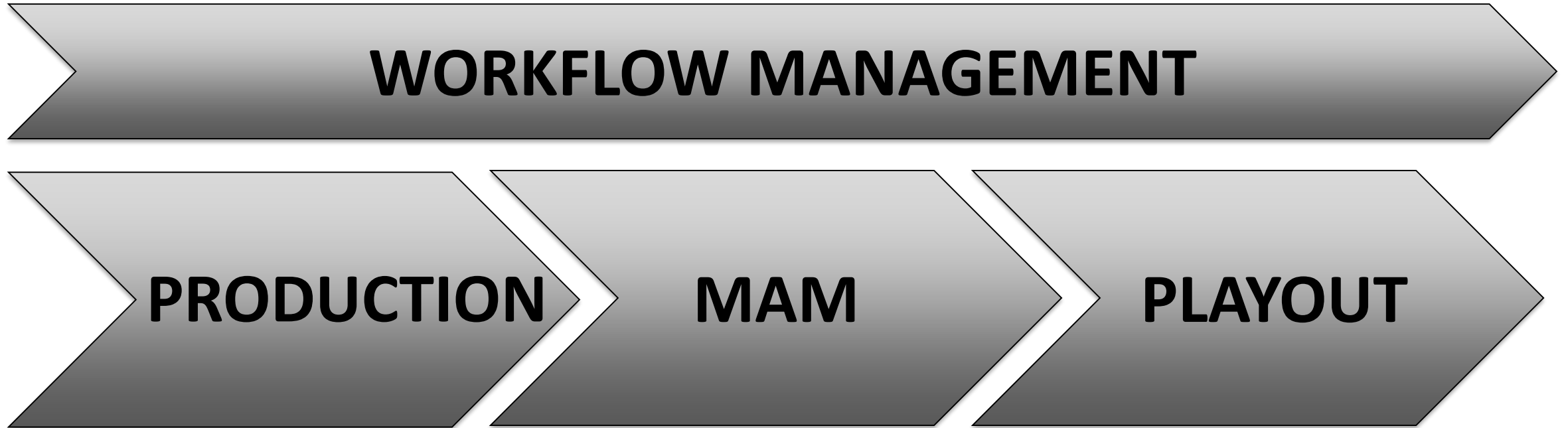
- **Headquarter**
 - Historically in London, UK. Now moving to Atlanta
- **Development**
 - Zagreb, Croatia
- **The Americas**
 - Atlanta Office
 - Head Office, Engineering, Sales and Pre-Sales
 - Tulsa Office
 - Assembly, Pre-Configurations, System Test, Pre-Shipping and Post-Sales
 - Miami Office
 - Sales for Caribbean & Latin America

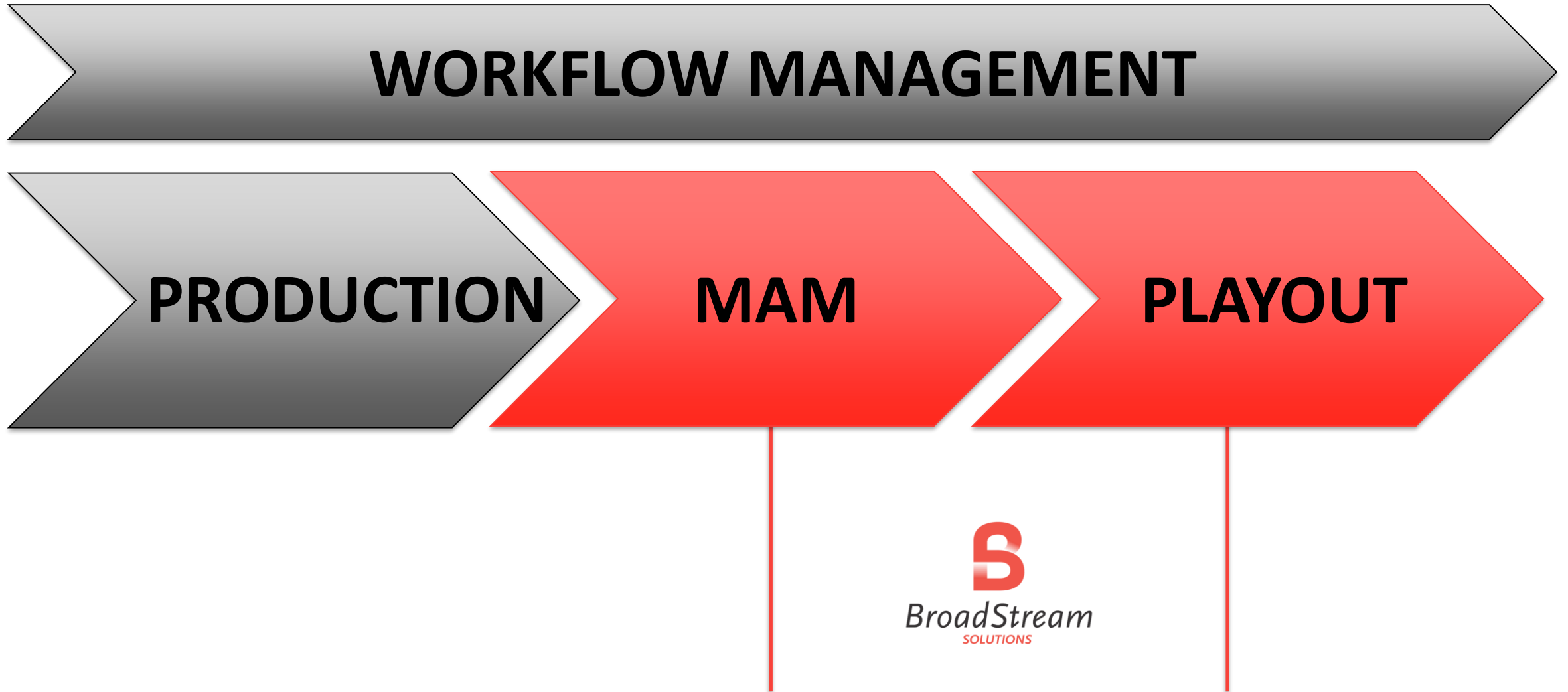
Broadcast Workflow



Broadcast Workflow







BroadStream Core Product



OASYS
AUTOMATED PLAYOUT

Why BroadStream ?



- We are a Software House
- Although we deliver Turnkey Solutions
- We don't offer just a product but a Platform
- We are agile and Responsive
- We offer Broadcast Grade support quality for IT Solutions
- Solid and Strong, privately held and internally financed
- We have a Team and Values
- **A True Partner**

BroadStream Customers

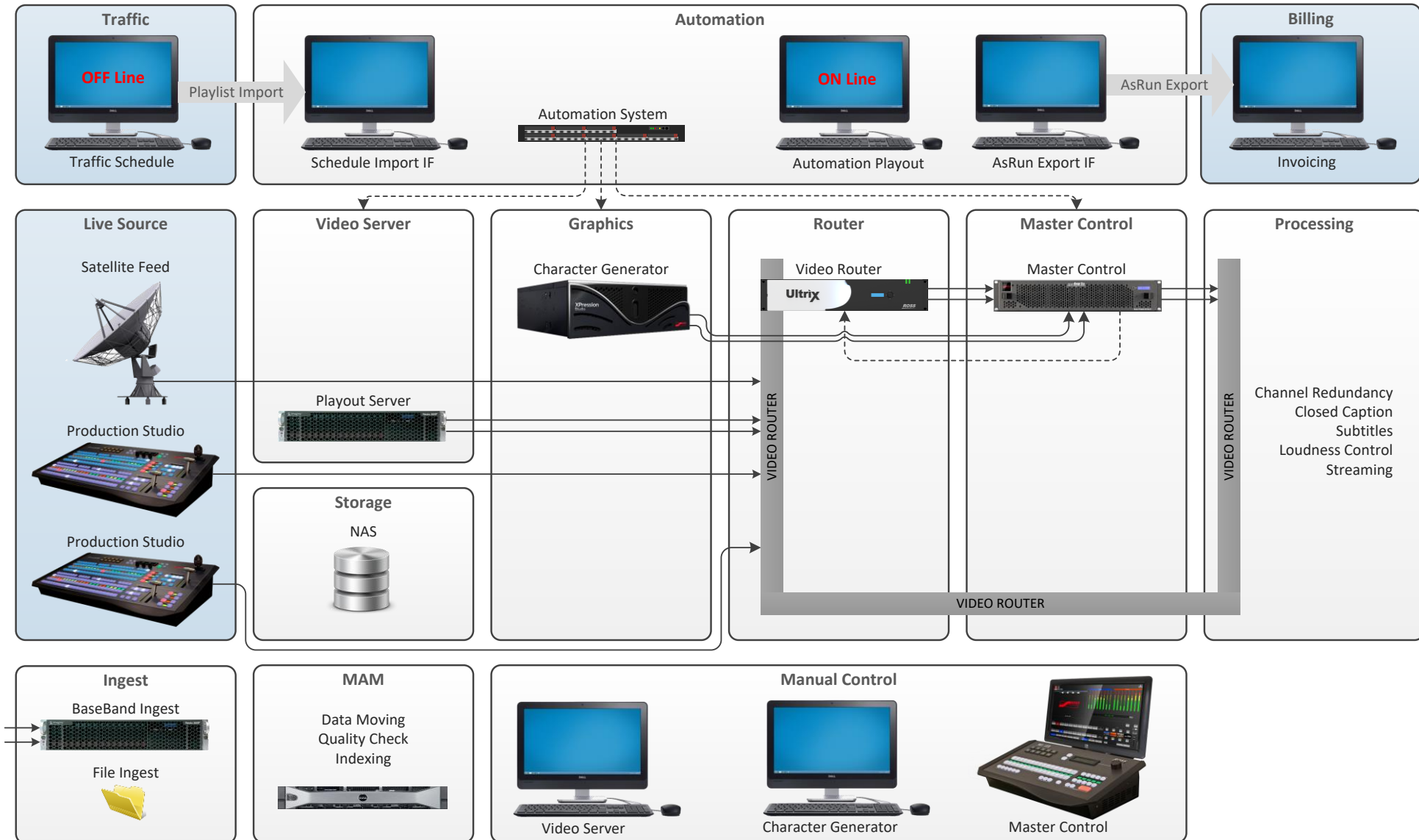




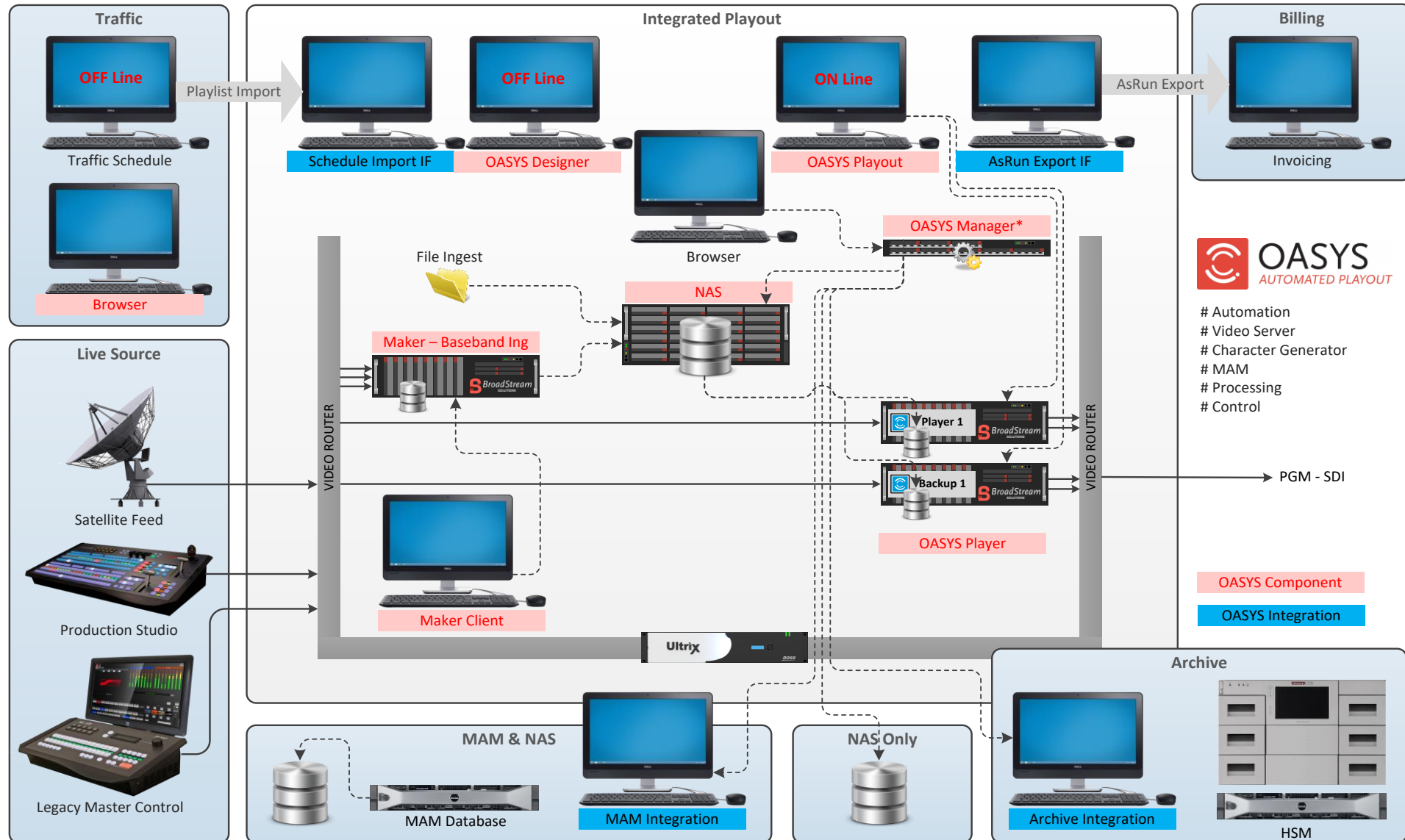
 *BroadStream*
SOLUTIONS

INTEGRATED PLAYOUT

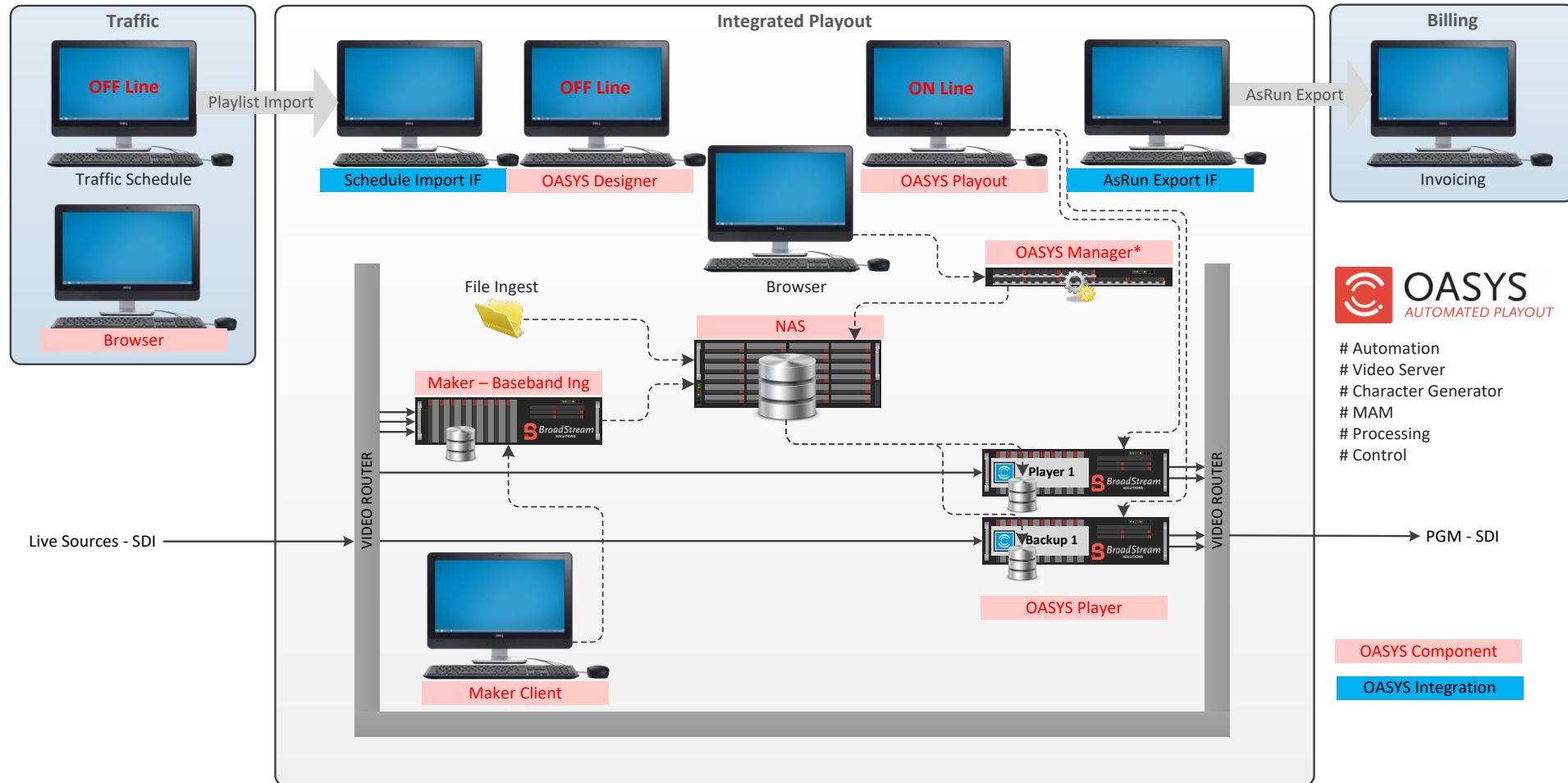
Legacy Playout Solution



Integrated Playout Solution



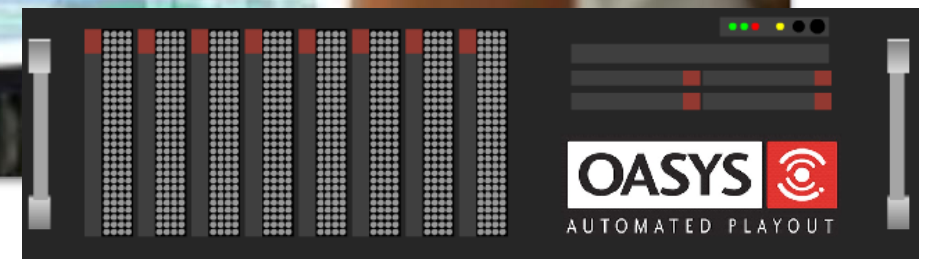
Integrated Playout Solution



Integrated Playout Solution



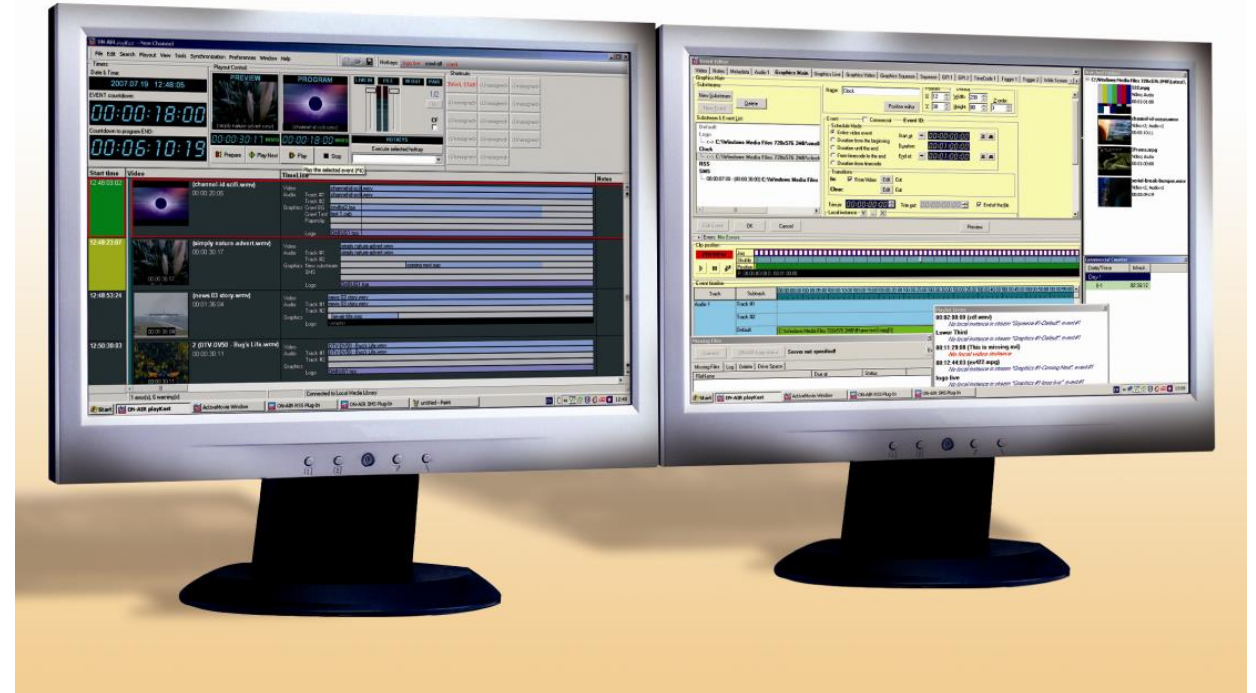
- “Solution in a Box”
 - Automation
 - Video Server
 - Character Generator
 - DVEs
 - MAM
 - Processing
 - Control



Integrated Playout Solution



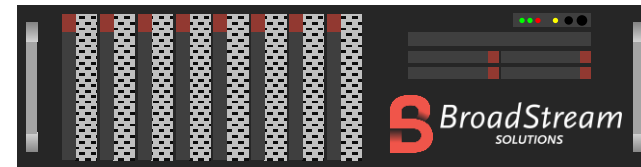
- Automation
 - Traffic Import
 - As Run Logs
 - Off-Line & On-Line changes
 - Sophisticated Playlist Control
 - Event Editor
 - Secondary Events Management
 - Hard Times
 - Auto Fillers
 - Programmable Hot Keys



Integrated Playout Solution



- Video Server
 - Multi Format File Support
 - Up/Down Conversion on the fly
 - Multi Channel Playout on the same Program
 - Playout from
 - Local Storage
 - Central NAS
 - Maker (Ingest Engine)



Integrated Playout Solution



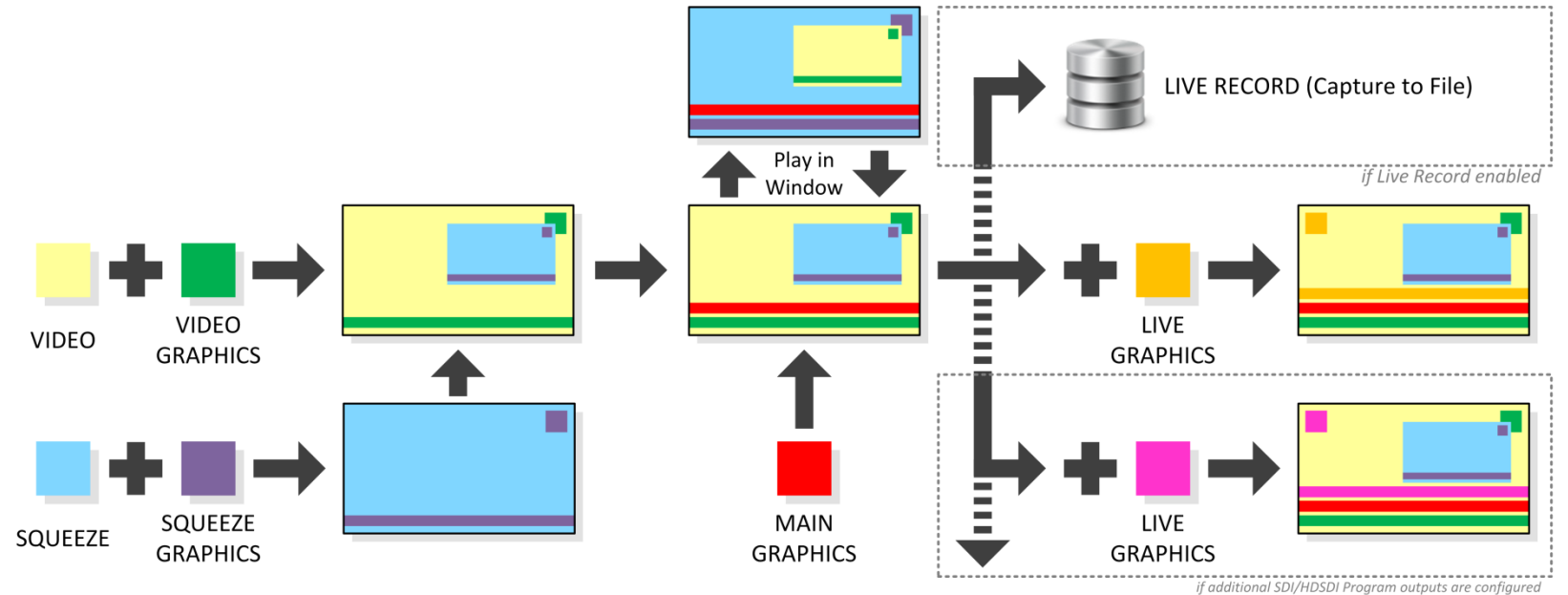
• Character Generator

– Multi Layer

- Programmable

– Dynamic Text

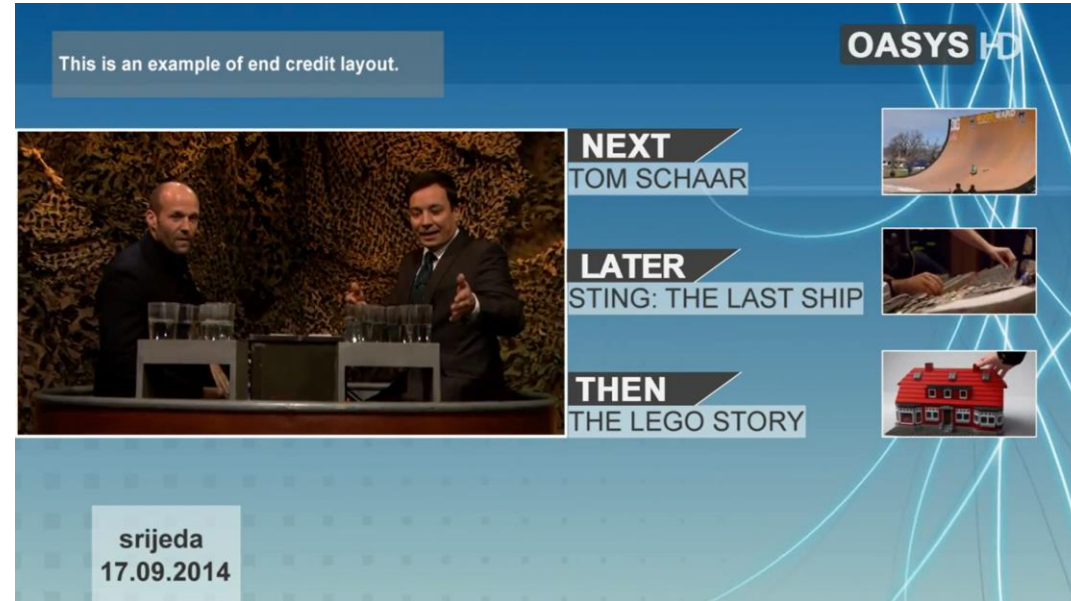
- xls, txt
- rss feeds
- Metadata
- Playlist Info
- Metadata Sender



Integrated Playout Solution



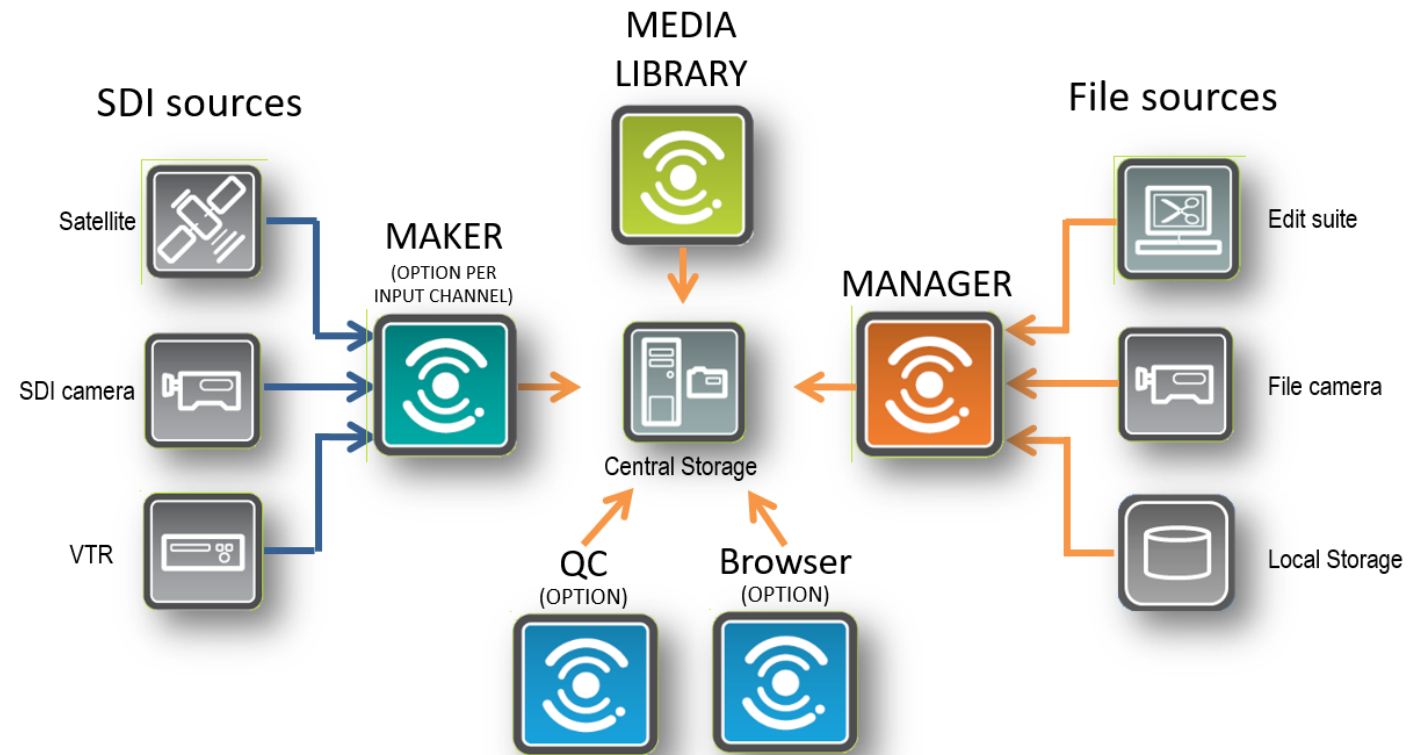
- DVEs
 - Up to 4 DVEs at the same time
 - File or Live Video content
 - 2D DVEs only
 - Programmable
 - Timing Control
 - Secondary Event Pop Up
 - Secondary Event turns into Primary Event



Integrated Playout Solution



- MAM
 - Playout Workflow Support
 - Ingest Management
 - Proxy Generation
 - Metadata Insertion
 - Quality Check
 - Audio Normalization
 - File Browsing & Preview
 - Sub Clipping
 - Media Indexing
 - Data Moving



Integrated Playout Solution



Processing

Inputs/Outputs

- SDIe
- IP Streaming
- IP TS

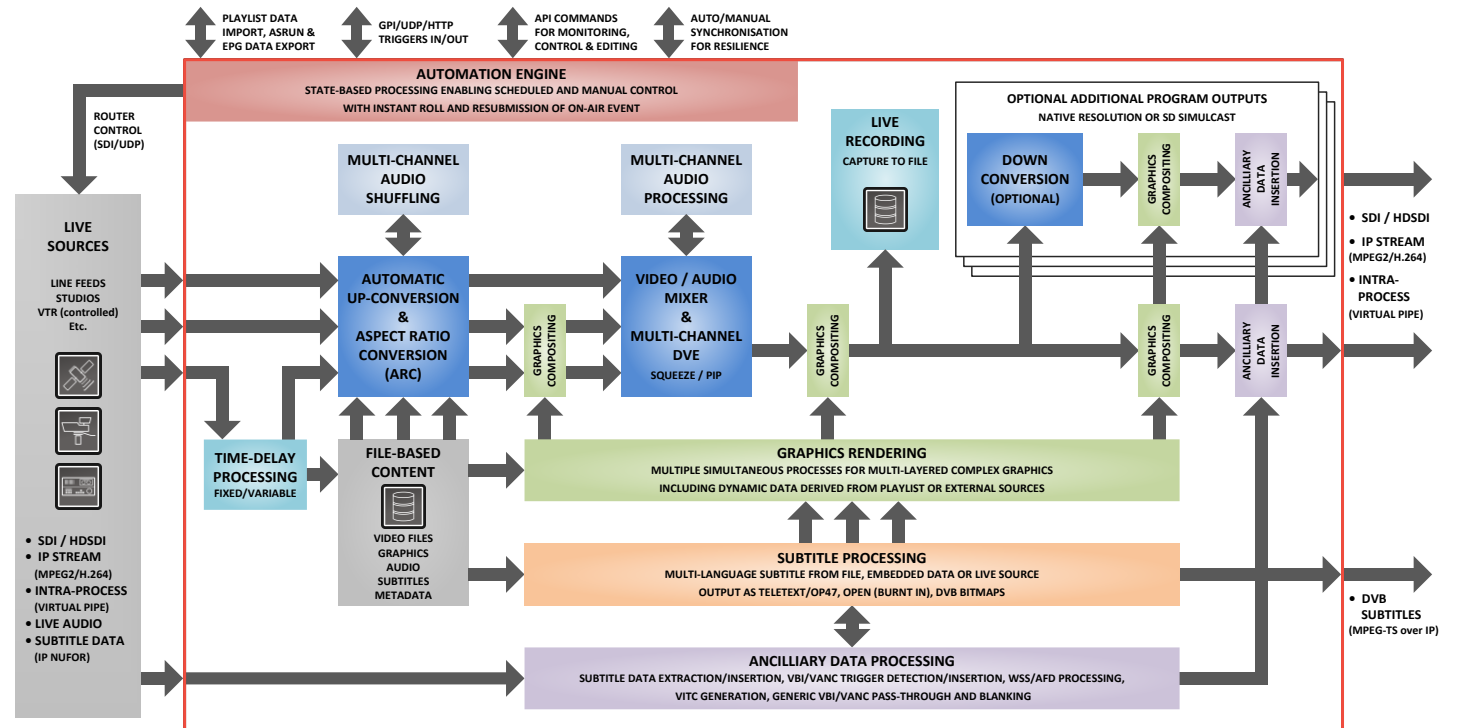
Audio Manipulation

Closed Caption

Multi Language Subtitle

DVB Subtitling

Streaming



Integrated Playout Solution



- Control

- Device Control

- Router

- Live Input Selection
 - Redundancy Management

- CG

- Additional GFX

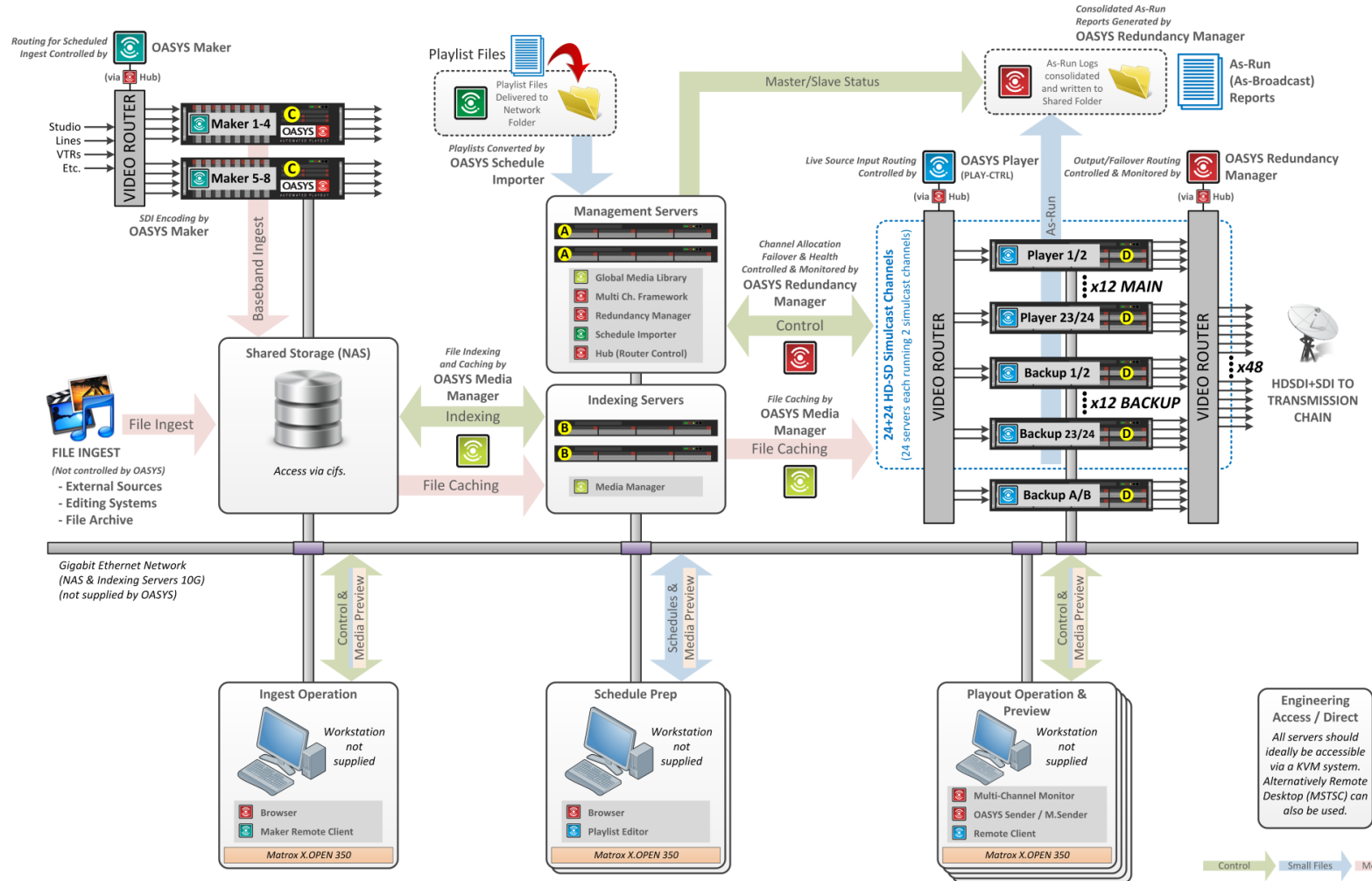
- Transport Control

- Additional Video Source

- Remote Playout

- Network Local Playout

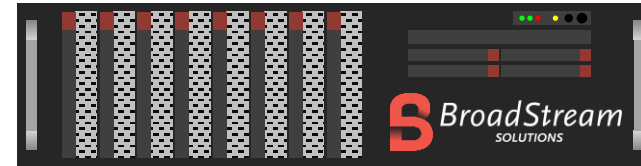
- Cue Tones
 - GPI
 - VANC Control



Integrated Playout Solution



- “Unique Feature Set”
 - Time Management
 - Redundancy Management
 - Multi Channel Web Control



Integrated Playout Solution



- Time Management

- Time Delay

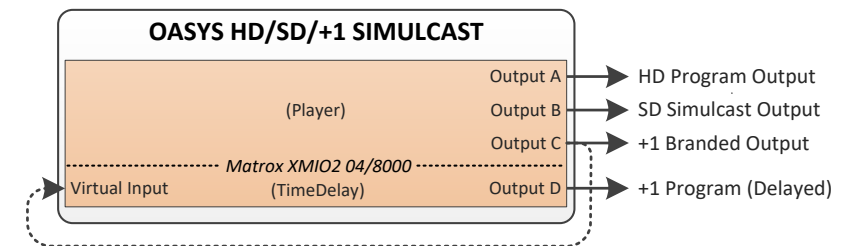
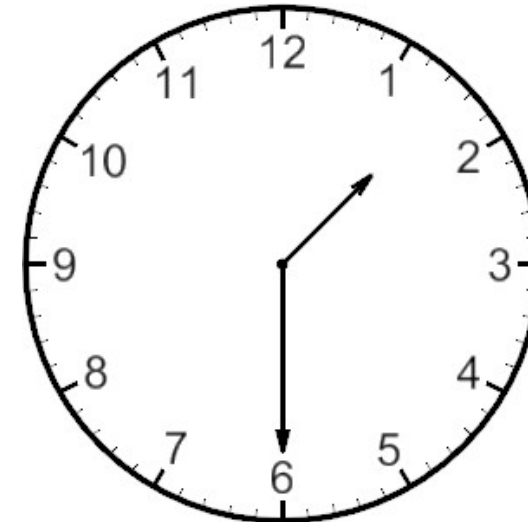
- Fixed Delay for Playout to different time zones

- Time Play

- Uncertain playout delay
 - Clipping within a large loop recording

- Secondary Recording

- Automatic Clean Feed PGM Recording
 - Automatic Playout later on the Playlist

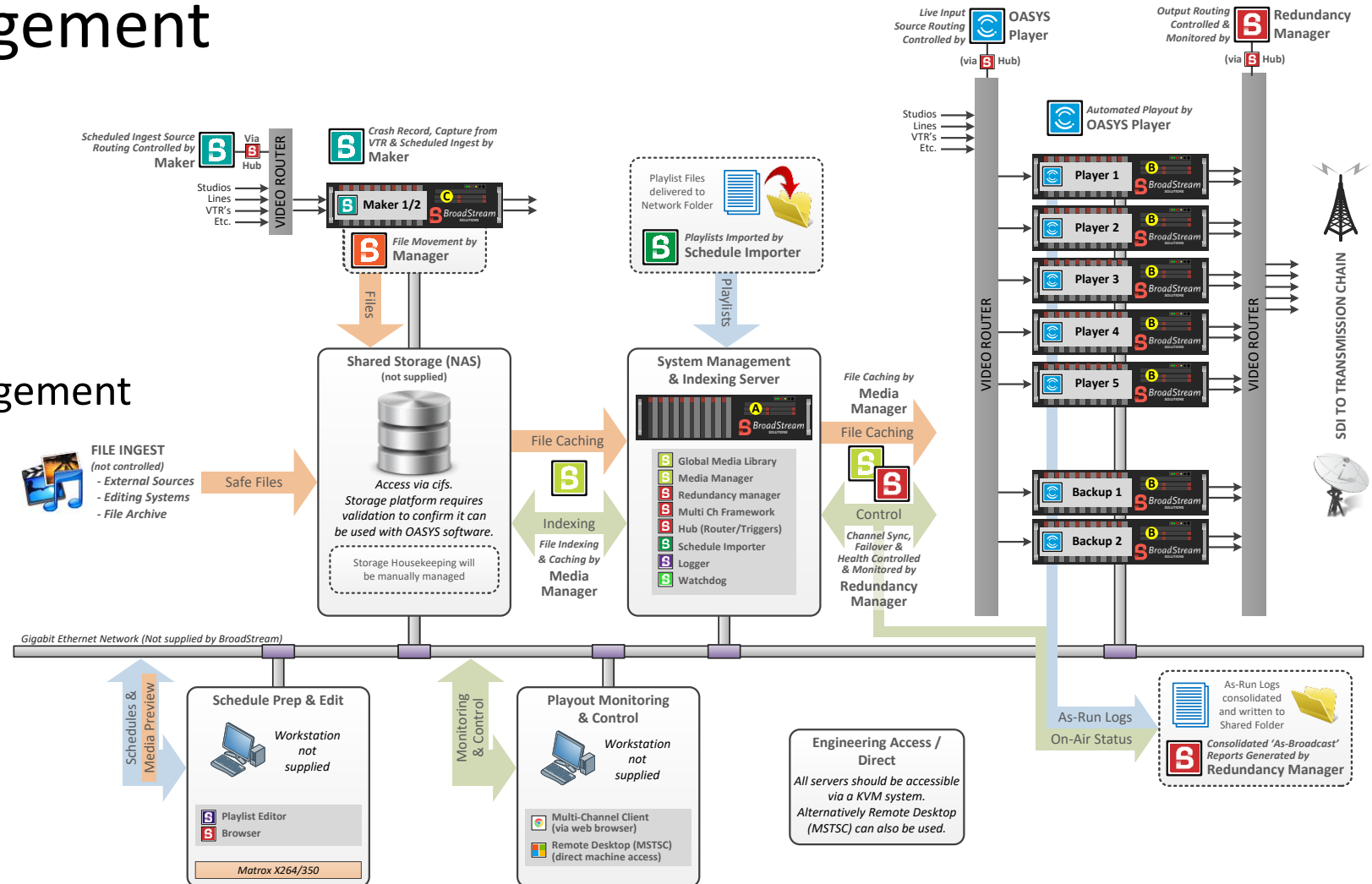


Integrated Playout Solution

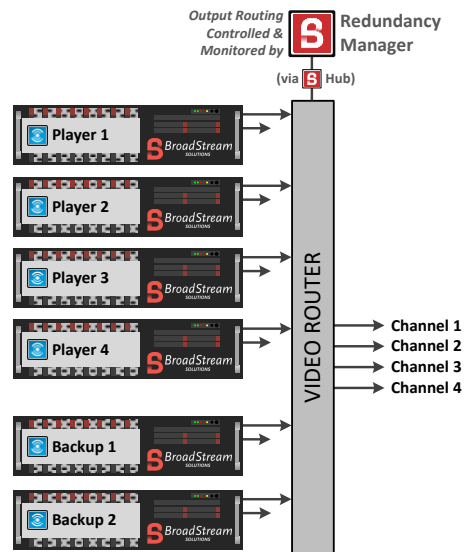


• Redundancy Management

- N+N Architecture
 - Mirroring
- N+M Architecture
 - Redundancy Manager
 - Channel Priority Management
 - Routing Control
 - Playlist Loading
 - Data Moving
 - As Run Concealment



- Redundancy Management



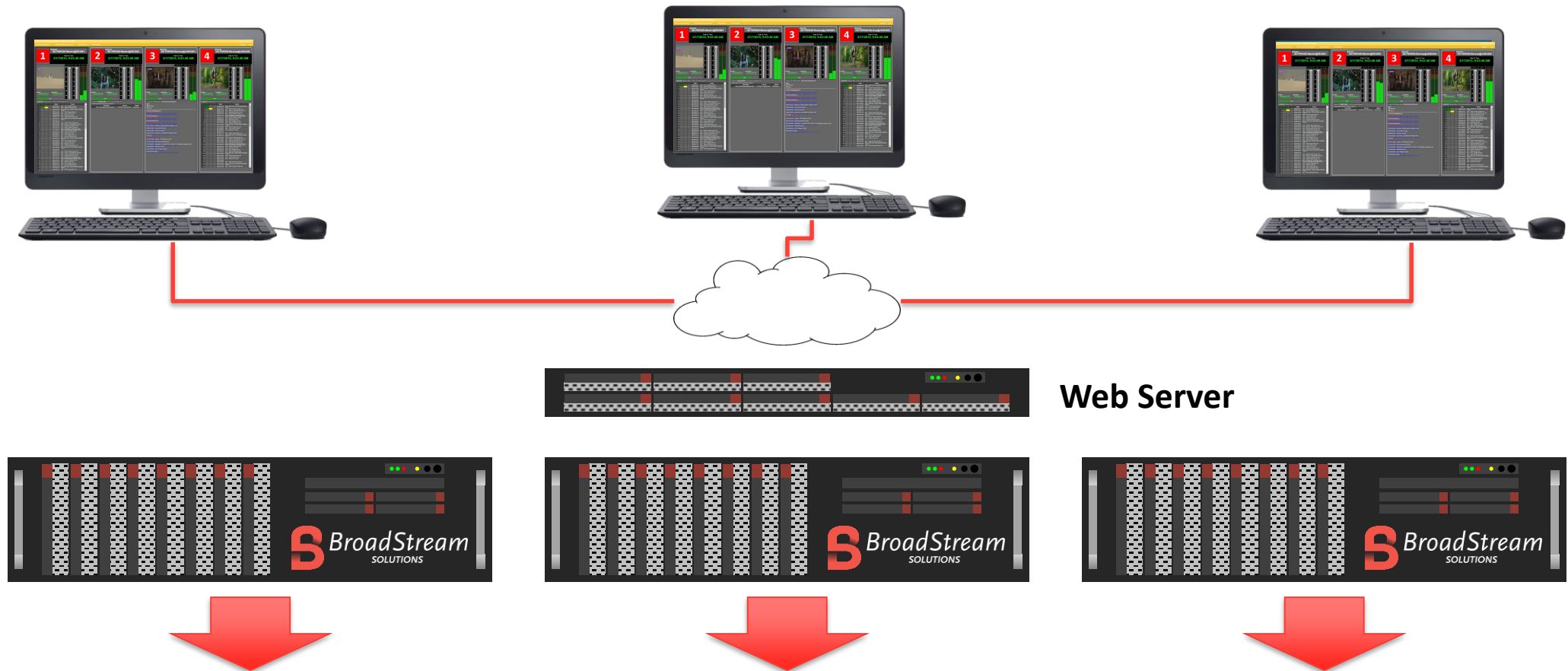
TV-Suite interface showing a grid of content slots and server status. The interface includes a TV-Suite header, a Router communication status bar, and a grid of content slots. The content slots are categorized by genre (Comedy, Movies, Music, Kids) and priority (Priority 1, Priority 2, Priority 3, Priority 4). The status of each slot is indicated by a color-coded button (ON-AIR, Playing, or Warning).

TV-Suite	Router communication: OK	Comedy	Movies	Music	Kids
		Priority: 1	Priority: 2	Priority: 3 No backup	Priority: 4 No backup
SERVER-1[1]		ON-AIR			
SERVER-2[1]	1 warning (from 13:15:58)		ON-AIR		
SERVER-3[1]				ON-AIR	
SERVER-4[1]					ON-AIR
SERVER-5[1]		Playing			
SERVER-6[1]	1 warning (from 13:15:58)		Playing		

Integrated Playout Solution



- Multi Channel Web Architecture
 - Web Server and remote Web Clients for Playout Control



Integrated Playout Solution



- Multi Channel Web Architecture



The collage displays several key components of the playout solution:

- Channel Status Monitors:** Four panels labeled 1 through 4, each showing a channel's status (e.g., HD PEROPS-Master@ZEUS#1) with video thumbnails and signal level meters.
- Main Presentation Editor:** A central interface for 'CH 1#0-Master@localhost#1' showing a program timeline with various video tracks, a 'PRESET' and 'PROGRAM' section, and a 'COMMERCIAL COUNTER' table.
- Video Preview:** A window titled 'Video preview - zeus 1' showing a live video feed of a group of people.
- System Information:** A top-right panel showing the date and time as '25.03.2015 16:35:11' and the user '@zeus#1'.

Integrated Playout Solution



Current layout template: 4CH template - Ogy NEW Combined Logged user: admin

Select layout template - Select player status template - Administration - Edit template Logout Hide

1

Channel: SD PERO#0-Master@ZEUS#1

Date & Time: 2/17/2015, 9:03:48 AM

Position: 00:00:29.10 Countdown: 00:00:31.16

47%

2

Channel: HD PERO#0-Master@ZEUS#2

Date & Time: 2/17/2015, 9:03:48 AM

Position: 00:00:00.00 Countdown: 00:01:00.16

74%

3

Channel: SD PERO#0-Backup@JANUS#1

Date & Time: 2/17/2015, 9:03:48 AM

Position: 00:00:29.11 Countdown: 00:00:31.16

47%

4

Channel: HD PERO#0-Backup@JANUS#2

Date & Time: 2/17/2015, 9:03:48 AM

Position: 00:00:00.00 Countdown: 00:01:00.16

74%

Linear list Missing files Errors and warnings list

Time	Event
09:03:19:17	(PAL - FIAT - Mirage Ad.mxf)
09:04:19:20	(PAL - OASYS Jingle Blue.avi)
09:04:27:20	(PAL - Ella Eyre - Deeper (Movie example 1).mxf)
09:08:18:02	(PAL - OASYS Jingle Blue.avi)
09:08:26:02	(PAL - Lexus Pitch Ad.mxf)
09:08:56:00	(PAL - iPhone 5 Ad.mxf)
09:09:27:07	(PAL - OASYS Jingle Green.avi)
09:09:35:07	(PAL - Katy Perry - Roar (Movie example 2).mxf)
09:13:48:23	
09:13:53:23	(PAL - OASYS Jingle Orange.avi)
09:14:01:23	(PAL - Doritos - Time Machine Ad.mxf)
09:14:31:22	(PAL - Coca-Cola Border Ad.mxf)
09:15:31:01	(PAL - OASYS Jingle Purple.avi)
09:15:39:01	(PAL - Pentatonix - Somebody That I Used To Know (Movie example 3).mxf)
09:18:52:12	(PAL - OASYS Jingle Red.avi)
09:19:00:12	(PAL - Cheeros Ad.mxf)
09:19:30:12	(PAL - FIAT - Mirage Ad.mxf)
09:20:30:15	(PAL - OASYS Jingle Blue.avi)
09:20:38:15	(PAL - Ella Eyre - Deeper (Movie example 1).mxf)
09:24:28:22	(PAL - OASYS Jingle Blue.avi)
09:24:36:22	(PAL - Lexus Pitch Ad.mxf)
09:25:06:20	(PAL - iPhone 5 Ad.mxf)
09:25:38:02	(PAL - OASYS Jingle Green.avi)
09:25:46:02	(PAL - Katy Perry - Roar (Movie example 2).mxf)
09:29:59:18	
09:30:04:18	(PAL - OASYS Jingle Orange.avi)
09:30:12:18	(PAL - Doritos - Time Machine Ad.mxf)
09:30:42:17	(PAL - Coca-Cola Border Ad.mxf)
09:31:41:21	(PAL - OASYS Jingle Purple.avi)
09:31:49:21	(PAL - Pentatonix - Somebody That I Used To Know (Movie example 3).mxf)
09:35:03:07	(PAL - OASYS Jingle Red.avi)
09:35:11:07	(PAL - Cheeros Ad.mxf)
09:35:41:07	(PAL - FIAT - Mirage Ad.mxf)
09:36:41:10	(PAL - OASYS Jingle Blue.avi)
09:38:49:10	(PAL - Ella Eyre - Deeper (Movie example 1).mxf)
09:40:39:17	(PAL - OASYS Jingle Blue.avi)

1 missing files; first at 17:2.2015, 0:04:53

File name	Due at	Status
1 - PAL - End Credits Graphics.aseq	2/17/2015, 10:04:53 AM	Searching...

Show: Warnings Errors

01:00:00 (dfidfdfdfg.avi)
No local instance in stream 'Audio #1-Track #1', event #1
No local instance in stream 'Audio #2-Track #1', event #1
01:00:00 (dfidfdfd.avi)
No local instance in stream 'Audio #1-Track #1', event #1
No local instance in stream 'Audio #2-Track #1', event #1
01:00:00 (dsdsdsd.avi)
No local instance in stream 'Audio #1-Track #1', event #1
No local instance in stream 'Audio #2-Track #1', event #1
10:04:27 (PAL - Ella Eyre - Deeper (Movie example 1).mxf)
No local instance in stream 'Graphics #2-Default', event #1
10:08:25 (PAL - Lexus Pitch Ad.mxf)
No local instance in stream 'Audio #1-Track #1', event #1
10:08:55 (PAL - iPhone 5 Ad.mxf)
No local instance in stream 'Audio #1-Track #1', event #1
10:09:35 (PAL - Katy Perry - Roar (Movie example 2).mxf)
No local instance in stream 'Graphics #2-Default', event #1
10:13:48 (PAL - Doritos - Time Machine Ad.mxf)
No local instance in stream 'Audio #1-Track #1', event #1
10:14:01 (PAL - Doritos - Time Machine Ad.mxf)
No local instance in stream 'Audio #1-Track #1', event #1
10:14:31 (PAL - Coca-Cola Border Ad.mxf)
No local instance in stream 'Audio #1-Track #1', event #1
10:15:38 (PAL - Pentatonix - Somebody That I Used To Know (Movie example 3).mxf)
No local instance in stream 'Graphics #2-Default', event #1
10:19:00 (PAL - Cheeros Ad.mxf)
No local instance in stream 'Audio #1-Track #1', event #1
10:19:30 (PAL - FIAT - Mirage Ad.mxf)
No local instance in stream 'Audio #1-Track #1', event #1
01:00:00 End Credits
No local instance in stream 'Graphics #2-Default', event #1

Linear list Missing files Errors and warnings list

Time	Event
09:00:39:19	(PAL - Katy Perry - Roar (Movie example 2).mxf)
09:04:43:10	(PAL - OASYS Jingle Orange.avi)
09:05:01:10	(PAL - Doritos - Time Machine Ad.mxf)
09:05:31:09	(PAL - Coca-Cola Border Ad.mxf)
09:06:30:13	(PAL - OASYS Jingle Purple.avi)
09:06:38:13	(PAL - Pentatonix - Somebody That I Used To Know (Movie example 3).mxf)
09:09:51:24	(PAL - OASYS Jingle Red.avi)
09:09:59:24	(PAL - Cheeros Ad.mxf)
09:10:29:24	(PAL - FIAT - Mirage Ad.mxf)
09:11:30:02	(PAL - OASYS Jingle Blue.avi)
09:11:38:02	(PAL - Ella Eyre - Deeper (Movie example 1).mxf)
09:15:28:09	(PAL - OASYS Jingle Blue.avi)
09:15:38:09	(PAL - Lexus Pitch Ad.mxf)
09:18:09:07	(PAL - iPhone 5 Ad.mxf)
09:19:37:14	
09:19:42:14	(PAL - OASYS Jingle Green.avi)
09:19:50:14	(PAL - Katy Perry - Roar (Movie example 2).mxf)
09:21:04:05	(PAL - OASYS Jingle Orange.avi)
09:21:32:05	(PAL - Doritos - Time Machine Ad.mxf)
09:21:42:04	(PAL - Coca-Cola Border Ad.mxf)
09:22:41:08	(PAL - OASYS Jingle Purple.avi)
09:22:49:08	(PAL - Pentatonix - Somebody That I Used To Know (Movie example 3).mxf)
09:26:02:19	(PAL - OASYS Jingle Red.avi)
09:26:10:19	(PAL - Cheeros Ad.mxf)
09:26:40:19	(PAL - FIAT - Mirage Ad.mxf)
09:27:40:22	(PAL - OASYS Jingle Blue.avi)
09:27:48:22	(PAL - Ella Eyre - Deeper (Movie example 1).mxf)
09:31:39:04	(PAL - OASYS Jingle Blue.avi)
09:31:47:04	(PAL - Lexus Pitch Ad.mxf)
09:32:17:02	(PAL - iPhone 5 Ad.mxf)
09:32:48:09	
09:32:53:09	(PAL - OASYS Jingle Green.avi)
09:33:01:09	(PAL - Katy Perry - Roar (Movie example 2).mxf)
09:37:15:00	(PAL - OASYS Jingle Orange.avi)

Integrated Playout Solution



OASYS MultiChannelMonitor x localhost:30812/MCM/

Current layout template: 4 Channel v2 - Details view Logged user: admin

Select layout template ▾ Select player status template ▾ Administration ▾ Logout Hide

1

CHANNEL STATUS

AUDIO STATUS

SHORTCUTS

Route to Monitor

CH 1#0-Master@localhost#1

PRESET

PROGRAM

Next event countdown

00:02:11:02

Prepared event name
(PAL - OASYS jingle Purple.avi)

Prepared event duration
00:00:08:00

Current event position

00:00:19:16

Current event name
(PAL - Rudimental - Waiting All Night ft Ella Eyre_16_9.mxf)

Current event duration
00:02:30:19

DYNAMIC HOTKEYS

BSS Logo OFF	BSS Logo ON
Ch Logo OFF	Ch Logo ON

ERRORS & WARNINGS

Displaying all 2 rows

2015/02/18 09:44:51	(Com - Get it now.mxf)	Error: No local video instance Warning: No local instance in stream "Audio #1-Track #1", event #1 Warning: Event is not long enough
2015/02/18 09:55:47	(Com - Buy more Stuff.mxf)	Error: No local video instance Warning: No local instance in stream "Audio #1-Track #1", event #1 Warning: Event is not long enough

Start time	Video	Timeline	Title	Duration
	-(1 events)			00:13:37:13
	-MULTI INSTANCE 1 PAL(6 events)			00:13:37:13
1.1	09:42:13:00-09:44:43:19	(F:\Demo Media\PAL - Rudimental - Waiting All Night ft Ella Eyre_16_9.mxf) Video Audio 1 Track #1 Router 1 Router	PAL - Rudimental - Waiting All Night ft Ella Eyre_16_9.mxf	00:02:30:19
	-COMMERCIAL BLOCK 1(4 events)			00:00:45:09
1.2	09:44:43:19-09:44:51:19	(F:\Demo Media\PAL - OASYS jingle Purple.avi[0]) Video Audio 1 Track #1	PAL - OASYS jingle Purple.avi[0] PAL - OASYS jingle Purple.wav[0]	00:00:08:00
1.2.1	09:44:51:19-09:44:51:19	(Com - Get it now.mxf) Video Audio 1 Track #1	Com - Get it now.mxf Com - Get it now.mxf	00:00:00:00
1.2.2	09:44:56:19-09:45:26:03	(F:\Demo Media\PAL - Volkswagen Door Thunk Ad.mxf[2]) Video Audio 1 Track #1	PAL - Volkswagen Door Thunk Ad.mxf[2] PAL - Samsung Galaxy Note Ad.mxf[0]	00:00:29:09
1.2.3	09:45:26:03-09:45:34:03	(F:\Demo Media\PAL - OASYS jingle Purple.avi[0]) Video Audio 1 Track #1	PAL - OASYS jingle Purple.avi[0] PAL - OASYS jingle Purple.wav[0]	00:00:08:00
1.2.4	09:45:34:03-09:49:04:23	(F:\Demo Media\PAL - Alex Clare - Too Close.mxf[2]) Video Audio 1 Track #1	PAL - Alex Clare - Too Close.mxf[2] PAL - Alex Clare - Too Close.mxf[0]	00:03:30:20
	-COMMERCIAL BLOCK 2(3 events)			00:00:46:00
1.4	09:49:04:23-09:49:12:23	(F:\Demo Media\PAL - OASYS jingle Purple.avi[0]) Video Audio 1 Track #1	PAL - OASYS jingle Purple.avi[0] PAL - OASYS jingle Purple.wav[0]	00:00:08:00
1.4.1	09:49:12:23-09:49:42:23	(F:\Demo Media\PAL - Old Spice - The Man Your Man C Video Audio 1 Track #1	PAL - Old Spice - The Man Your Man C PAL - Old Spice - The Man Your Man C	00:00:30:00
1.4.2	09:49:42:23-09:49:50:23	(F:\Demo Media\PAL - OASYS jingle Purple.avi[0]) Video Audio 1 Track #1	PAL - OASYS jingle Purple.avi[0] PAL - OASYS jingle Purple.wav[0]	00:00:08:00
1.4.3	09:49:50:23-09:54:39:12	(F:\Demo Media\PAL - Madonna - Super Bowl Medley Video Audio 1 Track #1	PAL - Madonna - Super Bowl Medley.m PAL - Madonna - Super Bowl Medley.m	00:04:48:14
	-COMMERCIAL BLOCK 3(4 events)			00:01:16:01
1.6	09:54:39:12-09:54:47:12	(F:\Demo Media\PAL - OASYS jingle Purple.avi[0]) Video Audio 1 Track #1	PAL - OASYS jingle Purple.avi[0] PAL - OASYS jingle Purple.wav[0]	00:00:08:00
1.6.1	09:54:47:12-09:55:47:13	(F:\Demo Media\PAL - Volkswagen Wings Ad.mxf[2]) Video Audio 1 Track #1	PAL - Volkswagen Wings Ad.mxf[2] PAL - Lexus Pitch Ad.mxf[0]	00:01:00:01
1.6.2	09:55:47:13-09:55:47:13	(Com - Buy more Stuff.mxf) Video Audio 1 Track #1	Com - Buy more Stuff.mxf Com - Buy more Stuff.mxf	00:00:00:00
1.6.3	09:55:52:13-09:56:00:13	(F:\Demo Media\PAL - OASYS jingle Purple.avi[0]) Video Audio 1 Track #1	PAL - OASYS jingle Purple.avi[0] PAL - OASYS jingle Purple.wav[0]	00:00:08:00
1.6.4				

2 errors; first at 18/02/2015 09:44:51 4 warnings; first at 18/02/2015 09:44:51

Integrated Playout Solution



The screenshot displays a video production software interface with several key components:

- Event Editor:** A central window for configuring video events. It includes fields for Title, Start mode (e.g., Start after the previous event), Duration (00:03:28:22), Repeat count (1), and Local path (F:\Demo Media\100025 - Jersey Fallo, Robin Thicke & The Roots - Blurred Lines.mxf[1]).
- Video preview - zeus 1:** A window showing a live video feed of a man in a white shirt and blue tie, surrounded by a crowd.
- Playout Grid:** A table at the bottom right showing a sequence of tracks and subtracks over time. The grid includes columns for time (e.g., 00:00:00, 00:02:00) and track names (e.g., Track #1: 100025 - Jersey Fallo, Robin Thicke & The Roots - Blurred Lines.mxf[1]).
- Top Panel:** Displays the Date & Time (25.03.2015 16:35:11) and the user name (@zeus#1).
- Bottom Panel:** Shows a list of tracks and subtracks, including titles like "Track #1: 100025 - Chrysler and Bob Dylan Ad - Ameri" and "Track #1: 100025 - Coca-Cola Ad.mxf[1]".



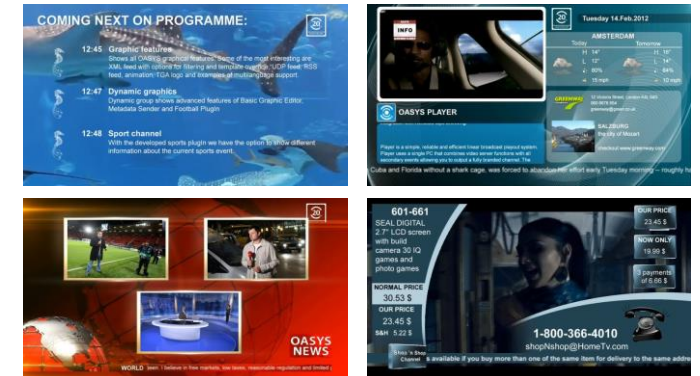
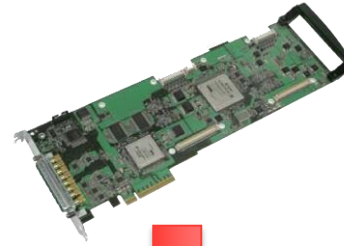
OASYS

AUTOMATED PLAYOUT

BroadStream OASYS



- OASYS Player
 - Appliance + SW



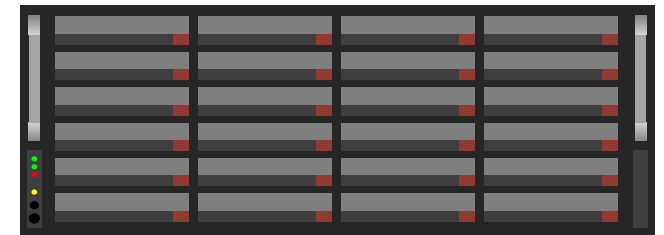
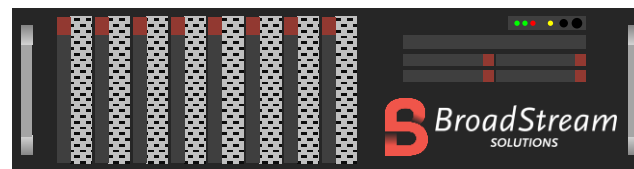
- Hardware

- Server on demand:

- BroadStream build on Supermicro but it could be Dell, HP -> Hardware Agnostic
 - Server Class with Redundant Hot Swappable PS
 - OS on demand: Win 7 Pro 64 or Win Server 2012 R2
 - Cores on demand: 12...20 cores
 - Storage on demand: 8 bays on 1RU and 3RU servers, 24 bays on 4RU server

- Applications

- Ingest Server
 - Playout Server
 - System Management
 - NAS



- I/O Cards

- Matrox based

- Matrox is taking care of: Codecs - Up/Down Conversion - Squeeze Back - Graphics

- I/O Card on demand

- High Complex solutions -> X.mio2
 - Simple solutions -> DSX LE3
 - IP infrastructure -> X.mio3
 - Codecs Only -> X264 & X.Open



X264



X.Open

SMPTE 2022-6, ASPEN & VSF



X.mio3 Series

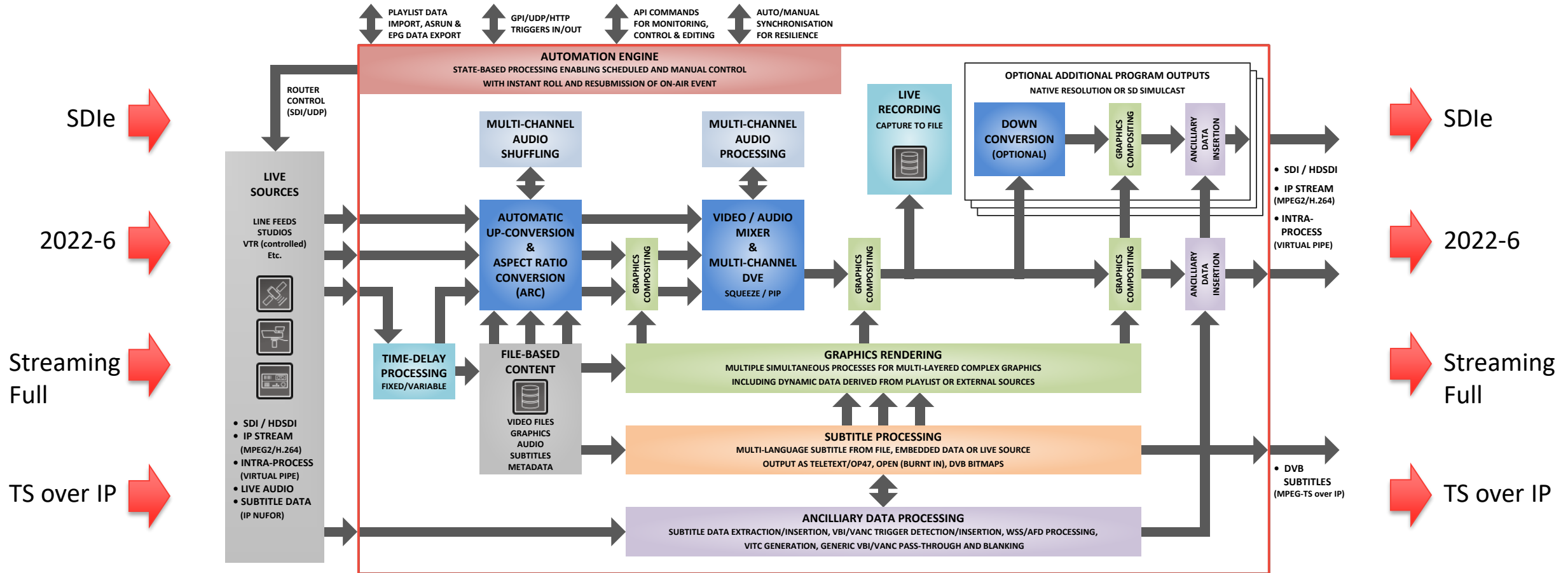


DSX LE3



X.mio2 Series

• OASYS Player



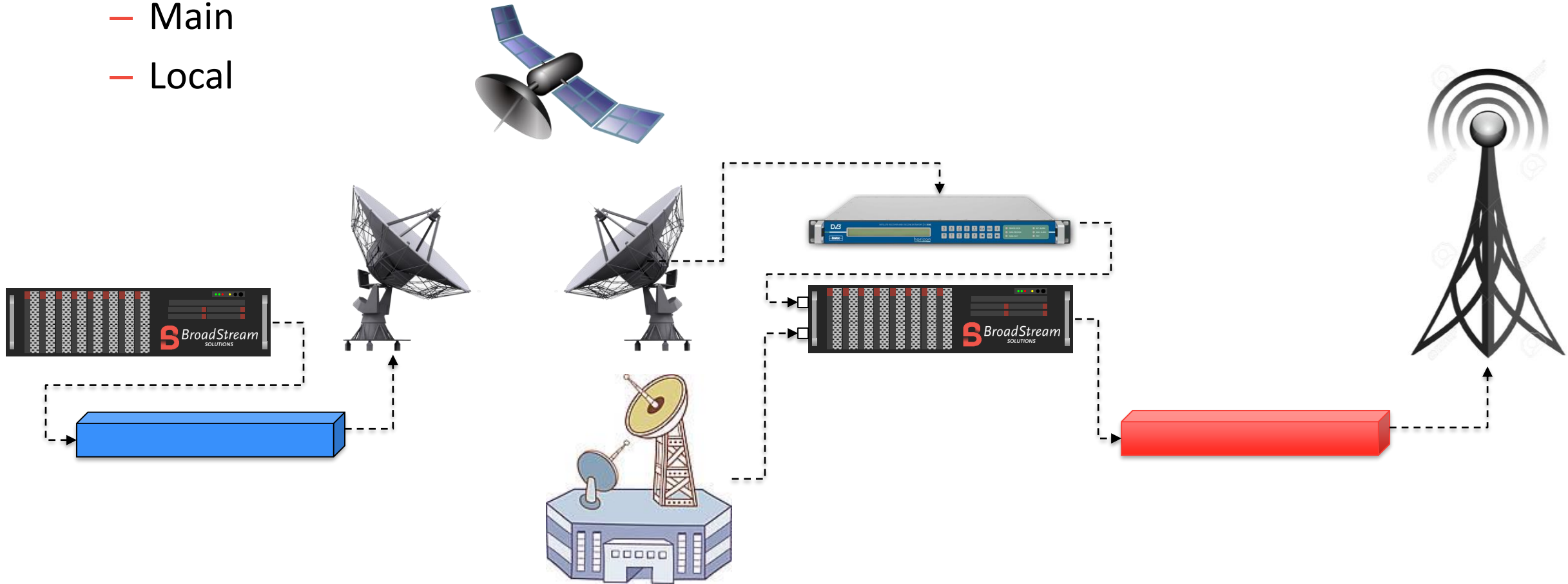


OASYS

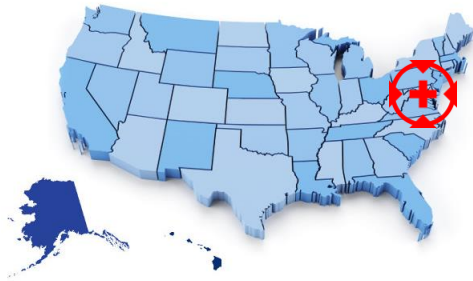
AUTOMATED PLAYOUT

- OASYS Player

- Main
- Local



NETWORK ORIGINATION @ SITE A



 **PLAYER**



Master Channel Playlist

Program Item
Break Group (with Break ID)
Program Item

VANC/VBI:
System Clock,
Break Dur. & Timing,
Break Triggering

LOCAL INSERTION @ SITE B

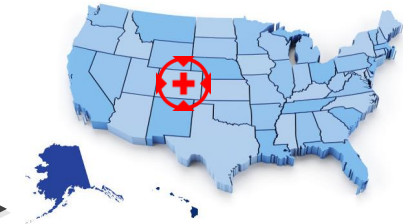
 **LOCAL**



LOCAL INSERTION @ SITE C

 **LOCAL**

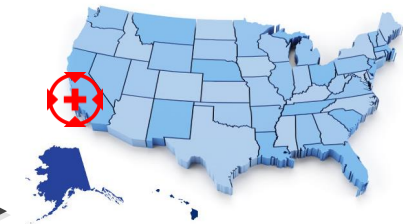
 **TIME DELAY**



LOCAL INSERTION @ SITE D

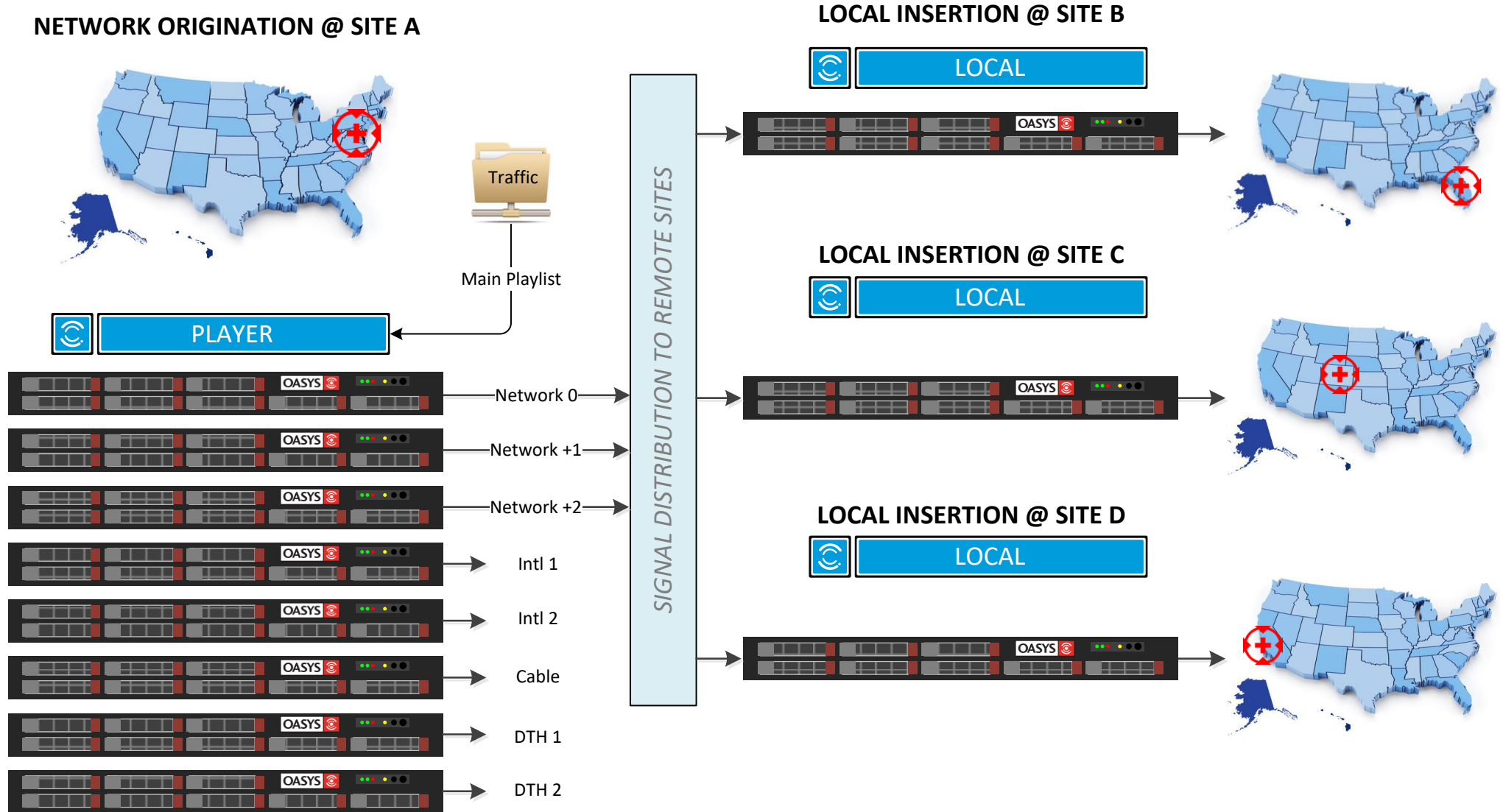
 **LOCAL**

 **TIME DELAY**



SIGNAL DISTRIBUTION TO REMOTE SITES

TV Networks





Transition & Uncertainty



- TV Stations are **Content Delivery Factories**
- Streaming delivery, web/OTT **as important as** OTA
- Need **Unified, Streamlined Workflow** to make long-tail content and archives profitable
- Need **End-to-End Metadata Workflows** to enable and support next-generation workflows
- **Virtualization and The Cloud**

Uncertainty = Opportunity



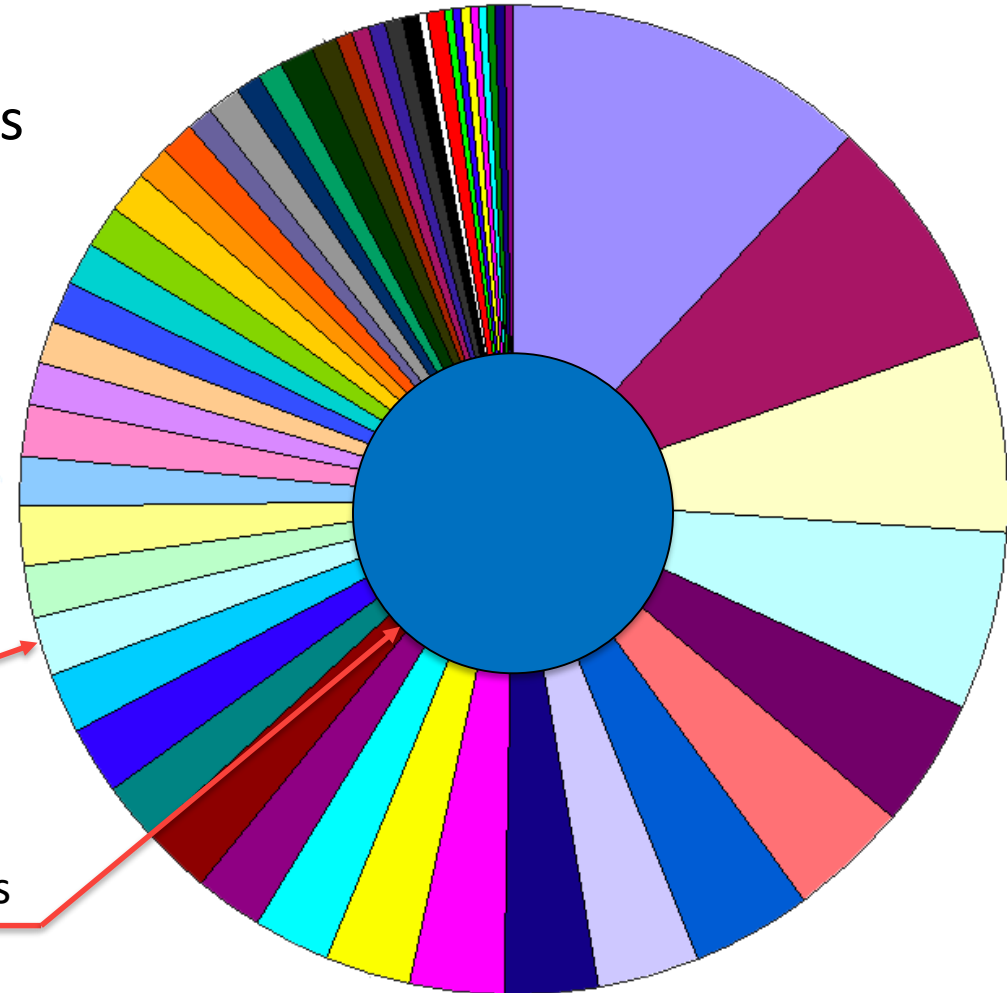
Challenge	Opportunity
OTT	Unified Workflow, MAM & Cloud Integration
ATSC 3.0 ?	New Linear Playout Models and Mobile TV
Spectrum Auction	Centralization, Consolidation, Cloud
UHDTV (4K)	New Technologies Implementation
Transition to IP	New Technologies Implementation
Micro & Pop-up Channels	Fast Deployment Solutions
Slow Economy	Be Smart - Change the Game

Uncertainty = Opportunity



- **Market Segmentation**

- Traditionally organized by GEO Regions
- Future by **Market Segments**
- Need for **MORE Channels**
- More Channels on the same GEO
 - ONLY possible **over IP**



IP, right content for the right segment

OTA...same Content for all segments

Why Virtualization & The Cloud ?



- Scalability, manageability, economics, speed
 - Collaborative media
 - Playout workflows
 - Economical DR
 - New channels, temporary channels
 - Quick On-Air turnaround
 - Secure, painless upgrades
 - Moves playout expenses from CAPEX to OPEX
 - Supports centralization, acquisition and divestiture vs traditional hub & spoke
 - Makes centralization hubs more scalable

Public Cloud or Private Cloud ?



- Public Cloud

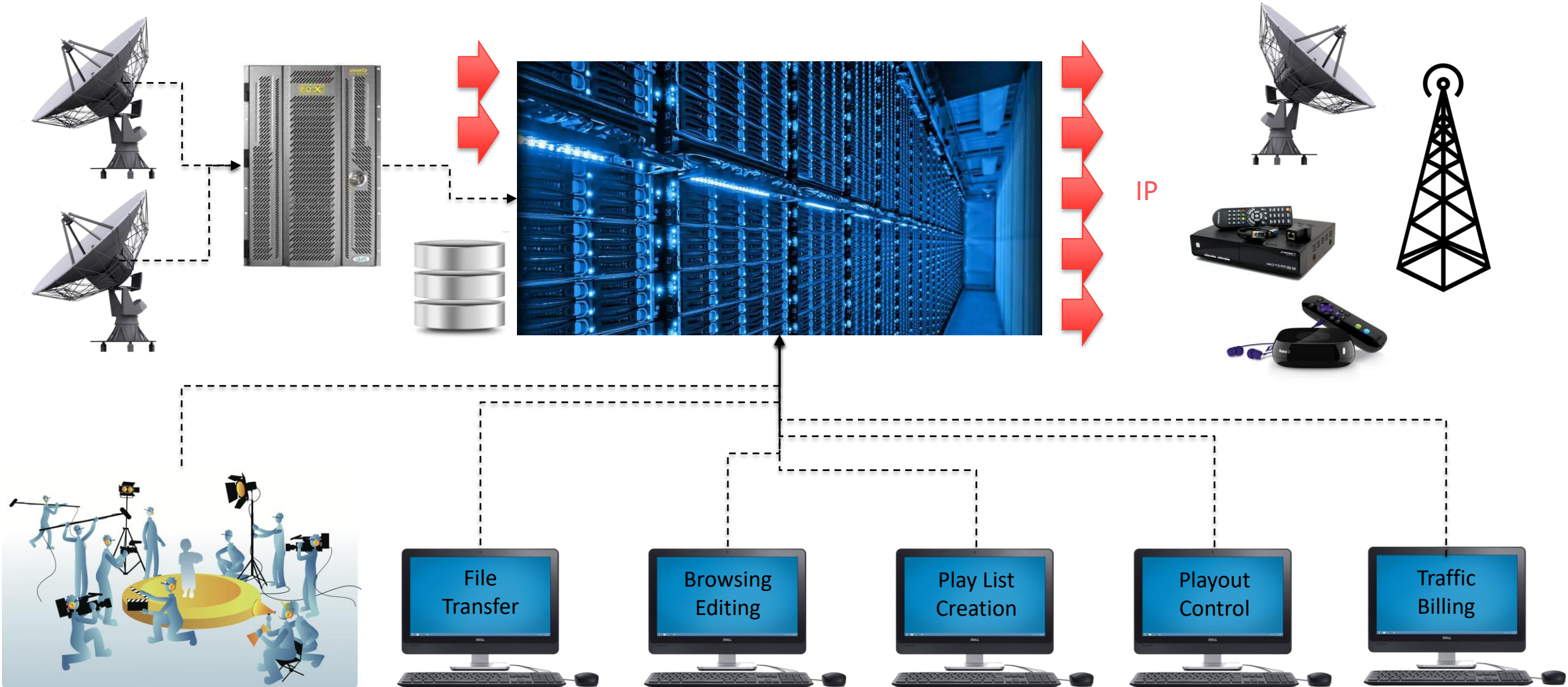
- Small customers
- AWS Amazon Web Services

- Private Cloud

- Large customers
- Televisa Cloud



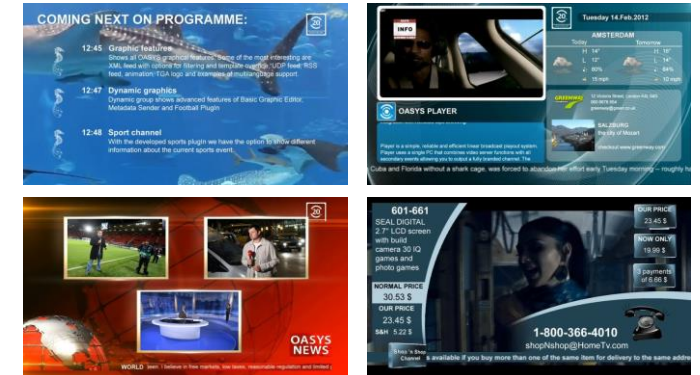
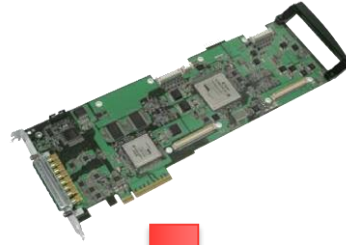
Private Cloud



OASYS as we deliver Today



- OASYS Player
 - Appliance + SW



OASYS going Virtualized



- OASYS Player for “datacenters”
 - Blade + SW
 - OASYS on the Cloud

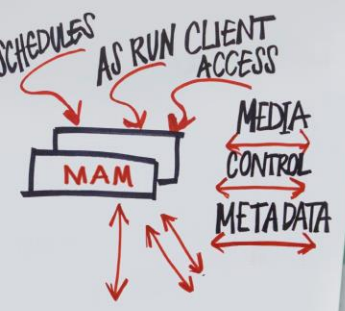
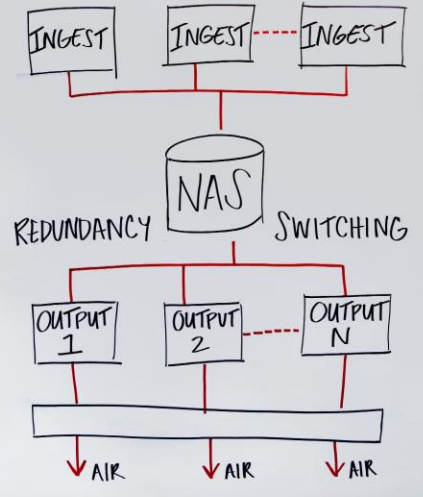


OASYS
AUTOMATED PLAYOUT

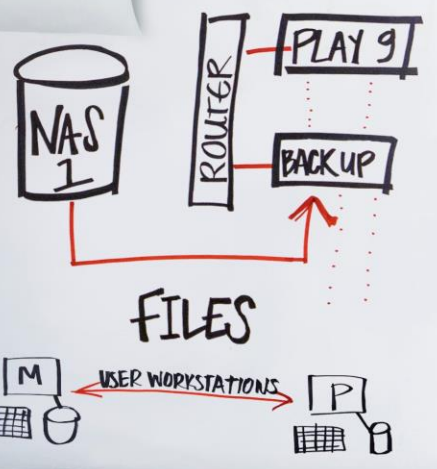
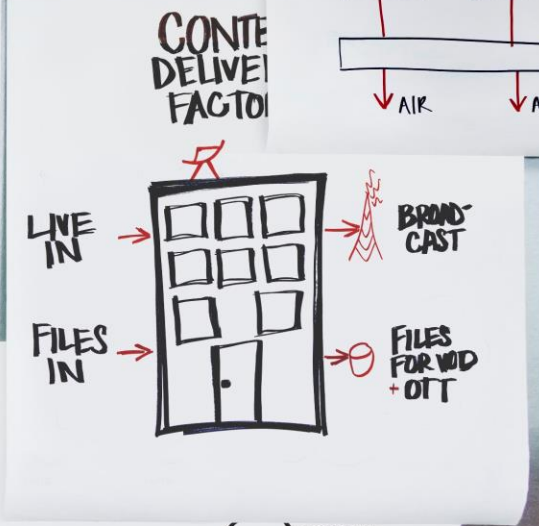
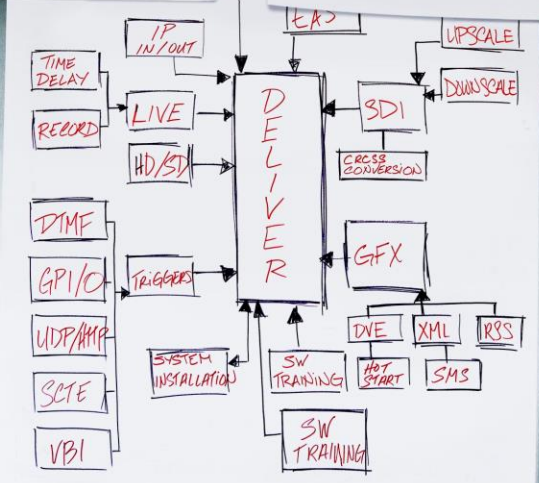
- Focus grp A-E...
- Tech support to resellers intg/troubleshoot

MOD VII-XII
 Assist resellers with formulating strategy
 G4TV...

- Identify new growth areas
- Formulate
- Initiate



Create
 Manage
 Deliver
 Report



AUTOMATION

