Delivering Broadcast functions through Software Applications

By Willy Halla
Cost is being driven out of technical and operational platforms, workflow systems, support, and reduced staff.

Less people means more automation, less “hands-on/craft” i.e. Broadcast/Media trending to lights-out operations.
Traditional Model
• IT/Software Solution
Answers to The Age Old Question: “How do we do more, at higher quality with less cost?”

- **Hardware**
  - Off-The-Shelf Commodity Hardware
  - Standard Interfaces for I/O’s and Comms.

- **Software**
  - Databases, software, and networking create more automated processes
  - Software techniques to create and link between various functional systems
Broadcast’s SOA-Services Approach

Service Oriented Architecture (SOA)

Before SOA

Capture Function
Transform Function
Transfer Function

After SOA

Middleware
Common I/F for Capture
Capture Service
Common I/F for Transform
Transform Service
Common I/F for Transfer
Transfer Service

In order to maximize the potential of SOA, standardization of the Industry common interfaces is essential.
FIMS Coordination with SMPTE

What is the FIMS Activity?

• Define interoperable media service interfaces between
  – Media Orchestration Systems
  – Media Services
Coordination to fill a need

FIMS – NAB 2014

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Basic Pieces in IT Model

- Software
- Database
- Storage
- Baseband Peripherals
Software
Current Software Modules
DataBase Maintenance, Transcoders, IE Interface
Player Engines and Various Available Plugins
The “New” Master Control
News, CG, and Studio Players
Multi-Viewers
Database

- Microsoft SQL best Practices
- Install enough RAM
- Use 64 bit OS to take advantage of the larger amount of RAM
- Use Separate Volumes of OS, Database, and temp files.
- Do regular maintenance such as Database Defragging and index re-building.
- Do consistent backups and additional backups prior to any changes.
Storage

Proprietary Storage vs Commodity Storage
Storage Architecture

One Volume vs Many
Network Redundancy

Clients

Backbone Ethernet

Server Farm
Example System PBS DDMS Lincoln, Ne.
Lights-Out Tech Center
Questions