Joe Curcio Project Portfolio Excerpts

DIGITAL AUDIO SYSTEM (DAS) PROJECT:

The Digital Audio System (DAS) is a major capital project that will replace and digitize the program play out and production systems for ABC Radio Networks. The project also includes more than 24 custom performance and development systems, as well as the following tasks:

Digital audio system Vendor Reviews	Storage vendor review and design	WAN design and workflow (DC, LA, Bristol)
Integrator Vendor Reviews	Studio equipment survey	Audio I/O design
Center Ring Integration System (CRIS) Design	Disney As ISP design.	Racks and related hardware specification and design and rack elevations.
Development of a new support structure.	Transition plans.	All software and licensing
Workflow survey and review	Functional drawings for all pre design	Shipping, receiving, and storage logistics.
News Call On Line development and integration	RFQ (Feature set, Best of Breed) and review process.	Vendor and staff travel budget and logistics.
Firewall and security design	Budget and procurement	Data backup sytem design.
Groups/User management.	Documentation and vendor information website	On air user control surfaces.
EPrep system integration	All aspects of training including venue and program	Project timelines.
Offsite build and acceptance	Maintain master punch list	Network wiring infrastructure
Audio editing and production feature set.	Automation system (Encoda) specification & Integration (Automation module includes GPI, serial, Net Cue, scheduler, etc).	Environmental design, including HVAC and power.
DAS synchronization with Internet operations.	Network design	SNMP system design & system baseline.
Pre load of audio to play out system design.	UPS upgrade	AVID INews system integration
Custom text fields, including spell check, and character filters.	Construction design	
Antivirus design	Cable and other related specifications (Terminations, cable management, patch bays, blocks, cable trays)	

Dalet 5.1 and ePrep network stabilized – The failing and problematic Dalet news and ePrep digital audio production systems at 125 WEA are greatly improved. Eliminating crashes, increasing storage from 20 hours to 2000 hours, new workstations and servers, CDRW, DLT backup, implementing audio production inside the users work cubicle, increased network stability and availability, new system management and redundancy, improved storage and network technology (Fiber Channel and Gig-E bit), network time sync, and staff training, etc.

Commercial Production network stabilized – The original commercial production was installed as a single thread (2 server workgroup) system with no backup or fail-over. The upgrade included: implemented clustering, RAID 5 storage, domain controllers, various network components, improved stability and availability.

DC DALET UPGRADE – Design replication system to allow Washington Digital Audio System to synchronize with existing New York Program and commercial systems (digital)

SPANISH LANGUAGE PROGRAM DALET SYSTEM – Design and implement a commercial play out system for Spanish programming.

PAUL HARVEY PROGRAM DIGITIZATION – Develop workflow and digital file encoding and exchange system to allow the Paul Harvey program to be distributed to the Network in digital form.

ABC News Call On Line – A new Internet based service was designed to provide up to seven days of news content (audio and text) to be available hourly via the AbcNewscall.com website. Custom software (Newscall OnLine Producer) was developed and written in house, and combined with custom web site scripting. This includes custom internal workstations and software installed in 2 locations. An additional upgrade added new content including Sports Call, Sports Extra, and What Else is News.

2004 Election Coverage – Designed digital methods and workflow for remote news ENG allowing remote reporters to file digital content via the Internet. Prepared local studio systems and personnel to ingest digital content. Provided general support to this system during election coverage events. Between August and November, News delivered nearly 2,000 digital audio cuts from the field via this method.

Dalet to D-Cart digital file transfer – Completed design and implementation of automated Dalet digital commercial production system to D-Cart digital play out system commercial file transfers. The system automatically converts audio, and embeds META data in commercial audio inventory so that it can be digitally transferred into the D-Cart play out system. This was a major step in digitizing, and streamlining the commercial production system. The software was designed and written in house.

Digital Startup Library; E-Bulk Feeds; Dalet to D-cart Bulk Feeds -

Completed design and implementation of custom software, systems, workflow, etc to further digitize, streamline and simplify the commercial production systems.

Dallas to N.Y. Digital Audio Link - Custom software (SND CONVERT) is deployed to the Dallas CIR for commercial audio backup. The software allows access to the Dalet commercial production system in New York. Real time analog dubs of commercial content to the Dallas Audio Vault system is eliminated and replaced by a digital transfer between New York and Dallas.

CD Ripping System Developed– Delivery of commercial content via "snail mail" dramatically moves from the delivery of analog Reel to Reel, to CD. A CD ripping system is added to the commercial production network that allows CD content to be digitally extracted from the CD in multiple locations and prepared for ingest into the Dalet digital audio system. Analog dubs from Reel and CD is virtually eliminated.

Digital Startup library – Custom software (SND CONVERT & DCLM) and workflow is implemented that eliminates the process of creating affiliate commercial startup libraries using extremely time consuming analog methods. Content is now sorted by network during daily workflow. The production libraries are converted to digital and burned on CD.

E-Bulk Feeds – A new method (and custom software) is implemented that allows commercial bulk feed content to be digitally transferred into the D-Cart system. This eliminates the need to perform an analog dub into D-Cart.

DLT network backup system installed – Installed DLT cabinet running Veritas Backup Exec software

Internet CODEC (AudioTX) is installed – Provided support for the implementation of the "Internet based AudioTX CODEC. The software allows near real time communication between a remote laptop and the ABCRN Technical Operations Center (TOC) via an ordinary (including WI-FI, DSL, ISDN, etc.) Internet connection.

ABC Spot Depot Services – Initiate, design, and implement ABC Spot Depot – The Digital Audio File Exchange Portal For ABC Radio Networks. In 2004 nearly 6,000 audio files were delivered to the ABC News and Commercial services operations via ABC Spot Depot. This does not include distribution of commercial content to the more than 15 commercial networks (500 affiliates), ABC ePrep, DARS, WABC Local, and the nearly 20 services that use ABC Spot Depot. Mid year statistics showed that over 50% of all commercial content ingested by the ABCRN commercial services "Spot Depot" allows users to use an on-line upload form to deliver audio content direct to the Dalet desktops at 125 West End Avenue. The site soon expands allowing delivery of audio content to the Commercial production operation.

Affiliates begin to download commercials via the Internet – A custom application (FTP BATCH MAKER) and workflow is developed to upload commercial content sorted by specific network. Distribution of commercial content via compact disk starts becoming a thing of the past, replaced by affiliates downloading commercial content via the Internet. operation was received via ABC Spot Depot. In addition it was estimated that nearly 60 gig of audio content is exchanged via ABC Spot Depot per month. ABC Spot Depot was initiated in 2001/2002, and on line (with the URL) by February 2003 and has become an integral part of the ABCRN digital file exchange operations.

EPREP HISPANIC – Develop Dalet system and related website to create the new ePrep Hispanic morning prep service.

Remote, Digital News delivery- A new section on the ABC Spot Depot digital audio file exchange website was initiated, and developed to allow field reporters to deliver remote audio content, as well as text content (and e-mail notification) to the ABCRN News operation. News usage of this system jumped from about 50 audio cuts per month in March 2004, to 600 – 700 files per month delivered in October/November. This system has become an integral part of the News production system.

America's Most Wanted program starts delivering digital audio to NED – The America's Most Wanted "1 minute" radio program is delivered digitally via the Internet to the ABCRN NED for post production and air. In addition, custom scripting and applications (DALET EXPORT) are implemented that allows the NED operator to provide the digital program to the ABCRADIO.COM website for distribution to affiliates.

USER, SYSTEM, AND NETWORK ADMINSTRATION SUPPORT FOR:

- DALET NETWORK Includes ePrep morning prep service produced on with Dalet Team News system, and Dalet 5.1e News and production system
- **CPN NETWORK** Support for the commercial integration, production and distribution service and ABC Spot Depot system.
- **NEW MEDIA** Includes all systems related to New Media digital access and conversion of D-Cart content.
- **OPERATIONS AND NEWS** Includes support for various digital content operations including News Call, Sports call, What Else Is News, Sports Access, Spot Depot, and America's Most Wanted.

In 2004 I responded to nearly 300 user or system issues in the areas of Commercial Production, ePrep, America's Most Wanted, General Dalet system, and Web based systems

FTP SOCKET AND FIREWALL ISSUES RESOLUTION WITH DISNEY IT – Technical liaison to Disney IT to resolve issues caused by Disney changing firewall and proxy systems.

AVID INEWS APPLICATION UPGRADE – Assist News Director in prep and redesign of Engineering systems and software related to AVID iNews upgrade.

ZOTOB VIRUS REMOVAL AND RECOVERY – Some elements of the virus had propagated to the Dalet digital audio network. Team leader to patch and remove the virus and execute recovery process.

D-CART CONNECTIVITY ISSUES – Help track, troubleshoot and resolve network connectivity issues between the D-Cart and Dalet networks.

On line Support system – The on line technical support system was created by me, maintained and updated to include technical support documentation on audio file formats, News headquarters, Newscall On Line, and DARS file exchange systems operations and troubleshooting, etc.

New Digital Services training – A new digital services training course was initiated, developed and hosted for commercial production, News, and Engineering staff to further their knowledge in the use of the many new digital systems that had been developed and put on line over the past year. The training covered CD burning/ripping systems, commercial digital startup libraries,

preparation of electronic bulk feeds, automated file exchange between Dalet and D-cart, file exchange systems via ABC Spot Depot, etc.

Digital production standards explored – Initiated preparing standards for digital audio content. Preliminary documents were submitted reviewing sample rate, bit rate, file format, levels, etc.

Digital audio training (Vids, documents, white papers) – A number of digital production "how to" documents and white papers were developed and distributed to users. In addition, a 54-minute multi-media training video was produced *entitled "Digital Recording Concepts – an Engineering white board".* The video covered everything from basic digital recording concepts, listening samples, and production tips.

Training and standards on using Dalet for commercial production – Created documentation, procedures, audio standards and policies for ingest, and post production of commercial audio content. Trained all Commercial operations users.

Troubleshooting techniques: - Developed curricula to teach Broadcast Engineers t troubleshoot and I.T. network.

NETWORK ADMINISTRATOR RESEARCH & HIRE - Prep requirements for new Network Administrator position and conduct interviews. Select candidates and assist in training.

T2K Media Converter affiliates software– Affiliates using the Star Guide T2K digital content delivery system had issues with regard to the way files were named in the existing delivery system. In addition, the delivery system did not permit audio file conversion so that the affiliate could ingest the audio content in a file format more native to their digital audio systems. A custom software (T2K Media Converter) package was written and distributed. This automated the process of file naming, format conversion, and file clean up and allows the affiliate stations to easily ingest the digital content into their own digital audio systems.

Digital transfer between Dalet and D-Cart developed – Custom software (MDTT) is developed that allows commercial content from the Dalet digital audio system to automatically be digitally transferred into the D-cart system. The transfer includes the automated "tagging" of all required META data (ISCI, title, duration, etc.) so that once the file arrives in the D-cart system, it is ready for air.

D.C. to N.Y Digital Audio Link – Custom software, and a "SND CONVERT" workstation is deployed to Washington for commercial audio backup. This workstation allows access to the Dalet commercial production system in New

York. Real time analog dubs of commercial content to the D.C. Dalet system is eliminated and replaced by a digital transfer between New York and D.C.

IT Systems automated file management – Custom software was developed to maintain audio files that are delivered from the field direct to the Dalet digital audio system.

Project Management software – The custom *Project Mate* software package was further improved to accommodate some of the *unusual* project management needs at ABCRN. I have used this custom software exclusively throughout 2004 to manage all of my projects,

Filing from the field to the desktop – Custom software (FILETRAN, FMD, and WEB DRIVE) is developed and implemented that creates a virtual WAN between the "Spot Depot" website and the Dalet digital production system. The IMEX system (short for import, export) allows Dalet users to drag and drop audio content for automatic export to the "public" Internet. In addition, audio content can be delivered from the "public" Internet right to the Dalet desktops.

Custom software automates commercial delivery - Wrote custom software applications to automate and streamline commercial content ingest and updates for the Star-guide store and forward system. Applications included: Filetran, FMD, ENV Query, Renamer, Title Trim, Log Keeper.

OTHER (Various Facilities):

TITLE	DESCRIPTION	
100 amp breakout, City Hall	Design of a 100 amp AC breakout panel for remote Sound System at City Hall. Project included cable, connector, and panel specifications. Design of receptacle panel.	
Blue Room System	Complete upgrade and re design of press distribution in City Hall daily mayoral press conference room.	
Board of Estimate System	Complete upgrade and re design of AMS (automatic mic system) sound, sound reinforcement, and press distribution system.	
Committee of the Whole System	Complete upgrade and re design of AMS (automatic mic system) sound, sound reinforcement, and press distribution system.	
Council Chambers System	Complete upgrade and re design of AMS (automatic mic system) sound, sound reinforcement, and press distribution system.	
Council Committee Room System	Complete upgrade and re design of AMS (automatic mic system) sound, sound reinforcement, and press distribution system.	
Inauguration Systems	Design, and technical director for sound and press distribution system for mayoral Inaugrurations (Koch, Dinkins, Giulliani)	
NY Rangers Championship	Design, and technical director for sound and press distribution system for main venue at City Hall.	
NY Rangers Championship	Design, and technical director for sound and press distribution system for main venue at City Hall.	
NY Mets Championship	Design, and technical director for sound and press distribution system for main venue at City Hall.	
Nelson Mandella in New York	Design, and technical director for sound and press distribution system for main venue at City Hall.	
News Booth Telephone System	The task included converting a standard 10 line instrument into a line select for the Telos One hybrid.	
News Booth Telos Systems	Installation and remote start for Telos One hyrids in 3 news locations	
250 Broadway System	Complete upgrade and re design of AMS (automatic mic system) sound, sound reinforcement, and press distribution system	
CR2/CR1 – ST-A Transfer Switch	Custom switching circuit for Call in system and PC system switchover between two control rooms.	
CR4 Telos System	Installation of Telos 1 system with custom remote select.	
CR4 IFB	Custom IFB system. Included design and fabrication of a custom satellite box.	
MC Ducker System	Custom design of a compressor system that enabled patch able program inputs to drop in level when "Cue talk" by producer was detected.	
Session Booking Application	Custom EXCEL application that enables the user to input session booking information, then automatically enters the information into a data base, print a session sheet, and produce an invoice. The application also maintains a auto-fill client data base.	
Staff Scheduling Application	Custom EXCEL application that enables the user to input and manage engineering staff schedule. This schedule was managed 8 weeks in advance.	
Control Room Manuals	Documentation project included in each of 8 control room and Master Control areas. The manuals included original reference material as well as manuals for much of the equipment located withing each area.	
FM Air Monitor (QEI), All CR's	The routing and installation of an alternate means to monitor FM air in all control rooms. The project used a QEI modulation monitor, Distribution amp system, and input select via PR&E consoles.	
TV Control Room Booth	The preparation of an off area Edit booth for use as a Television broadcast control area for TV/Radio broadcast. The project included audio and video cable runs, monitoring, and IFB.	
Dubbing and V/O Suite	Complete design and installation of a multi format dubbing suite, with custom router, and voice over capabilities.	
Traffic dubbing Suite	Complete design and installation of a multi format dubbing suite, with custom router	
CR4 Call Screener PC	The installation of a call screener PC and custom written software.	
Wire Room Edit Suite System	Design and installation of a complete News edit audio system. The system included DAT, Reel, Cart, Mixer, and live interview system for news production.	

Time Life SW56, Bdcst Suite	Complete design of digital (ISDN/SW56) broadcast booth in the Time Life Building, NYC.	
Uplink Flow	All documentation, including structural, for Satellite Uplink facility	
LSM30 PC Interface	PC interface to provide PC screen graphic display of in coming telephone calls	
	during fund drive	
Downlink Flow	Documentation of satellite downlink system	
EBS Flasher & Mute Circuit	Design various hardware circuits for EAS/EBS conversions	
Master Clock System	Redesign, replace FAVAG clock system with redundant ESE system.	
Simulcast Panel	Hardware and circuit design for AM/FM simulcast system.	
Tracker Air Logger System	Research & installation of Air logger system	
ISDN/Prima Installation	Various ISDN, Telco, installation for PRIMA, etc.	
Uplink Line Control Switch	Remote access custom circuit to control uplink facility via IP	
BOSE Flying System	Design and manufacture a custom speaker flying system for New Sounds venue	
SCR Panel	Custom multi button panel with local lamp on status	
Uplink Rack rewire	Rewire/organize uplink rack project	