

## Welcome!

Greetings from Team ENCO!

We were very busy this Spring getting new capabilities ready in DAD and preparing for our annual pilgrimage to Las Vegas, Nevada for NAB2007 – our 16th NAB. We wanted to include a few highlights from NAB so decided to hold publication of our Spring newsletter until after the show. More on that later...

Much work has been done on DAD 5.2a with release expected soon. Since 5.1f we have made a number of improvements and corrections to Airplay. We have also improved the on-line help functionality to better support new users. These help files continue to be updated to match current functionality and DAD's latest look and feel. We are also incorporating increased use of tool-tip guides to help new users. These were first added to DAD for machine identification in 5.1e. We also added more "?" icons to access the on-line help from any machine. Other icons include "" for machine configuration, "J" for channel assignment, and "C" for the Column Controller. The CUES machine now works with Playback machines 5 through 16. Similar to a CUES machine we have added a "RightClick->HeadQuickStart" to the Playlist Bar of Playback and Quad machines to allow the quick setting of a Head point for a cut in the Play Slot (while not yet playing). This is much easier for quickly setting a new Head point immediately prior to play than the Cues machine – great for rejoining anywhere into a pre-recorded long form program.

Needs for more data and better connectivity to outside systems has driven many new enhancements. We've added the ability to use cut based Start and Stop DCLs from arrays and other non-playback machines enabling better control of any custom applications or system connections that users implement.

At the heart of sending data is our PlaybackState (PBS) subsystem. We have enhanced PBS in many ways to support the growing needs for deriving and sending data to a wide variety of devices for an equally wide variety of purposes. There are new options in the PBKState.ini file that supports filters on triggers, groups and cut duration. This provides great flexibility in setting exactly what data needs to be sent to WEB streams, RDS encoders, HD Radio and the like. It also makes it easier to avoid problems associated with overloading slower devices that can be encountered.

Taking advantage of our enhanced PBS is a new version of PADapult. It has been implemented with direct support of the latest HDRadio Program Service Data (PSD) specifications. Other formats (IP, UDP, Serial) can be user defined and sent simultaneously as previously supported.

NAB2007 was an exciting show for us. We presented a paper at the Broadcast Engineering Conference during the Multicast for Radio session outlining the importance of flexibility in having a process oriented foundation (like we have in DAD with DCL) to address multiple program streams and ever changing new media opportunities. We continue to believe our first priority is to deliver superior flexibility afforded by a configurable process focused approach to automation.

We announced a partnership with Google to support their AdSense For Audio program. Whether or not the Google's AdSense meets its highly touted expectations, we want to ensure our users that it will be available to them without limitation.

Perhaps our most exciting introduction was the addition of Text-To-Speech capability to



PADapult. Based on our experience with speech processing systems we have integrated this with metadata processing in PADapult. It is not targeted for main broadcast programs, but it may be an ideal companion for low bandwidth multicast channel applications. For example, an HD3 channel used to stream alternative program content could include a synthesized voice track derived from metadata like "that was [artist] from [album]". No human voice tracking required – completely automated Voice Tracking. Or, a local traffic report might be derived from a service provided text stream, running continuously during commute periods. You can get a peek at this by listening to the web stream link from our main web page. The possibilities are endless and we would love to hear your ideas! Also, we re-announced a new version of Phonetica, which allows users to search for occurrences of spoken words or phrases within audio files (not just within the text metadata associated with audio).

Overall NAB2007 was a wonderful show for ENCO. We received a lot of great feedback and we have put some very cool things into the pipeline. Have a super Spring!

See you online at [novacek@enco.com](mailto:novacek@enco.com) or on the ENCO Forum at <http://forum.enco.com>

Gene

## ENCO Announces Support for Google AdSense



At the opening of NAB2007 in Las Vegas, ENCO and Google jointly announced that ENCO will integrate with Google's AdSense for Audio program in DAD. AdSense for Audio is an automated way for radio stations to supplement their existing revenue streams by making

their inventory available to Google advertisers, most new to radio, that aren't otherwise easily accessible today. By integrating directly with DAD, AdSense for Audio allows ads purchased by Google's advertisers to be placed directly into the stations' broadcasts, while at the same time making sure stations retain total control over their inventory through the tools and systems they're already accustomed to. Google's AdSense™ for Audio

system will deliver air-ready commercials directly to a stations DAD automation system. ENCO will implement system compatibility through Google's API for AdSense for Audio. ENCO's integration with AdSense for Audio will be available in DAD version 5.3a later this summer.

## New IP Control and Wheatstone Audio Over IP

New options are now available to provide advanced control for certain digital IP audio consoles and routers from several manufacturers. These new options allow broadcasters to quickly configure, connect and control new IP based consoles and/or console router combinations with DAD. We have also added new support for Wheatstone based audio over IP.

IP based audio consoles and routers are gaining popularity among broadcasters due to their reduced wiring requirements, network compatibility and lower costs. Our new IP console and router options provide advanced control and support for several leading IP based console and router manufacturers. These new capabilities ensure that broadcasters will be able to quickly integrate these powerful new IP routers and consoles with their DAD systems.

We have always considered connectivity and integration of the latest broadcast technologies of paramount importance for our customers. Incorporation of these IP console and router options

will greatly simplify the task of integrating the broadcaster's choice of new IP based technology with new or existing DAD systems. Users will also be empowered to do more with these new technologies. ENCO's IP Console and Router options, available now, support audio consoles and routers from leading manufacturers such as Axia, Harris, Logitek, SAS, Wheatstone and others.

Along with IP control of devices, IP distribution of audio is also gaining popularity. This capability has been supported in DAD for Axia LiveWire systems since version 4.3e. We have now added support for Wheatstone AoIP drivers. The AoIP driver can replace the use of sound cards in DAD workstations allowing cost savings and performance advantages when working with compatible Wheatstone gear. The Wheatstone AoIP driver is an efficient and cost effective way to transport audio to and from an audio delivery system over an Ethernet network, eliminating the need for expensive audio cards



while providing greater flexibility. Wheatstone and ENCO share many core values regarding product quality, performance and value and we welcome this opportunity to work closely with Wheatstone on yet another level. Gary Snow, President of Wheatstone Corporation, commented on the partnership: "This is a step forward in our relationship that we know our customers will immediately benefit from. We're looking forward to the next era in broadcast; AoIP and TCP/IP control are just two of the latest developments with our technology. We value the ability to work with other market leaders like ENCO to fully implement this technology in the field."

## Introducing PADapult *VS*

PADapult has been enhanced in several ways in the last few months. Automatic formatting for HD Radios' current Program Service Data or "PSD" specification has been added. This enables the proper connectivity and data stream for PSD on main and supplementary HD programs by simply setting a switch. Simultaneously, data may be formatted differently and sent to multiple other locations such as RDS encoders and WEB streams. Changes to DAD's playback state DCL has also enabled more flexibility for triggering PADapult information when needed.

Perhaps the most interesting addition to PADapult is a "voice synthesis" output.

PADapult with Voice Synthesis opens the door to exciting new applications of program metadata. Fully unattended playout on



auxiliary channels can now include spoken artist, title, station ID or other information automatically generated from the metadata, thereby eliminating the need for human interaction in the form of pre-recorded announcements. Other applications can include traffic, weather and sports updates and provide the advantage of incorporating this information in

audio form, which does not require the listener to read the information from their radio display. ENCO has pioneered a number of projects with speech technology. We also know that customers are looking for an effective means to explore the many program options for their supplementary multicast channels supported by HD Radio. It was a natural fit to apply our speech technology knowledge to this problem and we believe that creating an automated process to add information that is typically voice tracked, without human interaction, presents a compelling approach for cost efficient utilization of new multicast channels.

## Some Quick Tips

It's Spring time again which means that everything is in bloom. The DAD manual is no exception. We have grown and reworked the On-Line Manual Help. New graphics and revamped menus are the obvious aspects you will see when browsing through the update. There is also something new that we have added; COOL ITEMS. There are a few COOL ITEMS now listed within the manual



(yes, along with a pair of cheap sunglasses) that focus on some function or uses of DAD that you might not be aware of. These could be time savers to unique uses of a specific DAD function. These items might change as we highlight other cool items in DAD with future updates.

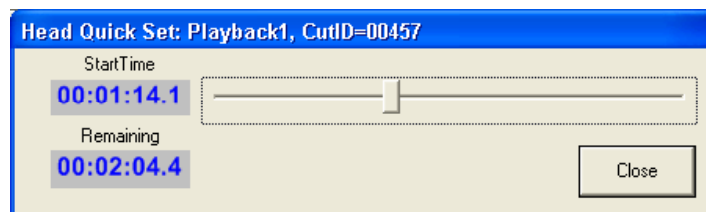
Speaking of Updates, in DAD version 5.2a there is a new control DCL:

```
SET CHANNEL <machine> [Px] [Sx]  
[Ox] [Ax]
```

This allows you to re-define the Channel Assignments for Arrays and Playback Decks automatically within DCL statements.

Also new in 5.2a is a right click option to set the Head of an audio cut quickly to a point in time that Gene mentioned earlier. This right

click option called Head Quick Set is available for Playback Decks and the Quad Deck. This allows you to set the start of a cut to something else quickly and easily.



# Using the ENCO Support Portal

1174: This is a short description of a problem (example only)

Severity:	<input type="text" value="Low"/>	Classification:	
Status:	read more data from client	Billing Status:	Applied Fee
Product:	DAC		
Contact:	<input type="text" value="John Doe"/>	Class:	
Assigned Support Engineer:	DAC	Closed By:	
Department:	Support	Resolution:	

**Full Description:**  
This represents a longer detailed description of the problem or incident. Optionally, a file or some other data may be attached.

## Journal Log

4/23/2007 3:48:03 PM OK File attached to file  
Web Price 2

Resolved: D:\Downloads\encom...  
Full

4/23/2007 3:01:11 PM Help: We did not find a new issue resolution. Can you send us a file?  
ENCO Admin

**The Incident entry and review screen provides a complete transaction log for any reported call.**

As described in our December newsletter, we have adopted a support issue tracking system to enable better tracking and communication relating to technical issues and customer support. The system, called "Tracker", has been operational since late December and is providing up to date information and history on all support calls, referred to as "incidents", as well as a growing knowledgebase of information. Many of the communication and follow-up tasks are handled automatically and the system provides WEB access for all registered customer contacts.

Once registered, you may log onto the system through your WEB browser and see any open incidents for your site or a history of all reported incidents. By opening any incident link, a complete detail of the incident is presented. This information includes when the call was opened, the problem description, the assigned support engineer, and a history of notes called "journal entries".

## Upcoming Events!

Broadcast Asia 2007, June 19-22, Singapore

Latin American Broadcast Show – July 9th and 10th, Miami, Florida

SMPTE Convention, July 17-20, Sydney, Australia

TAB/SBE 2007 Convention and Trade Show – August 8th – 10th, Austin, Texas

## Contacting ENCO Systems

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Journal entries can be created by support engineers or the customer contact thus providing a chronological view of the status and history of any issue. Journal entries often include ENCO requests for more information and our customers' response, or dialog relating to problem investigation. Files such as screen shots or log files may be simply attached to the journal entry and will be stored in the system with their associated incident. Customers may add to or update information directly in the incident page. This information is instantly updated in our engineers' desktop application. You may also create new requests or incidents when logged into your page. Once entered, the new incident is assigned a unique number and established as an "open" incident for your site in Tracker and our engineers are alerted.

Our telephone support line works as it always has, however when we take your call, our engineers open a new incident and record the pertinent details. From that moment on, you may view the incident status or add information via the portal.

We can also authorize a customer site administrator enabling you to create new users, email distribution lists and locations for your organization, all through the web portal.

You can obtain a login and password by calling us at (248) 827-4440 ex 131 or visiting the portal at <http://support.enco.com> and following the link for a new user name.

All support requests that would have been previously sent via email should now be directed through the portal. Shortly we will discontinue our support@enco.com mailbox and mail will be returned with a message directing the sender to the portal.

The feedback we have received on Tracker has been very positive and we continue to be confident that this system will better help us help you. Get your login and take a test drive!