DAViD
systems

PLAY-OUT & DELIVERY

Play-out and Content Distribution Solutions for Today and Tomorrow

Quality and reliability have been the bedrock requirements for broadcast play-out systems from the time they were first introduced. But as technology has progressed, the demands on radio and TV for consumer-driven content have become increasingly complex. Today broadcasters make audio and video available "on-demand" from Websites, regionalize show content, produce special-interest programs for off-line access, and generate multimedia for handheld receivers like cell phones.

New distribution channels and formats like on-line streaming, podcasts, RSS, DAB/HD-Radio, and surround sound present promising possibilities to grow audience share and create new sources of revenue. The brands of broadcasters who recognize the potential of DAVID Systems' powerful play-out and distribution tools stand-out boldly in today's fiercely competitive multimedia world.

Keep the workflow of play-out lean and efficient despite the proliferation of new distribution channels and make your station future-proof by using our modern and versatile play-out systems.

INTEGRATION

Designed to meet the unique needs of each operation in which they're installed, DAVID Systems' OnAir applications are reliable tools for broadcasting and play-out solutions. For more than 15 years, radio and TV stations around the world have relied upon our innovative, IP-based systems. Here is some of what they've come to rely upon by partnering with DAVID Systems.

Robust Play-to-air Systems

Our OnAir solutions offer the highest degree of reliability because the production and play-out environments are completely separated. Even if some system components did encounter a failure, play-out buffering and a backbone of redundant system protections prevent broadcasts from ever suffering a catastrophic failure.

Modern and Fast

The XML-based data transfer within the play-out environment grants the highest degree of flexibility and readiness to adapt to future advances in IT. In addition, our powerful client/server technology offers near real-time communication between all system components, offering your staff full flexibility in handling breaking news and last-minute schedule updates. The automated data transfer to all clients and locations connected to the system prevents errors and makes the status of projects transparent to everyone.

Seamless Integration

Optimization of the workplace can only truly be achieved when the systems the staff uses are combined to work together. DAVID Systems solutions allow the global offices of one customer to operate as a single unit, making sharing data between hemispheres as easy as if it is between adjoining cubicles. Through dedicated import/export clients, we smoothly integrate 3rd party systems like music schedulers, traffic and billing systems, newsroom management software, and even ERP systems like SAP.

Customized User Interfaces

Individually configured GUIs maximize the ease and efficiency of individual workflows. The most important data as determined by each user is available at a glance. Vital tools are no more than a thought and a click away on each desktop.
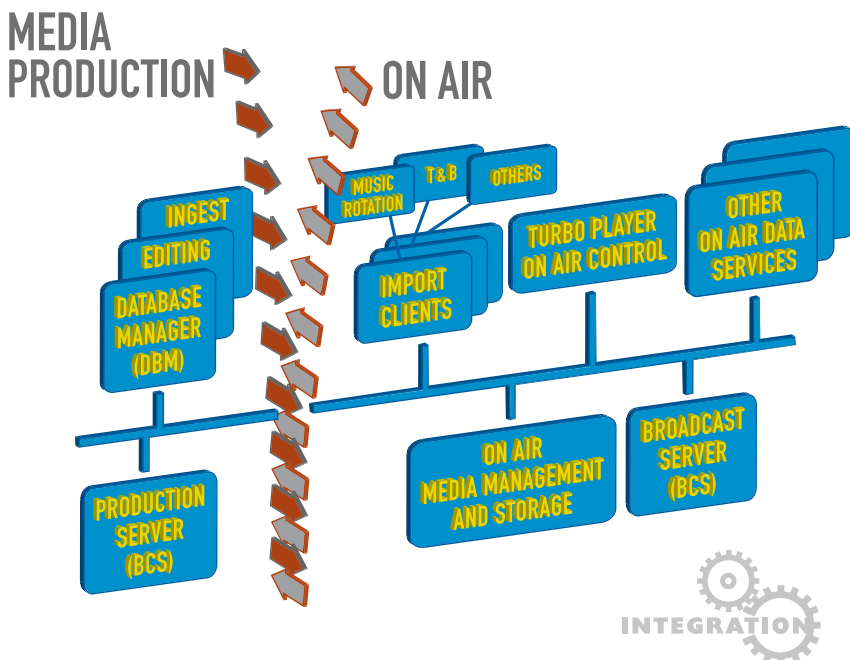
PLANNING & PLAY-OUT

Efficiency in Radio Planning and Play-out

To provide maximum safety for OnAir play-out, entries which are ready-for-air are stored in the XML standard and are placed into a dedicated play-out infrastructure with its own servers and storage systems. And yet to keep DigaSystem operating in harmony with itself, predefined templates facilitate program planning as well as data import from production, archives, and third party systems. To effortlessly accommodate the inevitable last minute change to a schedule, the producer and host in the studio have powerful tools to manage it — even if it needs to happen at the very last moment.

DigaSystem. Concept

MEDIA PRODUCTION   ON AIR

INGEST
EDITING
DATABASE MANAGER (DBM)

MUSIC ROTATION   T & B   OTHERS

IMPORT CLIENTS

TURBO PLAYER ON AIR CONTROL

OTHER ON AIR DATA SERVICES

PRODUCTION SERVER (BCS)

ON AIR MEDIA MANAGEMENT AND STORAGE

BROADCAST SERVER (BCS)

INTEGRATION

Import and export clients integrate music rotation systems, traffic and billing software, and ERP solutions into the DAVID Systems. They make on-the-fly format conversion and parallel feeds like podcasts and Web content possible. For radio-driven video play-out, DAVID Systems' TurboPlayer even coordinates the transmission of audio content with graphics, pictures, and video material for mobile devices and streaming. Transparency is crucial for speed and reactivity in the newsroom. The high-performance IT infrastructure of DAVID Systems OnAir ensures that the whole team is always informed about content status and schedule changes in the current show. The graphical user interface can be configured individually, displaying exactly the information each user needs to do his job quickly and well.

Centralized or Local Control

How should the resources of multiple locations be organized to complement one another? Should scheduling and play-out be managed centrally or locally – or perhaps a mix of both? Whatever the case may be, DAVID Systems OnAir Solutions offer freedom of choice and are designed to meld to the particular processes, business models and regional structures of each of our customers.

User rights can be configured to grant direct remote access to the program schedule to users at both your headquarters and your regional sites. Alternatively, the exchange of program data can be automated and synchronized via remote links.

That way, regional programs can be planned and produced locally while the play-out originates from your headquarters. The play-out of several regional programs can be managed from just one workstation – including different news, music, promos, and advertisements. Operational control can be completely local or it can revert to centralized operation during certain hours of the day such as overnights or while carrying syndicated programming.

No matter how complex an operational strategy may be, our system is flexible enough to make the vision a reality. This means higher audience retention and additional commercial revenue can be achieved while lowering costs.

DEVELOPMENT

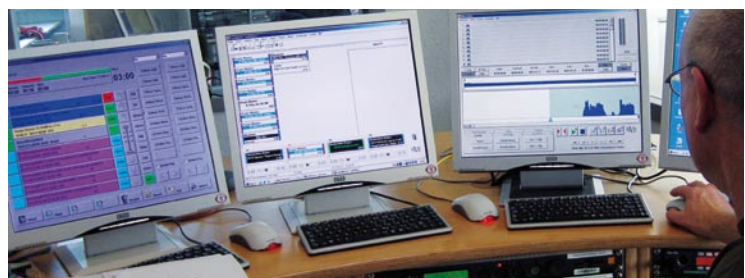## Your Content can be Received Anytime and Anywhere

Radio as we used to know it is history. Devices like mobile phones that combine radio and TV receivers with telephones and the Internet are already receiving wide acceptance from consumers who are hungry for content. „Radio delivery across multiple platforms" – no other system provider makes it possible for broadcasters to meet the new demands of its audiences as easily as DAVID Systems does. Our references speak to our success!

Are you interested in delivering radio-driven multimedia content via HD-Radio and DVB-H? Then you can benefit from our expertise and the practical experience of our family of customers. DAVID Systems OnAir applications have maximized the potential of the multiple platforms now at radio's disposal for many of our clients.

The DigaSystem offers another distinctive feature: 5.1 surround sound under the new EBU RF64 standard which has been developed with DAVID Systems' leadership. That format not only allows audio files larger than 4 GB but also includes a stereo downmix (5.1 + 2 in simulcast mode) to enable listeners with traditional stereo equipment to listen to the same program that others are receiving in 5.1 surround sound.

RADIO DELIVERY ACROSS MULTIPLE PLATFORMS

Web / Streaming
Print Media
EPG
IPG
DAB / HD-Radio
DMB / DVB-H, DVB-S
Surround Sound
RSS Feeds / Podcast
SMS
IP-Phones
RDS / RTplus

DAVID Systems video play-out solutions

In the very near future, consumers with state-of-the-art receiving devices will have the freedom to choose between different media and formats. Many broadcasters therefore will challenge the traditional separation between radio and TV and converge the workflow processes for production, play-out, and content distribution.
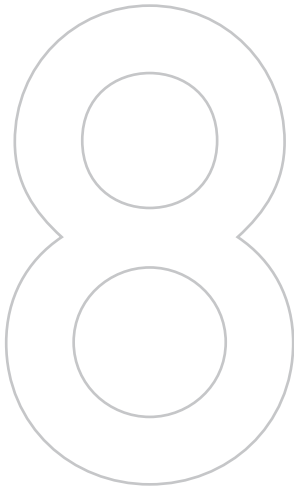
DAVID Systems customers are well prepared to make this happen. Our format and media independent production system is flexibly extendable to include video play-out applications. New content can be converted into the most common formats on-the-fly during the transfer process. To play-out these contributions, existing video servers (e.g., Omneon, GVG) can be used as well as dedicated DAVID Systems video players. This leaves open the possibilities for future developments and at the same time protects your investments for the future.

REFERENCES FOR DAVID ONAIR

ORF
Bayerischer Rundfunk
Antenne Bayern
WDR
RBB
Radio Free Europe/Radio Liberty
DRS/RTSI/RTR/Bundeshaus
NRK
Sveriges Radio
WNYC

INTEGRATION

■ DAVID Systems GmbH

DAVID Systems' activities are summarized in the five letters of the company name: Digital Audio & Video Integration and Development.
The company, with locations in Munich, Berlin and Washington, is a leading international supplier for open, IT-based radio and TV-production networks. The spectrum of customer installations ranges from 20 to over 2,000 desktop workstations.

PRODUCTION

- Media and format independent content management system (CMS)
- Ingest, production, and management
- Audio and video editors

ON AIR

- Custom broadcast servers and integration of play-out systems (TV and radio)
- Complete play-out systems for radio
- Play-out support for different platforms and devices
- (DMB / HD Radio, mobile, surround)
- Play-out control of video servers

MEDIA

- File and Metadata transfer and conversion for radio, TV and Internet (automated)
- Integration of regional and international studios and mobile teams
- Integration of workflows and peripheral systems
- Archiving

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