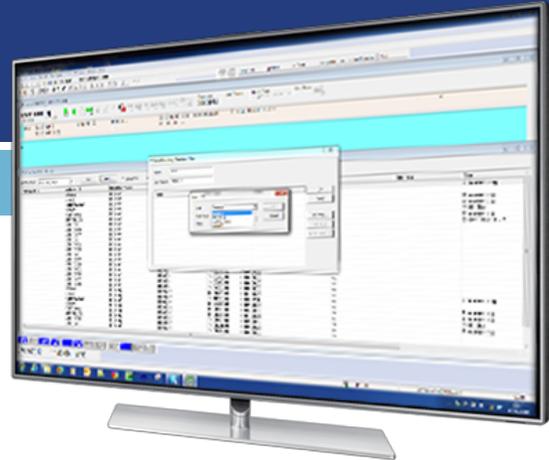


D-Series™

Advanced Playout Automation



The D-Series™ playout automation system is an extremely scalable system that provides world-class device control for linear playout channels and manages the movement of file-based media to multiple delivery platforms. The enterprise-level system delivers reliable, frame-accurate control of high-capacity media distribution environments.

D-Series playout automation commands a single architecture that can easily grow to manage more than 1,000 channels. A powerful, configurable user interface maximizes efficiency, simplifies facility reconfiguration and enables control large numbers of channels. System integrity and practical security — including user access — are provided across the entire facility through station-defined security policies. System configuration can be managed from any authorized operator workstation.

The dual redundant configuration of D-Series provides extremely high levels of system availability for a large broadcast facility. The system is also extraordinarily flexible, with dynamic device allocation and management processes supporting a broad range of ingest and playout devices. Open metadata exchange is supported via BXF, MXF, AAF and V-ISAN.

Product Features

- **Scalability:** D-Series manages large numbers and a wide variety of channels, playout devices and material management facilities, operating efficiently with maximum operator productivity. It can scale to over 1,000 distribution channels within a single control architecture.
- **Redundant Components:** When configured for dual redundancy, backup computers (either local or remote) continuously shadow the main so that they can take over instantly if necessary — without any effect on running schedules.
- **Real-Time Operations:** D-Series™ Device Controllers run the real-time D-Series software and communicate with video servers, routers, master control and graphics equipment via RS-422 or IP, as required.
- **Manual Override:** With fully prepared schedules, D-Series operation can be completely hands-off; but during sports or other live events, your operators can take control and make confident decisions as action unfolds. Dedicated hardware control panels allow more efficient management of system processes than does a keyboard and / or mouse.
- **Comprehensive Alarms:** D-Series provides clear information about any alarm that is triggered, allowing you to work toward fast error resolution. All system errors are logged for later analysis.

- **Configurable User Categories:** Individual viewing, editing and maintenance rights are set up for each class of operator in a customizable configuration table to ensure system security at all times.
- **Business and Asset Management:** Integration D-Series supports content and schedule integration via the SMPTE-2021 Broadcast eXchange Format (BXF). This standard is used for integration with traffic systems for log and as-run information, programming systems for schedule information, and digital asset management systems for content preparation and distribution.

Product Details

Content delivery is instrumental in your success or failure to gain audience share. Regardless of your market segment or your delivery targets, playout efficiency and quality can help to capture viewers — or push them away. D-Series helps grab and hold your audience by assuring playout quality to all media environments.

Broadcast Television — D-Series provides central control of local content insertion, with the ability for local program origination to integrate with network feeds. The system supports growth through the efficient management of digital operations, the ability to seamlessly add channels and increased operator productivity.

Satellite/Cable TV and Radio — Multiplatform media companies face a growing number of delivery challenges — broadband, VOD, IPTV and mobile, to name a few. The stakes are raised even higher when local content and advertising needs to be inserted into programming. The D-Series solution's flexible delivery capabilities and structural efficiency lay the groundwork on which to build any media delivery operation.

IP Distribution — With the ability to ingest, manage and play out digital file-based media content in a fully online operation, D-Series offers substantial benefits for telecommunications organizations, Internet service providers and any company that delivers content to wired or wireless devices over IP networks. D-Series simplifies the process of converting content to diverse formats by seamlessly integrating with Imagine Communications digital asset management systems to automate content repurposing and redistribution. The result is enterprise flexibility — a necessary trait for tackling new media revenue opportunities.

Ingest Operations

Comprehensive ingest capabilities — from single spot operation to large-scale batch ingest — with quality-control features allow D-Series to function as a standalone automation solution or to be integrated with Imagine Communications Invenio or third-party digital asset management systems. Additional ingest capabilities include:

Traffic System Interoperability

D-Series performs ingest and material-management operations based on work orders — such as record lists, cache lists, copy lists, delete lists and purge lists — produced by supported traffic systems. For late-arriving or unscheduled ingest orders, manual entry is quick and easy.

Confidence Checking

If supported by the video server, a file can begin playout while recording is still in progress — a feature that can be used to verify the integrity of encoded material during ingest.

Quality Safeguards

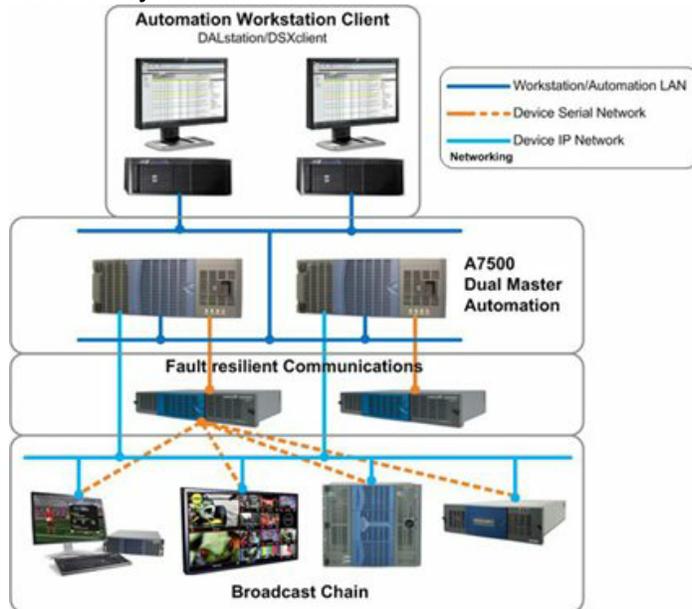
During ingest, files are recorded with a temporary file name to prevent the material from going to air or being transferred to other locations before its integrity is verified. At the end of recording, you can review the file within the D-Series system to clear it for use. On release, the file name is changed to the proper one; if rejected, the file is deleted to allow the operation to be repeated.

Point Trimming

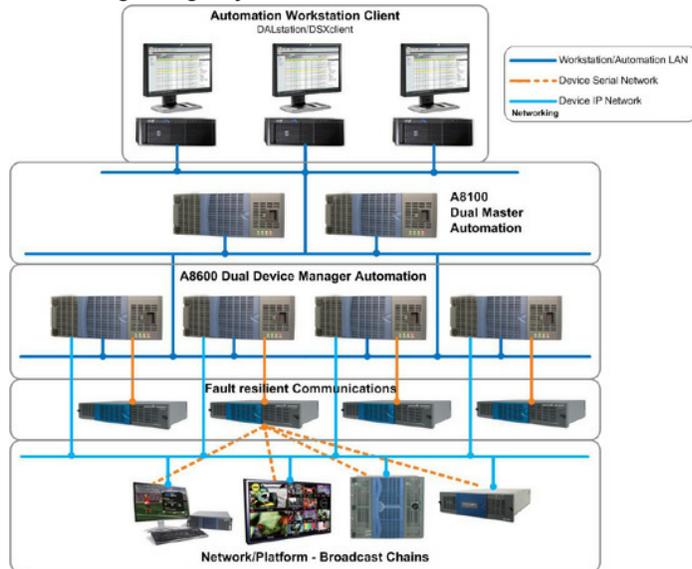
During the review process, the start and end of a program can be trimmed. Point trimming is particularly useful when recording live feeds; the original material remains in the server so that it can be retrimmed again, if required. The system database holds the new timing information.

Images/Diagrams

D-Series A7 Integrated Automation Architecture Realtime Playout Automation



A8 Distributed Automation Architecture Scale to more than 1000 channels with the benefits of maintaining a single system



Specifications

Specifications and designs are subject to change without notice

To view specifications for individual D-Series products and add-ons, please review the appropriate datasheet from the list provided.

D-Series client applications are supported by the Microsoft® Windows® XP or Windows 7 operating system. The workstation should include:

- 1.8 GHz processor
- 1 GB RAM
- 40 GB HD drive (minimum)
- Two (2) Ethernet NICs
- USB port
- CD-ROM drive
- RS-232 to RS-422 converter for each panel to be controlled

Information Server runs on Microsoft® Windows Server 2003® and an appropriately configured hardware platform

The database must be MySQL® Server running on an appropriately configured hardware platform.

System Manager runs on the Microsoft® Windows® XP or Windows 7 operating system and an appropriately configured hardware platform.