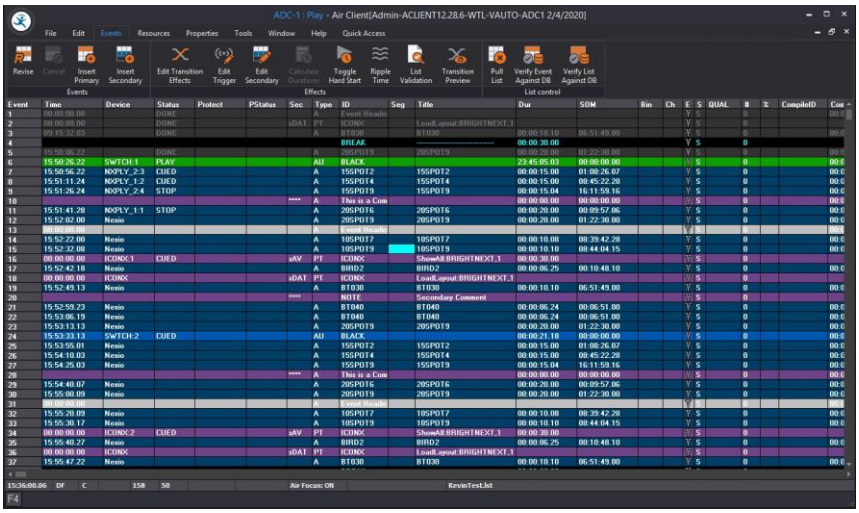
Datasheet

ADC™

Automated Content Management and Distribution



Broadcast automation has evolved beyond simple channel playout to become a full content-management and distribution engine. Media operations require efficient, format-agnostic content delivery.

The industry-leading on-premises solution ADC™ is engineered to support content-management workflows. Proven in demanding broadcast environments, ADC integrates robust asset management with automated operations to deliver uncompromising control and distribution of your media.

With operational flexibility and modular scalability, ADC adapts as your business evolves. Deploy it at the core of your operations to ensure uninterrupted playout of content and commercials, keeping your channels on-air and seamless.

ADC is cost-effective and simple to install, supporting architectures from single-channel setups to multi-site deployments. Advanced list-synchronization and redundancy ensure high availability and uninterrupted service in any environment.

With an extensive device-driver library and advanced features, ADC delivers exceptional performance for both static and dynamic channels—ideal for news, sports, and multi-channel workflows.

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Benefits

- **Proven Reliability:** Trusted by leading broadcasters worldwide, ADC ensures consistent, on-air performance in the most demanding environments.
- **Operational Efficiency**: Combines asset management and automation for seamless, end-to-end content control and delivery.
- **Flexible Architecture:** Scales effortlessly from single-channel systems to complex, multi-site operations.
- **High Availability:** Advanced synchronization and redundancy options deliver uninterrupted service and rapid recovery.
- **Interoperable:** Integrates with more devices and business systems than any other automation product, creating seamless workflow environments.
- **Easy Deployment:** Simple to configure, integrate, and maintain—reducing setup time and operational complexity.
- **Comprehensive Device Control:** Supports an extensive range of third-party devices and systems for maximum interoperability.
- **Dynamic Workflow Support:** Handles both predictable and fast-changing channels, including live news and sports.
- **Future-Ready Design:** Modular and scalable to evolve with your business and technology roadmap.

Applications

- **Broadcast and Cable Networks**
  ADC manages complex network workflows with regionalized ad insertion, mezzanine format conversion support, and robust redundancy—making it the trusted choice for major content providers.
- **Commercial Environments**
  Ideal for dynamic, multichannel operations, ADC supports complex branding, fast-changing schedules, and seamless content management from acquisition through distribution.
- **Public Broadcasting Services**
  ADC delivers reliable automation for PBS member stations, integrating with traffic and scheduling systems for smooth, consistent playout.
- **Centralized Operations**
  Supporting distributed ingest, centralized playout, and edge-based workflows, ADC offers the flexibility to power any centralization strategy.

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Right-Sized Redundancy

ADC offers multiple, interlocking redundancy strategies, allowing you to select the approach that best protects your revenue streams:

List Redundancy
Duplicates and synchronizes automation schedules to create parallel transmission paths. Either path can assume playout responsibilities, supporting redundancy on the same site or across geo-dispersed locations for disaster recovery.

Cold Standby
Works with List Redundancy to protect Device Controllers and device communications. Control can seamlessly switch from the primary to a backup controller, ensuring uninterrupted operations.

Microsoft® Clustering
ADC's database architecture supports Microsoft® Clustering to safeguard metadata assets and maintain workflow continuity.

Components

ADC's modular architecture scales easily to meet evolving operational needs, from adding channels to supporting new workflows or enhanced redundancy.

ADC on-premise playout automation is built on the following components:

Device Controller
Manages multiple playlists and devices in real time. Controllers can handle multiple channels simultaneously and be paired for redundant, failover-ready operation. The device controller can be a hardware system or on-premise virtual machine.

File Server
Manages all metadata using a Microsoft SQL database to support automated workflows. Its flexible schema allows custom tables, and redundant configurations ensure uninterrupted operation.

Air Client™
An intuitive workstation for playlist management, Air Client™ monitors and controls multiple playout and ingest channels across multiple device controllers from a single user interface.

Media Client
Manages media ingest and tracks content across servers, archives, and other storage devices.

ADC Services (Business Services Layer)
Integrates seamlessly with traffic, scheduling, MAM, and other business systems. The RESTful API supports both centralized and distributed workflows, ensuring efficient operations.

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Optional Components

ADC's functionality can be extended with a variety of optional modules. Select from the following to enhance your system:

Motion
Managing content from multiple sources in various formats presents challenges in distribution, workflow efficiency, and staff productivity. Motion addresses this by providing intelligent content workflows across the full spectrum of media operations, including archive, transcoding, automated QC, multiple nearline volumes, replication, and file-based ingest. With Motion, ADC can automate these processes while allowing manual validation at critical stages.

Key features of Motion:
- Intelligent, rules-based content workflows
- Integration with other business systems and task management tools
- Flexible, scalable, and intuitive workflow builder
- Streamlined operations through automated content management

Link List
Link List is an optional extension for the ADC Air Client that enables the management of break-away lists derived from a primary or master list. It is commonly used for regionalized commercial insertion, allowing different content to be played for specific regions. Link List benefits any facility needing a simple, proven method for producing multiple program streams from a single master schedule.

Key benefits of Link List:
- Enables targeted or regionalized commercial placement
- Supports multiple commercial streams for any primary channel
- Maintains operational efficiency while increasing revenue potential

Secondary Record
Secondary Record captures live programming in real-time for later reuse. It automatically ingests content and generates associated program metadata, allowing immediate or delayed repurposing. Programs can be rescheduled with different commercials and branding, making this module ideal for newscast replays, live sports events, or any content requiring distribution across channels or platforms at a later time.

Key benefits of Secondary Record:
- Reliable capture of live programming for quick-turnaround reuse
- Supports content repurposing with flexible branding and commercials
- Facilitates multi-platform and multi-channel distribution

Specifications and designs are subject to change without notice.

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Optional Components (continued)

Synchro Service
ADC™ Synchro Service is a service-based application that automates modifications across multiple transmission lists, reducing manual effort and saving operator time.

A group of lists is created from a source transmission list, replicated to destination lists, with specific translator rules applied. Each destination list can have its own translator rules, and the lists in the group are kept synchronized automatically. This enables:

- Automatic creation of regional variant lists
- Advanced preview of a channel prior to air using destination lists

Missing Media Viewer (MMV)
ADC Missing Media Viewer is an HTML-based web application that allows broadcasters to quickly identify content scheduled for playback but missing from video servers across multiple channels. Advanced notifications help prevent on-air errors and lost revenue.

Users can create customized views with saved filters, enabling quick monitoring of different channel groups for detailed oversight.

Key benefits:
- Rapid identification of missing media
- Prevention of on-air errors and revenue loss
- Flexible monitoring through saved filters and customized views

Breakaway Client
ADC Breakaway Client manages interruptions in a normal schedule, such as live news bulletins or unscheduled events. When a Breakaway occurs, the scheduled content is temporarily suspended and a predefined sequence—often including live studio elements—is played.

Because the duration of the Breakaway is unpredictable, the automation playlist must adjust to ensure subsequent programming plays at the correct time. Two primary methods are used to return to the schedule:

- **Slide/Floating Return:** Rejoins the schedule from the point of exit, as if the Breakaway did not occur.

- **Join-In-Progress Return**: Rejoins the schedule in progress, at the point it would have been if the Breakaway had not occurred.

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Software and Hardware

Device Controller and File Server Specification

Chassis	2RU - 3.44 x 17.63 x 26.10 in (8.75 x 44.8 x 66.3 cm)
CPU	AMD 16 Core CPU 3.0Ghz
RAM	Device Controller: 2 x 16GB SINGLE RANK PC5-4800 File Server: 4 x 16GB SINGLE RANK PC5-4800
Storage	Redundant RAID O/S Drives (2 x 480GB Read Intensive SSD) File Server Internal: 12 x 3.5” drives – 24TB, 72TB or 96TB Options
Network	4 x 1Gb/s Ports Dedicated iLO Management Port Device Controller: Additional 4 x 1Gb/s Ports
I/O Interface	1 x Serial Port 3 USB 3.0 ports (1 front, 2 rear)
Weight	Minimum: 16.97 kg (37.41 lb) Maximum: 35.67 kg (78.63 lb)
Power Supply	Dual, 1000W Flex Slot Titanium Hot-plug Power Supply
BTU Rating	3741 BTU/hr (at 100 VAC), 3596 BTU/hr (at 200 VAC), 3582 BTU/hr (at 240 VAC)
Software	Current Device Server 12.29.xx release Current ADC Services 5.10.xx release
Operating System	Microsoft Windows Server 2022
Database	Microsoft SQL Server 2019 or Microsoft SQL Server 2022

Client Workstation Requirements

Hardware	Dual-core 2.8 gigahertz (GHz) or faster processor RAM: 4 gigabyte (GB) for 32-bit or 8 GB for 64-bit Hard drive space: 80 GB or greater Graphics card: DirectX 9 or later with WDDM 1.0 driver NIC: 2 x 1GbE Additional Intel Network Interface Cards may be required for systems connecting to external networks, or a database using TCP/IP.
Software	Current Air Client 4.29.xx release Current Media Client 4.29.xx release
Operating System	Windows 10 or Windows 11

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