CASE STUDY:

MetaBroadcast Active Metadata Management Elevates RadioTimes Program Listings



RadioTimes

Background

Radio Times has been the UK's trusted provider of program listings for 100 years. The award winning radiotimes.com website, launched in 1997, continues to grow with a data centric commitment to providing consumers with the scheduling data and editorial content needed to decide what and where they want to watch. When your goal is to be the authoritative source of where and when to enjoy television and entertainment content, it's important to consolidate, validate, and cleanse the data supporting your service.

MetaBroadcast has been collaborating with the Radio Times website team for over 10 years. As the website has evolved to align with the interests of their audience, their need for a wider variety of metadata created new challenges. At its core, the website provides highly valued scheduling and coming soon data. However, viewers also expect to see recommendations and editorial content. Radio Times needed a partner that could help them aggregate metadata from multiple sources, validate the accuracy of that data and provide flexibility for centralized editorial reviews.

Active Metadata Management

MetaBroadcast's cloud-based metadata management platform, Atlas, provides both flexibility and scale to fulfil Radio Times requirements. It starts with metadata ingest. The website's primary need is to aggregate PA scheduling data and SVOD data which is available via the online Electronic Program Guide and user interface. This data is complemented by Radio Times' reviews and editorial content. EPG data is validated by comparing the ingested data with the data available from the Content Management Systems of the leading UK broadcasters (e.g., BBC, ITV, UKTV, Amazon Prime, etc.).

Radio Times faced several challenges. First, the descriptive metadata needed is not available from a single source. Each source specializes in providing different types of metadata, Radio Times needed to define a methodology for consolidating and normalizing data from different sources into a defined data structure. The solution would need to map content IDs regardless of source, validate broadcast IDs, \rightarrow

ensure use of consistent formats, and de-duplicate repetitive records. Atlas orchestrates the data workflow and automates processes for normalizing, matching and unifying metadata based upon an agreed data schema. Atlas reviews data hierarchies to ensure compliance with the data schema and availability of data related to TV brand, series, and episode or film collections and franchises.

Radio Times also identified the need for incremental descriptive data to enrich the user experience. Enhanced data related to program, plot, cast and crew data, images, languages, release dates, awards and alternative titles are provided by IMDb. MetaBroadcast licenses IMDb data on AWS Data Exchange which make

alternative titles are provided by IMDb. MetaBroadcast licenses IMDb data on AWS Data Exchange which makes it easy to find, subscribe to, and use third-party data. AWS Data Exchange streamlines third-party data procurement so customers can access data more quickly and with less effort to accelerate innovation. Upon ingest of only the specific IMDb data defined by Radio Times and data provided by additional Radio Times-defined data sources, Atlas initiates automated processes for equivalence and hierarchy healing, ID mapping and data cleansing.

Atlas gives Radio Times the flexibility to prioritize data sources. With a goal of using the best available metadata, Radio Times gives preference to defined data sources such as their own film reviews and IMDb data. Upon consolidation of IDs and related metadata, a unique Content ID is created with the updated records, making a single source of truth available for distribution to Radio Times for use on their website.

Web-Based Tools

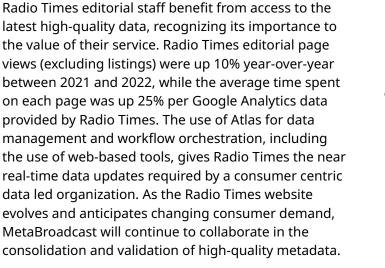
Effective metadata management requires more than data ingest and automated processes. Radio Times is not alone in requiring the ability to review content records, images, channel groupings or genres. MetaBroadcast provides a web-based application that gives Radio Times incremental capabilities. The Editorial Override Service exposes content records residing in Atlas. Radio Times can create new content records for existing content IDs, including assignment of genre codes. A similar Image Override Service enables Radio Times to review images and delete or add images from existing ingest sources.

The Channel Grouping Tool allows users to define the order of channels within Radio Times channel groups so that Radio Times can prioritize which channels are presented higher up their final product page (e.g. above the fold). This tool helps Radio Times create base groups, perform bulk edits, and determine which channels should be included or excluded in listings.

Operational Efficiency

With multiple sources and requirements for regular updates, the importance of connectivity between Atlas and the Radio Times CMS; and between Atlas and Radio Times defined sources, is critical. Radio Times must provide current and accurate data to its customers. If there are schedule changes, the Radio Times website must reflect those updates. Atlas not only provides operational efficiency through its use of automated processes; it also ensures persistent data updates including daily ingestion of IMDb data delivered on AWS Data Exchange.

Atlas is a cloud native platform using Amazon Web Services (AWS) which provides the expected benefits of security, scalability, and reliability. AWS enables ATLAS to take advantage of elastic search which delivers fast search results across large datasets, as well as AWS Cloud Development Kit to accelerate cloud development using common programming languages to model applications. AWS also auto-scales capabilities to allocate resources and business continuity and disaster recovery services. Leveraging the broad suite of AWS services helps MetaBroadcast to continuously enhance its platform capabilities while delivering a cost-efficient solution to Radio Times.



- **MetaBroadcast continues to give Radio Times the flexibility and agility we need to meet and exceed our stated goals. High quality metadata is of paramount importance to us and we value our ongoing partnership with MetaBroadcast.
- Mark Summerton, Managing Director, RadioTimes.com

