

Transforming Community Broadcasting with Firecrest Systems

Community Access Media Alliance



Background

In the early 2010s, Firecrest Systems began supporting Manawatū People's Radio (MPR), a local access radio station in Palmerston North. The work initially involved maintaining their website and managing software licensing.

MPR was part of the Community Access Media Alliance (CAMA)—then known as ACAB. CAMA operated the Access Internet Radio Project (AIR Project), a digital initiative initially built by a single developer and later maintained by a separate IT provider.

The AIR Project aimed to provide listeners with online access to community radio broadcasts across Aotearoa New Zealand, but early development challenges left it vulnerable.

The Challenge

CAMA's IT supplier was commissioned to deliver a new mobile app for the AIR Project but exhausted the entire budget without producing a working product. This setback left CAMA and its members with:

- No app delivered.
- No budget available to fix the issues.
- Risk of losing momentum for a growing digital media initiative.

MPR reached out to Firecrest Systems, asking for help salvaging the situation.

The Firecrest Solution

Firecrest Systems stepped in to deliver the missing mobile app, running the project entirely in-house. This restored confidence across the sector. On the back of this success, CAMA reassessed its IT supplier relationship and transitioned the entire AIR platform to Firecrest, marking the beginning of a strategic technology partnership.

Together we developed AIR 2.0, a platform that moved beyond stop-gap solutions and grew into the beating heart of access sector broadcasting. Under Firecrest, the platform expanded rapidly to include:

- **On-demand listening** for archived shows.
- **Live streaming** for station broadcasts.
- **Cross-station content sharing.**
- **Sector-wide podcasting infrastructure**—now recognised as Aotearoa New Zealand's biggest podcasting platform.

Scaling to Accessmedia.nz

Today, the AIR platform has evolved into accessmedia.nz, a digital hub funded by NZ On Air and powered by Firecrest's AWS-based infrastructure. The platform showcases more than 1,000 podcast titles generated by CAMA's 12 member organisations. Larger community stations now achieve over 1,000 daily podcast listens (measured using IAB guidelines). Recently, accessmedia.nz underwent a major makeover to ensure it continues to meet communities where they access content. The revamp introduced multilingual support, including Te Reo Māori, reflecting the sector's commitment to cultural inclusivity. According to Phil Grey, project lead for CAMA, the platform has shifted its strategy away from reliance on a standalone app:

"We've taken a step sideways with this – focusing on mobile optimisation in favour of the existing accessmedia.nz app. That'll keep working for most, but we will cease any development, meaning that as devices and operating systems advance, the app will become redundant."

This decision reflects a sector-wide trend. As Grey explains:

"With most CAMA content also being added to the major global platforms, we find our audiences. A separate app is costly, and in the current environment, we can do far better investing in adding features to the main accessmedia.nz platform."

The Technology Stack

The current platform is entirely cloud-native on AWS, designed for scale, security, and performance.

Core AWS Services

- **Amazon CloudFront (CDN)** – Delivers live/on-demand streams while generating detailed listener activity logs.
- **Amazon S3** – Secure scalable storage for content and raw log data.
- **AWS Lambda** – Serverless workflows to process logs and trigger analytics.
- **Amazon Athena** – Serverless SQL queries over CloudFront logs to generate insights.
- **Amazon RDS** – Stores structured audience analytics for reporting and dashboards.
- **Amazon API Gateway** – Secure API layer exposing platform services.

Supporting Services

- **Amazon ECS & ECR** – Containerised deployments and service orchestration.
- **Amazon EC2** – Dedicated compute where required.

Analytics Workflow

1. CloudFront delivers and logs listener behaviour.
2. Logs stored in S3.
3. Lambda triggers analytics jobs.
4. Athena queries processed usage data.
5. Results written to RDS.
6. API Gateway makes insights available to dashboards and services.

Results & Impact

- Growth from a fragile one-man-band build into New Zealand's largest podcasting platform.
- Over **1,000 podcast** listens daily
- Over **1,000 titles** hosted, across **12 community stations**.
- Support for Te Reo Māori, aligning with Aotearoa New Zealand's cultural priorities.
- Mobile-first optimisation replacing costly app development.
- Reliable, scalable infrastructure with data-driven audience insights.

Lessons Learned

The story of accessmedia.nz illustrates a recurring challenge: many organisations begin with software built by "one-man band" developers. While this may meet early needs, the lack of continuity creates risk when those developers step away.

By transitioning to Firecrest, CAMA gained:

- A long-term technology partner.
- A scalable platform capable of growing into a national digital hub.
- The ability to adapt strategy—shifting from app-based delivery to mobile-first web optimisation—while maintaining sector-wide confidence.