Ant Media

Case Study: KDDI

Leveraging Smart Drones and Mobile Communications

About KDDI

KDDI Smart Drone, a spin-off from KDDI—one of Japan's leading telecommunications companies—is at the forefront of using drone technology to address pressing social issues. Founded on the principle that "**drones x mobile communications = smart drones,**" KDDI Smart Drone combines its expertise in mobile and wireless communication to unlock the full potential of drone applications in society.

Challenge

- **Diverse Video Protocols:** Each manufacturer uses its own protocol, and while they primarily worked with **SRT** for secure and reliable streaming, many drones did not support this protocol. They needed a solution that could integrate multiple protocols seamlessly.
- **Limited Platform Accessibility:** Their original client application was Android-only, restricting access for users on other platforms and devices. Expanding support was necessary to increase reach and usability.
- **Need for Low-Latency Video Viewing:** For real-time applications, low latency was critical. Rebuilding the app as a web-based platform would enable cross-platform support and provide a faster, more responsive video experience.

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Solution

Initially, KDDI explored using **AWS** video services. However, they encountered limitations such as low latency (<1 sec), multi-protocol support, automatic switching according to communication (adaptive) and high cost.

By implementing Ant Media Server, KDDI achieved several key advantages:

- **Ultra-Low Latency:** We deliver video latency below 1 second, ensuring real-time responsiveness for your applications.
- **Multi-Protocol Support:** Our flexible protocol support simplifies integration with various drone models and minimizes impact on existing systems.
- **On-Demand Usage:** Our licensing model allows easy scaling and helps to reduce unnecessary costs.
- **Adaptive Streaming:** We ensure stable, high-quality streams by adapting to each client's network conditions, even in fluctuating environments.
- **Multi-Site Distribution:** We support multi-site distribution, enabling to broadcast to multiple locations simultaneously without compromising performance.