



Media automation controller interface

API Protocol Translator Microservice

About the client

GLOOKAST develops innovative software tools, including products for MXF workflows, that “solve the workflow puzzle” for the broadcast and media industries. They empower their customers with the freedom to choose from vendors they prefer and offer flexible solutions for ingesting audio, video, and metadata into a production environment.

GLOOKAST products are widely used by broadcasters, content producers, universities, and postproduction facilities in the USA, Latin America and Europe.

Client need

GLOOKAST needed to create a communication interface between GLOOKAST 's “Gloobox Capturer”, a baseband video/audio ingest solution and a 3rd party automation controller using an API Protocol licensed to GLOOKAST. They would need to translate Gloobox Capturer API calls into the equivalent calls of the automation controller’s API Protocol allowing full automation of a Gloobox Capturer appliance.

Product challenges

The device control and automation system user interface must be able to control a Gloobox Capturer appliance exactly as it would control a conventional broadcast video server, and expose a functionally equivalent interface to a conventional ingest and playout server. A new microservice would be required to translate between the different APIs as well as handle converting XML and SOAP communication formats.

The delaplex solution

delaplex developed a new microservice that allows the device control and automation system, or any controller that supports the same specific API, to seamlessly automate a Gloobox Capturer Server using their choice of familiar user interfaces. The Windows microservice supports both simple raw socket XML and SOAP communications. It translates communications seamlessly between XML and SOAP and forwards the appropriate requests/responses to each device, as required.

“ delaPlex is great to work with...”

“delaPlex is great to work with because of their flexibility, professionalism, and core understanding of what we’re trying to achieve – they took the time to understand our needs, ultimately making the process of working together seamless, even being thousands of miles apart.”

Guilherme Silva, Co-Founder and CEO
Glookast

How we did it

delaPlex used a tightly integrated suite of agile development tools to enable best practices, modern tooling, and rapid build for this project.

- Created a service using FIMS that runs as a background windows service, implements the very specific API interface and forwards the equivalent Glookast Capturer Server API calls.
- Implemented socket programming and multi-threading to handle multiple command requests efficiently.
- Implemented marshaling and unmarshalling schema to translate between Java and XML objects.
- Created configuration file format to save/modify the microservice default properties.
- Implemented H2 (light weight database) for certain commands to preserve and maintain their object state.
- Added per channel verbose logging to track the execution of commands.

Core stack



delaPlex is a global software development and business solutions provider helping companies drive growth, revenue and marketplace value. Our innovative business methodology has built an unmatched reputation of bringing an alliance of collaborative industry experts, across industries and skillsets, to clients anywhere around the world.