

Control Rooms' Modernization for a Government Law Enforcement Organization

Modernizing mission-critical control rooms and expanding across multiple locations.

Government Law enforcement organization in Chile overseeing strategic operations across the country's armed forces in a secure, mission-critical environment.



Project

The project focused on the modernization of three control rooms designed to support monitoring, coordination, and operational oversight, with multiple information sources visualized and managed within a secure and structured environment.

Project Goal

The goal was to modernize the mission-critical control room environment by

improving display capacity and usability, while ensuring seamless integration of diverse applications, reliable performance, and a simple, operator-friendly video wall management experience.

Project Background

The main control room operated for over six years with an 8-monitor VuWall-based video wall. As operational needs evolved, greater flexibility in content management and expanded visualization became necessary, leading to a 12-monitor wall upgrade and deployment of two additional control rooms.

Solution

Polywall was selected as the central video wall platform for all three control rooms. Operators manage applications, CCTV, video conferencing, web tools, and desktops from a single interface, adjusting layouts in real time. Secure desktop replication via **Polywall Streamer** supports briefings. All rooms use identical architecture, ensuring consistent performance and user experience.



Technical Characteristics

Control room configuration

- Main room: 12 Full HD displays (6×2)
- Second room: 6 Full HD displays (3×2)
- Third room: 4 Full HD displays (2×2)

Core software

- Polywall platform in all rooms

Video wall controllers

- Custom build PC with GPU cards/capture cards
- Operating system: Windows 11 Pro

Displays

- LG 55VL5F panels for the 4- and 6-display rooms
- Samsung VM55B-E panels for the 12-display room, matching existing equipment

“This was a project with a demanding client and a high level of complexity. Thanks to our experience with such solutions and the support of the Polywall team, we successfully delivered the solution and left the client satisfied.”

Felipe Juárez,
Commercial Manager, Fast Tecno, Chile

Results

Thanks to modernization, the control rooms provide a more flexible and efficient operational environment. Operators combine multiple sources and adjust layouts in real time, supporting coordination and faster decisions.

Key Results:

- **Improved situational awareness** through simultaneous visualization of CCTV, video conferencing, web applications, and operator desktops
- **Greater operational comfort** thanks to a modernized, expanded video wall setup
- **Consistent workflows and user experience** across all three control rooms
- **Reliable performance** without latency or loss of image quality

Polywall standardized operations and simplified content control while supporting future expansion without increasing daily complexity.