Userful Powers Command Center and Customer Service Office to Enhance Public Transportation Experience and Operations

Malaga, Spain

The Empresa Malagueña de Transportes (EMT) manages a fleet of 242 vehicles, distributed across 47 lines in a city of almost 570 thousand people in the south of Spain. They also have a customer service office in the city center.

THE CHALLENGE

EMT monitors the entire transportation system from a single command center run by a 4-inspector team. The team leverages the city's network of approximately 80

traffic cameras as well as proprietary cameras installed in strategic places and inside the vehicles themselves. EMT needed to be able to monitor the inside of the vehicles in real time, and switch quickly between feeds throughout the transportation network. Drivers can activate an alarm that automatically ensures the feed from that vehicle is monitored in the command center, enabling the surveillance team to assess and prevent potential threats to public safety by making mission-critical decisions at the push of a button.

EMT needed a solution that was flexible with the ability to pull in multiple sources of content from the many different feeds throughout their network and quickly switch among them. They also needed something that was simple to use, that their team of inspectors could quickly learn to operate. Finally, it had to be cost effective.

THE SOLUTION

After careful review of different display technologies—including specialized hardware solutions for video walls, as well as digital signage—the team at EMT learned about Userful's Visual Networking Platform solution. Right away, they appreciated the simplicity and flexibility of the solution.

"The support for real-time interactive content, seeing how simple it was to manage and the ability to easily switch content sources between displays, was what really convinced me that Userful was the solution we were looking for," said EMT Systems Engineer, Jose Manuel Fernandez.

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- Jose Manuel Fernandez, Systems Engineer, EMT

Userful fit EMT's needs perfectly because it's able to handle a virtually unlimited number of inputs and it easily scales the number of outputs it can offer. This is unique in the video wall space and is a result of Userful's innovative architecture. Userful leverages the network to deliver content from the PC onto the video wall(s). With Userful, a single PC can support a video wall of up to 100+ displays. Each display has a simple, cost-effective zero client device on the back that connects to the PC through the local area network (LAN). Userful software turns that PC into an appliance that is easily managed through a browser. Using the browser-based interface, customers can easily pull content from almost any available source including network sources in real time. The solution can display everything from video to a full-screen browser to a desktop and even a series of virtual desktops (multiple independent desktop sessions running on the same PC). According to Fernandez, "the integration for virtual machines in the system made the solution even better for us."

In the command center, Userful deployed a 3x3 video wall with nine 55" LG commercial displays, all running from a single Intel Core i7 PC with 32 GB of RAM, which is securely located away from the wall itself in a locked room, with a controlled environment—helping to prolong the PC's lifespan. EMT added HDMI capture cards to pull in external content sources to display on the video wall in real time.

After deploying the control room system, the EMT deployed a 2x2 video wall at the customer service office in downtown Malaga, which is managed and operated remotely from the main office, and displays information to the public regarding fares, schedules and additional information. Through their different functions, these deployments offer refreshed internal and external visualization and the flexibility to display content and notifications in real time.

THE RESULTS

The solution was functional out of the box and the easy configuration enabled a smooth transition, with minimal downtime. Throughout the engagement, EMT has been very happy with the quality of technical support—any questions they had during installation were promptly answered via phone or text, with subsequent follow-ups to ensure the highest performance of the system.

The EMT has achieved their goal of refreshing both the command center and customer service office with better visualization, more simultaneous cameras on display and the flexibility to show desktop content and online notifications in real time, effectively optimizing internal and external communication.

With Userful, the EMT can expand their command center as their fleet grows. When they need to add more displays, they simply add more zero clients onto the network and the PC they've already deployed will support the additional displays. Now they can continue to grow without needing to undergo a big expansion project.