



Impactful live presentations can no longer rely on simply a microphone and a flipchart. A typical presentation today now includes computer interfaces, high-definition video, and remote presenters, in addition to the traditional equipment such as projectors, lighting, and sound systems. There is also a growing need in the event technology industry for presentation capture and streaming services that can easily process all of this input and serve it to viewers beyond those at the physical venue. Clients are looking to stream their complex presentations live to the Internet, as well as record for later use.

Customarily, service providers are commissioned to set up the presentation, as well as handle recording and streaming. These providers set up a projection screen for displaying presentation slides or other visuals, while managing multiple cameras to pan the scene as well as capture the presenter. The computer system used for recording and streaming receives camera feeds and the presentation feed and mixes them together for alternating or picture in picture (PiP) video. This output can then be streamed online or broadcast to another location within the venue. Simultaneously, everything is recorded for use as video presentations at a later date.

PSAV is one such service provider, working primarily with the corporate, medical, and technology industries with exactly the video services needed for recording and distributing memorable presentations. PSAV is a large audiovisual services company that has been successfully expanding into the growing streaming segment by offering presentation and event recording and live streaming. Each year, PSAV produces over 1,000 virtual events for an extremely varied list of clients.

In order to continue growing that business, they needed a cost-effective and reliable solution to handle multiple events in different locations with a common platform that could be customized to clients' specific needs.

Overview

- **PSAV needed a portable presentation recorder for capturing and streaming live visuals**
- **Previous solutions didn't have the performance to handle multiple inputs**
- **Shipping larger systems was problematic and cost prohibitive**
- **NextComputing provided a powerful portable system bundled with the specific components they needed**
- **NextComputing handled testing and technical support**
- **PSAV added their branding and calls this system the Multicaster**
- **The Multicaster is now used for a variety of applications including recording, streaming, and overflowing**

Problem Scenario

Historically, PSAV has needed to accommodate live feeds with other visuals while recording the event simultaneously. The company utilized portable presentation recorders from a well-known provider but ran into problems when attempting to capture multiple sources, particularly video cameras and graphics. Although able to physically accommodate two separate inputs, the systems were not able to process both a camera feed and a presenter's slides if those slides were more complex than static images. PSAV needed a system that could accommodate multiple types of inputs at the same time, including industry-standard HD-SDI video connections for the camera feed and a DVI or HDMI connection to capture a presentation via the presenter's laptop or other PC. With so many different clients, PSAV needed a system that was flexible, able to accommodate a variety of event needs, including the ability to run Telestream Wirecast — a widely-used live video production application.

Cost was also a big concern. Purchasing and maintaining their fleet of encoders had become prohibitively expensive, forcing them to seek alternate solutions. PSAV preferred portable systems over stationary computers to avoid expensive shipping costs, increased risk of damage during delivery, the need for a separate monitor, and other maintenance issues.

PSAV approached NextComputing with a request for a bundled solution that would provide the technical elements required for smooth presentation capture and streaming. If NextComputing could provide some of the hardware components and test everything as a complete "appliance," it would save PSAV considerable time and money. This approach would also help PSAV resolve any technical issues ahead of time so they wouldn't have to coordinate technical support from multiple vendors.

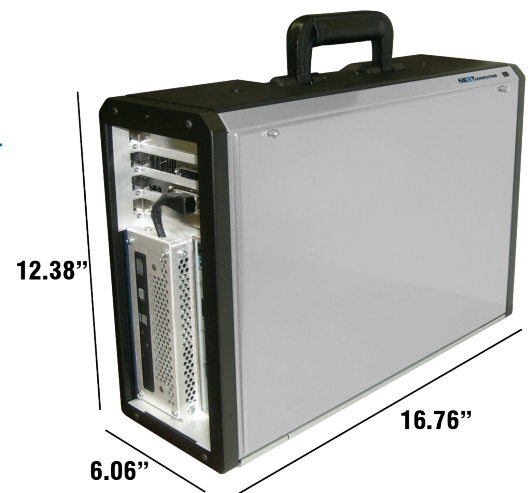
Solution

NextComputing provided PSAV with a powerful portable system bundled with the specific components they needed. NextComputing tested of all components within the system, so that it became a "plug and play" solution for PSAV. When PSAV received the system, all necessary components were correctly installed, pre-tested, and ready to go.

NextComputing, as designers of the systems, understood PSAV's needs like no one else. They are experts at integrating industry-specific components into their system to perfectly customize it for each customer. This allows PSAV to rely on NextComputing for technical support, rather than juggling feedback from multiple providers for each component. For example, PSAV indicated a technical issue with

NextComputing's OEM services available to clients include:

- Application support
- Appliance support
- Multiple distinct configurations based on the same internal architecture
- Shipping for client-branded systems direct to their own customers



some third-party hardware that NextComputing was able to resolve by collaborating with that vendor on behalf of PSAV, without additional cost. Rather than a one-size-fits-all business model, NextComputing provides customized configurations for every system, based on the specific needs of the customer. For PSAV, that means streaming runs more smoothly on customized full-powered systems. Features like full-sized PCI Express slots allow for easy use of needed cards, such as DataPath and BlackMagic Design video capture cards. Application testing means NextComputing goes beyond the hardware for customers' industry-specific needs. NextComputing provides branding services for OEMs as well. In the case of PSAV, customized systems were branded with their logo, allowing PSAV to make the product their own. Large computer manufacturers do not generally provide these services, placing the burden of integration and support on the customer.

PSAV often needs to hand transport or ship systems to each location. NextComputing systems are small and light, allowing for easier and more cost-effective transport. PSAV has been particularly pleased with the durability of NextComputing's systems, performing reliably at each destination again and again.

Summary

Multicaster is the proprietary name PSAV has given to the NextComputing portable workstations. Multicaster has now been used for a variety of applications, including recording, streaming, and "overflowing" (sending the output over an internal network to another room or venue). Currently, PSAV is using approximately 50 of NextComputing's portable systems in the field.

PSAV's virtual audiences range from a few dozen to over 100,000. They produce events all over the world with locations in Central America, North America, Europe, the Middle East, and Asia. www.psav.com

The prevalence of presentation capture and streaming across many industries is increasing. Users need an easy-to-use, consolidated solution for this application. NextComputing differentiates itself from large computer manufacturers with unique portable, customizable products backed by unparalleled technical support.

To learn more about NextComputing's line of portable workstations, visit www.nextcomputing.com/products/portable-workstations/



PSAV Multicaster based on the NextComputing Radius portable computer, running Telestreaming Wirecast software



Side view of the Multicaster showing the variety of source inputs, allowing the system to be used for many types of events