

ISE 2015 Come See Matrox Stand #11-F68

Matrox Technology on the Floor

Matrox Avio KVM Extension @ VuWall Technology Inc. (8-H330)

Matrox C-Series Multi-Display Digital Signage @ Scala B.V. (8-F195)

Matrox Maevex AV-over-IP @ Bilfinger Mauell (Mitsubishi stand 2-A24) @ VuWall Technology Inc. (8-H330)

Matrox Mura MPX-based Video Walls @ Advantech Europe B.V. (Mitsubishi stand 2-A24) @ VuWall Technology Inc. (8-H330)

One of the World's Largest Flight **Information Displays Powered by Matrox Graphics Cards**



Integrated by Inonet, Munich Airport's 72-monitor FIDS video wall is powered by Matrox M-Series graphics cards

72-monitor video wall keeps Munich Airport passengers up-to-speed

The Challenge

Munich Airport serves around 39-million passengers annually. The original analogue flight information display system (FIDS) had been in operation since the airport opened in 1992, representing arrival and departure information on multiple small LEDs. The system required a high level of IT maintenance and intervention to keep it operational. Munich Airport sought a replacement solution that could reliably display flight arrival and departure information with minimal downtime.

power an astonishing 72 NEC X463UN displays, each at Full HD resolutions of 1920x1080. With the display's extremely narrow 5.7mm bezel, a user-friendly viewing angle of 178° was enabled, making each of the 72 displays completely visible from any front-viewing position. IT personnel were also pleased with how the displays have been

By switching to a digital FIDS running on a reliable video wall comprising large, Full HD displays powered by Matrox M-Series graphics cards, more flights can now be displayed in a clear, attractive form.

"The aim of the installation was to present razor sharp content across the entire display.

"Using the Matrox M-Series, we were able to realise the requirements" quickly and easily."



Walls

Introducing Matrox C-Series: Designed for reliable, high-performance multi-display signage setups in addition to control rooms, enterprise, security, A/V and embedded applications.

Matrox C420 is the fastest fanless quad card on the market while Matrox C680 provides even higher performance and display density. Both professional-grade graphics cards feature advanced multi-monitor capabilities & EDID management. Now you can deliver long-lasting impressions across up to six Ultra-HD/4K displays from a single-slot, energy efficient graphics card - or combine boards to drive more displays.

Matrox PowerDesk software is included to help you easily configure landscape or portrait setups with intuitive drag & drop functionality. This field-proven software helps you create a seamless image across all screens with the Matrox bezel management feature and save time on multi-site deployments by exporting the same configuration and desktop management settings across multiple installation sites.

"These latest Matrox C-Series graphics cards deliver solid performance as well as the reliability we have come to expect from Matrox. Having successfully installed Matrox M-Series graphics cards many times in the past, we were excited to test out this new line of cards with our Smart Digital Signage, and would most definitely recommend C-Series to our customers seeking to drive digital signage across multiple displays."

The Solution

Brought in to manage the installation, local system integrator InoNet had experience with Matrox M-Series graphics cards, which support up to eight displays from a single board at up to 2560x1600 per screen. Using a Matrox M9148 quad-monitor and M9188 octal-monitor graphics card combination within six of their Magnius-2 video wall controller systems, InoNet was able to

specifically configured with a fail-safe feature to ensure continuous operation.

Susanne Gomez, Key Account Manager Digital Signage at InoNet

The Result

The Munich Airport today hosts one of the world's largest flight information display systems in an 18x4, 72-monitor wall that spans an incredible 19 metres wide by 2.30 metres high.

There is no scaling via daisy chaining on the 72 displays, where each monitor is individually supplied with Full HD content," said Susanne Gomez, Key Account Manager Digital Signage at InoNet. "Using the Matrox M-Series, we were able to realize the requirements quickly and easily."

Wille Jan Bons, CEO at Net Display Systems

Emergency Response Center Relies On Matrox Mura Technology

Looking for a way to manage a growing influx of real-time video and data within their emergency response center, the Bouches-du-Rhône Fire & Rescue Department (SDIS 13) hired Agelec to integrate two new video walls. SDIS 13 now relies on Matrox Mura[™] MPX cards – installed within Agelec AGCWALL video wall processors - to capture and display a wide variety of inputs including cameras, remote PCs, and internet sources. Following this successful installation, SDIS 13 is in a better position to monitor constantly evolving information.



Graphics Pulse - February 2015

Maevex AV-over-IP at Hong Kong International Airport



The Hong Kong Civil Aviation Department uses Matrox Maevex H.264 encoder and decoder devices to stream live, lowbandwidth aircraft traffic footage 2 km from the Hong Kong International Airport to its Education Path aviation gallery.

Matrox H.264 encoders and decoders cost-effectively stream low-bandwidth, 1080p60 camera footage to educational air traffic control exhibit 2 km away

First-Class AV-over-IP

Located in the headquarters of the Hong Kong Civil Aviation Department (HKCAD), the Education Path features a number of highlyengaging galleries, and HKCAD was interested in adding another to its collection with a "live" air traffic control (ATC) exhibit. The initiative required streaming high-quality, low-latency video feeds of the airport's aircraft activity between HKCAD's restricted ATC tower and the remote Education Path aviation gallery. It was also critical that this be achieved within the existing network infrastructure's 8Mbps of available bandwidth, while keeping the IT network administration satisfied with minimal network bandwidth usage.

A Low-Bandwidth, Low-Latency Alternative Local IT solutions provider Amara International Ltd. recommended Matrox Maevex[™] H.264 encoders & decoders. These cost-effective devices can stream up to Full HD 1080p60 video and audio at low, adjustable bit rates between 100Kbps and 25Mbps. The AV-over-IP devices are capable of distributing content over existing IP networks using standard, commercial-off-theshelf network cabling and equipment. Amara also demonstrated how the bundled Matrox PowerStream[™] software provides a wide set of

network (LAN) to a remote Epson[®] HD projector 2 km (1.2 mi) away. Through PowerStream, Amara was able to optimally set the bit-rate limit to a more resource-friendly 8Mbps, ensuring smooth and uninterrupted video delivery.

"Pristine image quality, low-bandwidth

"Matrox Maevex was instrumental in helping us stream video over our existing IP network and we are very satisfied with the equipment's performance so far."

 $\label{eq:main_state} \mbox{Miss Michelle Siu, Project Officer at the Hong Kong Civil Aviation Department}$

control options—including easy remote device management, stream switching and streaming/ recording parameter adjustment, and, most importantly, bit-rate customisation.

Cleared for Takeoff

HKCAD today uses Maevex in their ATC tower to stream live aircraft traffic footage from a 1080p60 HD camera over their local access

consumption, high stability...these are the qualities that make Matrox Maevex a unique AV-over-IP solution," said Miss Michelle Siu, Project Officer at the Hong Kong Civil Aviation Department. "Matrox Maevex was instrumental in helping us stream video over our existing IP network and we are very satisfied with the equipment's performance so far." ■

Multi-Display Extension in the Control Room

Texas-based oil refinery operator consoles powered by Matrox KVM extenders. Consoles designed by Tresco. Total integration performed by Technical Innovation – Critical Space Solutions (CSS).



Sharing Critical Data in the Control Room



Share high-quality, low-bandwidth content between individual operators or on a collaborative video wall with Matrox Maevex[™] AV-over-IP H.264 encoders & decoders. For example, connect your laptop to a Maevex encoder plugged into the LAN, and display your screen anywhere on the network using Maevex decoders. ■

Discover more at matrox.com/graphics/maevex_share



Add a Console Display to Your Video Wall



Want to run video wall management, diagnostics, or monitoring applications on a separate display from your video wall? Simply install a validated Matrox P690 graphics card alongside one or more Matrox Mura[™] MPX capture & display boards and drive up to four local console displays from your video wall

Shopping Mall Mounts 14-Metre-High Digital Signage

AV integrator Craneworks selected Matrox Mura[™] MPX Series boards to capture & display HD content from multiple sources on a huge 14.4-metre-high DigiLED LED screen at Helsinki's Kamppi Centre mall.

"Matrox Mura boards made it easy to build attractive signage layouts incorporating live content feeds, signage content from Mac mini media players, and different backgrounds," said Craneworks managing director Sami Käyhkö.



processor. ■ Learn more at matrox.com/graphics/p690_console

Matrox Graphics Inc.

Matrox Graphics is a premier manufacturer of leading add-in graphics cards, multi-monitor adapters, fibre-optic KVM extenders, video wall controllers, and video over IP encoders/ decoders for professional and industrial markets. Matrox's best-in-class product line enables OEMs, system integrators, and IT and professional AV solution providers to deliver high-quality implementations to customers worldwide. For more information, please visit **matrox.com/graphics**.

Graphics for Professionals