SMATER SECURITY FOR A TRANSFORMING WORLD

Graymatics is transforming the world of closed-circuit television (CCTV) to help ensure the safety of rapidly increasing urban populations from student campuses to mega cities.

Business needs
Graymatics looked for an OEM partner to deliver high-performance, scalable platforms to support its pioneering smart video management and analytics software. What’s more, it needed a partner that could accelerate innovation and provide global support.

Solutions at a glance
- OEM Solutions
- Servers
- Storage
- Networking
- IoT Edge Gateways

Business results
- Increases speed of development by 200%
- Provides global support for smart projects worldwide
- Offers customers extended warranties on appliance hardware
- Supports data-intensive workloads within small IT footprints
- Enables continued development, particularly with IoT

“Graymatics is delivering fully integrated software and hardware appliances three times faster with Dell EMC OEM Solutions.”

Abhijit Shanbhag, CEO, Graymatics
Digital transformation is unlocking the full potential of CCTV. Nowadays, CCTV data can be seamlessly integrated with data from other building systems and analyzed closely to help managers better control building environments and people’s safety. These architectures can also be scaled up to support large urban areas—helping local and national governments better administer the growth of megacities.

A pioneer in CCTV technology, Graymatics, based in Singapore, is helping drive the transformation. Its intelligent software is analyzing everything that happens on camera and providing a level of insight that goes beyond simple notifications of intruders. Abhijit Shanbhag, CEO of Graymatics, says, “Our systems track what’s happening and also help customers identify patterns. The data they collect measures how areas of a building are being used for smart building management. We’re even getting to a point where software can recognize people’s expressions, giving retailers a sense of a customer’s satisfaction rate.”

Today, the company’s advanced CCTV technology is being integrated into new building developments in Singapore and in smart-city projects across Southeast Asia, including Indonesia. Shanbhag says, “It’s an exciting time because the true potential of CCTV is finally being realized and Graymatics technology is helping optimize the benefits of customers’ investments.”

**Partnership breeds success**

While Graymatics looked to capitalize on new business opportunities, it wanted to stay focused on software development. Comments Shanbhag, “We didn’t have the internal resources or skill sets to develop the hardware to support our applications.” Thus, Graymatics sought an original equipment manufacturer (OEM) partner to meet its hardware needs. “We wanted to work with an OEM partner that could help accelerate our pace of innovation,” says Shanbhag, “meaning a partner that was already deeply involved in maximizing the benefits of the analytics and machine-learning fields.”

**Scalable platforms are a priority**

Graymatics engaged with Dell EMC OEM Solutions after looking at multiple vendors. “The breadth and the scalability of the Dell EMC OEM platforms would enable us to tailor our smart CCTV solutions to specific clients. There is a huge difference in the number of CCTV cameras needed for smart-city projects compared to smart-building projects. We are talking hundreds or even thousands,” says Shanbhag. “Whatever the requirement, Dell EMC OEM Solutions could deliver the high performance we need for our software in a relatively small hardware footprint.”

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CEO, Graymatics

Expertise helps find solutions

The advantages of Dell EMC OEM Solutions went beyond simply the hardware. As Shanbhag explains, “The Dell EMC OEM team helped us drive innovation by experimenting and testing our software on multiple Dell EMC platforms. Plus, we knew that with Dell EMC OEM Solutions’ global services we could sell our products worldwide and still provide the local support our customers want. Finally, there was the fact that we would be working with a Dell EMC OEM team that knew the CCTV industry inside and out. When you work with people who are experts in your market, it’s easier to find solutions because they know who your customers are and what they need.”

Reflecting the growing need for performance

By working with Dell EMC OEM, Graymatics gained access to a range of Dell EMC PowerEdge servers with field programmable gate arrays (FPGAs) and NVIDIA graphics processing units (GPUs) to work alongside central processing units (CPUs). For Graymatics, the combination accelerates its analytics, machine-learning software and other data-intensive workloads. Comments Shanbhag, “With Dell EMC PowerEdge OEM servers, including R740, R640 and R540, we gained the turbo boost to run our analytics software. Plus, with Dell EMC VxRail and Dell EMC Networking Switches, we could offer customers high-powered solutions with all-flash performance and scalability.”

Accelerating speed of innovation by 200%

Today, Graymatics is at the forefront of CCTV technology with the support of Dell EMC OEM Solutions. The company is turning its advanced analytics and machine-learning software into pioneering appliances to support smart CCTV deployments across multiple locations. “We are accelerating speed of delivery for our high-performance smart video management solutions with Dell EMC OEM Solutions,” says Shanbhag. “Graymatics is delivering fully integrated software and hardware appliances three times faster with Dell EMC OEM Solutions.”
Global support and extended warranties

Graymatics also has peace of mind knowing that Dell EMC’s global support infrastructure stands behind every implementation. “Our technology is being deployed for smart-city projects in Indonesia, Singapore and across the Asia-Pacific region,” says Shanbhag. “We find that Dell EMC OEM Solutions puts us in a strong position, because customers know they will get great local support that responds quickly to their needs.”

Furthermore, Graymatics has taken advantage of the OEM XL program. This ensures Graymatics’ OEM platforms have longer-life components to maximize payback. It also means the company receives advanced notifications on platform updates to improve planning. And finally, BIOS and other firmware updates are done in batches to reduce administration costs.

Continued innovation, continued success

Looking to the future, Shanbhag says Graymatics is excited about the evolving relationship with Dell EMC OEM. The two organizations are working on the integration of Dell Edge Gateway Internet of Things (IoT) technology into the Graymatics’ appliance portfolio. IoT-enabled CCTV solutions would mean customers can process camera image data, for example, at the network edge—on the Dell IoT Edge Gateway-based appliance. The most obvious benefit of this would be instant processing, avoiding delays from processing imagery back at a data center or up in a cloud infrastructure. “Right now, we’re in the Dell EMC OEM lab, working on our IoT solutions powered by Dell Edge Gateway technology. We don’t think it will be long before we have a new solution that’s ready to go to market. With Dell EMC OEM, innovation moves fast.”