

Wind River, Inc.  
 Alameda, California

**Wind River Upgrades Campus Wide Video Surveillance and Security Systems**

Wind River, a wholly owned subsidiary of Intel Corporation has deployed an Exacqvision Hybrid Analog and Megapixel integrated Surveillance system that includes Arecont Megapixel technology and AIRAYA wireless bridging, delivered by SurveillanceGrid, at their corporate headquarters in Alameda, California as part of a integrated campus wide safety network.

Tasked with consolidating two legacy systems as well as upgrading functionality and resolution at an economical price, Wind River turned to SurveillanceGrid to design, integrate, and deploy a state-of-the-art video surveillance network. SurveillanceGRID, a leading provider of integrated IP technology, chose best of breed solutions that would seamlessly integrate Wind River's existing analog cameras and Megapixel technology from Arecont and AXIS, extend the network with wireless functionality while providing an easy to manage user interface for security personnel to maintain with ExacqVision's Hybrid server.

"We were interested in upgrading to a modern system that would give us the capability to add new high resolution cameras to our campus. We choose the SurveillanceGrid solution because it gave us the capability to upgrade our system within our budget," said Don Will, Director of Facility at Wind River. "We did not have camera coverage in the parking lot or inside our buildings and there were certain cameras that were not working, our goal was to make the campus more secure and to provide traceability of movement to minimize incidents. I shared our requirements with SurveillanceGrid and they made it happen."



**Wind River a world leader in embedded and mobile software.**

Customer Facts	Wind River, Inc.
Headquarters:	Alameda, California
Contact:	Don Will
Founded:	1981

Wind River platforms, development tools, and market-specific solutions significantly reduce development time, cost, and risk at all phases of the device software development process—from concept to deployed product.

**The Challenge**

Integrate legacy disparate systems, expand coverage and increase the video surveillance image quality in order to deliver crisp and clear images for the identification of objects, license plates and persons.

The stated goal of Wind River was to integrate two existing disparate surveillance systems; a Pelco DVR system which was at capacity and an older legacy system. Each system used a different video software platform, monitors, tape backup system, and some of the picture quality was illegible. The first requirement was to merge the two disparate systems on a single platform which would allow Wind River to expand the surveillance system with high resolution IP Megapixel cameras.

The second requirement was to increase the video surveillance image quality in order to deliver crisp and clear images for the identification of objects, license plates and persons. It was equally important for images of person and vehicles to meet evidentiary standards. SurveillanceGrid took advantage of IP Megapixel technology and leveraged the superior resolution inherent in the Megapixel technology to design and deliver a hybrid platform that supported existing analog and IP Megapixel cameras.

The third requirement was to provide traceability of moving objects on the campus. To achieve this requirement, surveillance and detection needed to be moved out to the perimeter of the property by installing cameras in the parking lot to begin observation of cars and people entering the premises.

Usability, seamless integration and recording of both analog and IP video surveillance cameras on a single platform was an important fourth requirement for Wind River. The ability to have a simple, single user interface to operate the system in order to go back and re-play video from any given time period, from any camera or camera group and to record, then send the incident to management or the authorities was a critical requirement.

The location of Wind River's corporate campus also posed a challenge for SurveillanceGrid. The campus is located in a harsh RF environment where RF interference from many public and private wireless networks installed in the surrounding San Francisco Bay communities including the Port of Oakland, and the Oakland International Airport is extensive.

**The Solution**

Challenged with a harsh RF environment and budget constraints SurveillanceGrid meets the challenge and meets Wind Rivers expectations.

The Wind River surveillance network incorporates the ExacqVision Hybrid NVR Server which provides seamless integration of both analog and IP video cameras. The ExacqVision VMS software is installed and preconfigured on the hybrid server providing a turnkey video surveillance and recording solution. The ExacqVision Hybrid NVR server connected the disparate information from the existing camera systems, with the new IP Megapixel cameras mitigating risk across Wind River's enterprise environment by providing actionable intelligence, speeding security incident resolution, and reducing security operations costs. The server now integrates Wind River's legacy analog surveillance cameras with the perimeter SurveillanceGrid Arecont WS365 full motion 360° H-264 panoramic view cameras and the new interior Axis 216MFD high performance Megapixel network cameras.

Unlike conventional wireless video surveillance systems the SurveillanceGrid WS365, which is based on the Arecont 8365 8 Megapixel camera and the AIRAYA wireless bridge, is fully tested and pre-configured to a customers'



SurveillanceGrid  
Arecont WS365 fully  
integrated high resolution  
IP network camera and  
integrated wireless radio



### Fully Integrated, Preconfigured Radio and Camera Technology

The new SurveillanceGrid Arecont WS365 delivers full motion progressive scan 1600 x 1200 video resolution. The high resolution 8 Megapixel network camera features the latest full motion 360° H-264 panoramic view camera and encrypted radio technology, providing complete, pre-configured and easy to install outdoor wireless video systems for surveillance, real-time monitoring, and recording of activity.

### Benefits:

- High resolution and crystal-clear imagery allows the WS365 to substitute multiple analog cameras; thereby reducing the total cost of installation
- No need to supply a separate power source since the camera and the integrated radio are powered from the same power source delivered over an integrated outdoor POE cable
- With H.264 (MPEG4, Part 10) Compression Standard



specification before the systems are delivered to installation sites, guaranteeing seamless integration into existing networks. Using SurveillanceGrid's bridging technology the RF interference was neutralized and permitted the installation of Arecont high resolution IP Megapixel cameras at perimeter locations that feature H.264 compression and are able to stream 8 Megapixels of video resolution or 21 times normal analog camera resolution using only 6 Mbps of network capacity. SurveillanceGrid® IP-based open architecture, selectable bandwidth management capability, and enterprise class performance assures reliability, predictability and scalability for real-time, high resolution distributed IP video installations.

To gain greater camera density and views to interior locations within the buildings the Axis 216MFD Megapixel fixed dome camera was used to provide high quality images perfect for the identification of objects and persons. The high quality lens of the Axis 216MFD uses DC-iris control for improving the depth of field and protecting the sensor at intensely illuminated scenes. The Megapixel resolution allows important areas like entrances and exit doors to be monitored in great detail.

"We'd like to continue to keep upgrading the system and cost is always a factor in this economy but we are very pleased with what we installed. SurveillanceGrid provided excellent customer support, we were taken care of and I really appreciated all the hard work and dedication," said Don Will. "We had sparse campus coverage; SurveillanceGrid provided us with coverage in all areas and focused on areas on where there had been prior incidents which has deterred future incidents from occurring."

Warren Hackbarth SurveillanceGRID's Managing Partner states: "We designed this solution based on Wind River's needs. The new surveillance network features the latest camera IP Megapixel technology coupled with a point-to-multipoint secure encrypted radio technology, providing a complete, pre-configured and easy to install outdoor wireless video systems for surveillance, real-time monitoring, and recording of activity. The Exacq vision server was easy to install, configure, manage, and has a user friendly interface that allows for easy detection and traceability of people and vehicles on the campus. ExacqVision server was able to integrate analog, Megapixel Arecont, and Axis cameras and put them onto a simple single platform that is viewable via client software both remotely and on-site. We look forward to keep advancing this system's functionality for Wind River."

The Wind River network is a 4 Giga bit network. The network is a segmented, secure, Cisco backbone network. The backup of the surveillance system is done over the network. The SurveillanceGrid solution integrated seamlessly into Wind River's networking environment. The hybrid nature of the system allowed SurveillanceGrid to extend the perimeter outward and to increase camera density; the system is now able to capture events before people come into the building as well as tracking movement of people in the interior of each building on the campus at 4 and 21 times greater resolution than legacy surveillance systems. It is a more secure environment; Wind River consolidated their camera system and doubled their camera count while maintaining network performance, reliability and coverage.

"The coverage we got with the new system was what Wind River had envisioned. The system met all of our expectations," said Don Will. "In the future we would like to add more cameras both inside and outside the buildings and to expand our coverage in the parking lot in order to capture vehicle license plates."

### About SurveillanceGrid™ Seamless Security<sup>SM</sup>. Anytime. Anywhere. Any Device

Founded in 2009, SurveillanceGrid is a premier provider of IP-surveillance systems, integrating video surveillance, access control and building automation into a Seamless Security<sup>SM</sup> solution that allows access and control to the user where they are. For more information, please visit SurveillanceGrid's web site at: <http://www.surveillancegrid.com>, email [info@surveillancegrid.com](mailto:info@surveillancegrid.com), or call toll free +1 800 528 8184.

For information on how your business can benefit from the innovative approaches being developed by SurveillanceGrid, please contact us via email [sales@surveillancegrid.com](mailto:sales@surveillancegrid.com)



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