There's more behind some doors than others. And when market leading companies look to safeguard their vested advantage, gained dearly through commitment and drive, they know there is more to security than credentials, readers and wireless locks around them. Only the Authentic Mercury open platform delivers a solid, systemic approach to protect people, premises and assets. Our trusted partners are ready to help you realize true access control by combining best-in-class solutions for a powerful access control system that is customized for your organization.

A lot has been invested behind those doors. Make sure they are part of the most robust security platform in the business. Learn more by downloading the white paper. It is essential reading for the fully informed security professional. [www.mercury-security.com/wireless-or-not.html](http://www.mercury-security.com/wireless-or-not.html)
Access Control Business Sources
The hospitals, schools and universities market (up 6 percentage points) slingshot past last year’s No. 1 access control segment, office buildings (even with 2015). Government and utilities also fared well with gains of 3 points apiece. Retail and entertainment venues receded by 6 points.

Gross Profit Percentage for Access Control Installations
This one will bring some smiles as gross margins for access business ascended 5 percentage points from a year ago. The 2016 figure returns the margin to its loftiest level since before the recession.

Average Access Control Price Charged Per Door
The average price charged per access control door has trended up for at least three years in a row. It now tops $2,000 ($2,046) as compared to $1,725 in 2015 and $1,695 in 2014. The most prevalent breakout shifted from $2,300-$2,499 in 2015 to its current $2,500+.

Percentage of Access Systems Involving Integration or Networking
Close to half of all access systems being installed today by systems integrators are integrated with other security or building systems (up 1 point from 2015). And, more than seven in 10 of all the systems are now running through some level of networked building infrastructure, dead even with 2015.

Percentage of Access Systems Involving Wireless Devices
Nearly half of all respondents deploy wireless access devices less than 10% of the time. The average is 21%, median 15%. This question was introduced for the 2016 study.

For more industry research and statistics, visit securitysales.com/topic/category/research.
**Number of Doors/Openings Per Access Installation**
Access smiles ought to turn into a toothy grin with this one. The average number of secured entries/exits has more than doubled since 2010. That along with the rise in price charged per entry/exit is a potent combination. Given the average of $2,046 per access controlled opening, the typical installation costs the client $26,598 ($17,850 in 2015).

**Percentage Growth for Those Offering Managed Access Control**
Those integrators offering managed access control services are reaping the benefits. Those realizing a percentage of revenue growth in that part of their portfolios of at least 40% gained 7 percentage points from a year ago, and has soared 23 points since 2013. Plus, those seeing less than 10% growth continued to plunge (34 points since 2014).

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
<th>2014</th>
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<tr>
<td>0%-9%</td>
<td>30%</td>
<td>37%</td>
<td>64%</td>
<td>45%</td>
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<td>10%-19%</td>
<td>25%</td>
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<td>20%-39%</td>
<td>15%</td>
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<td>40% or more</td>
<td>30%</td>
<td>23%</td>
<td>14%</td>
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**Security Product/Service Revenue Source Rankings**
Video surveillance boosted its dominance over the rest of the field as the leading revenue generator, increasing .28 while last year’s second-place finisher (access control) was sliced by .74. Integrated systems gained steam with a .18 rise to leapfrog over access. Outdoor perimeter detection and intrusion detection clicked up .9 and .7 respectively.

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<tr>
<td>Video Surveillance</td>
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<tr>
<td>Outdoor Perimeter Detection</td>
<td>1.80</td>
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**Companies Offering Managed/Hosted Access Control Services**
One of the industry’s most heavily touted opportunities of recent years continues to show a steady yet measured rise in adoption as a service offering. Managed and/or hosted access control (or access control as a service, ACaaS) has headed upstream by 16 percentage points since 2011.

**Percentage of Projects Including Outdoor Applications (e.g. telephone entry, parking gates)**
Maybe it’s the milder winter just passed because according to these latest figures integrators are spending more time tending to outdoor access control applications. Those selecting less than 10% exactly halved (38% to 19%), and those choosing 40% or more added 3 percentage points compared to 2015.

**Nonsecurity Product/Service Revenue Source Ratings (scale = 1-5, 5 being most often involved with)**
The results here demonstrate that security integrators are venturing farther afield to expand their portfolios as all categories except business intelligence/Big Data (ironically one of the more hyped areas among this group to the security trade). The biggest gainer was digital signage (.45) followed by building automation (.24). No. 1 Datacomm/network infrastructure rose .18.
Little League Baseball® World Series scores big with Lenel and Mercury solution

“The Lenel system has allowed the Little League Baseball World Series to reach the cutting edge of electronic security technology by providing us with the latest in photo ID credentialing, access control, and digital video technology. As always, the number one priority at the World Series is the safety and security of the participants. Little League Baseball sincerely appreciates Lenel’s efforts in helping us reach that goal.”

The Challenge

Each year as summer draws to a close, the small industrial community of South Williamsport, Pennsylvania swells to accommodate more than 300,000 visitors to the world’s largest youth sports organization, Little League Baseball’s World Series. From its origins in 1939 as a three-team Williamsport league, the Little League Baseball World Series has grown to include more than 215 players on 16 teams, representing more than 80 countries.

The event is held at the 72-acre Little League complex, which includes a headquarters building, five baseball diamonds, practice facilities, housing, dining and recreation areas, the Howard J. Lamade Stadium (site of the championship game), Volunteer Stadium, a conference center and the Little League Museum.

The Solution

James Ferguson, Director of Security approached Lenel to inquire if the security system manufacturer could help Little League Baseball better differentiate Series participants from one another. Lenel readily agreed to step up to the plate by providing a badging system to issue secure photo identification badges to 200 players and coaches at the 1999 World Series.

A database of registrants was downloaded into the system before the games, to verify the identity of participants with the help of schools, parents and coaches. The benefits of storing cardholder data in one central location were critically important for medical and other emergencies that require the rapid retrieval of such information. Lenel’s more than 20-year partnership with Mercury Security, a global leader in the supply of OEM access control hardware, has also benefited the Little League’s system. Mercury hardware supports the Lenel OnGuard system’s open architecture platform.

Results

Over the years, the number of issued secure identification badges at the Little League Baseball World Series has grown to approximately 2,500.

The flexibility of the OnGuard system design enabled Lenel to install and run the system on the Little League campus’ in place of a computer network. The system implementation has been cost-efficient in both time and money, leveraging the Little League’s existing infrastructure investment.

The integrated capabilities and centralized database of the OnGuard system have proven invaluable in helping local and state police, the FBI, the Secret Service, and other government personnel protect lives, facilities and the campus grounds during the Series.

“Thanks to Lenel, Little League was able to provide security for locations within its facilities that were previously cost prohibitive or difficult to address.”

–James Ferguson, Director of Security for Little League Baseball International
National Instruments moves to advanced, interoperable access control

Since 1976, National Instruments has equipped engineers and scientists with tools that accelerate productivity, innovation and discovery. NI’s approach to engineering provides an integrated software and hardware platform that speeds the development of any system needing measurement and control. Customers in nearly every industry—from healthcare and automotive to consumer electronics and particle physics—use NI’s integrated hardware and software platform to improve our world.

The Challenge:
Following the End-of-Life announcement of Casi Picture Perfect Software that was being discontinued and other proprietary hardware for their access control system.

NI sought a solution to economically migrate to an open system for more functionality and greater flexibility.

Authentic Mercury Bridge hardware made it possible for National Instruments to migrate to an Open Options system for interoperable and flexible access control.

Solution Provided:
- Open Options DNA Fusion access control software
- Mercury M5 Bridge Hardware for Casi upgrades.

Highlights:
- National Instruments was using Casi Picture Perfect Software that was being discontinued and other proprietary hardware for their access control system.
- NI sought a solution to economically migrate to an open system for more functionality and greater flexibility.
- Authentic Mercury Bridge hardware made it possible for National Instruments to migrate to an Open Options system for interoperable and flexible access control.

How Mercury Helped Solve The Problem
National Instruments used the Mercury M5 Bridge solution to migrate their legacy system to an Open Options system and Authentic Mercury open platform. Mercury’s direct swap board replacement approach minimized cost and the need for NI to “rip and replace” their existing infrastructure or re-wire their legacy devices for a time-efficient migration. Based on open architecture for interoperability and future enhancements, the new National Instrument’s system makes it possible for NI to move beyond the limitations of their previous proprietary hardware into a current, dynamic and flexible access control.

“We were looking for a solution built on open architecture to avoid being backed into a corner with a proprietary system”, said Chris Verde, Security Manager at National Instruments. “Luckily, the Mercury M5 Bridge hardware enabled a plug-and-play conversion for us to migrate to the Authentic Mercury hardware platform. This made it possible for us to easily move to an Open Options system – without the need to completely retrofit our infrastructure.”

The Results
National Instruments reported considerable cost savings by not having to re-wire most of their infrastructure. The company also noted the added bonus of being able to keep the smaller form factor of the M5 since wall space is a premium in two of their security rooms.

NI has deployed the Authentic Mercury hardware and Open Options DNA Fusion software across numerous locations globally, from their Austin headquarters and seven satellite offices in the US, to other major branches in Hungary and Malaysia.

We are proud to have Open Options as an Authentic Mercury partner as we celebrate 19 years of success together.
George Mason University (GMU) has grown exponentially since its official founding in 1972. GMU today is home to more than 30,000 students on its 670-acre residential campus. Over the past eight years, GMU has opened nearly 30 new facilities and renovated countless others to bring its physical plant to nearly 170 buildings. Common challenges for all GMU’s facilities are the need for physical security and access control. GMU meets these challenges with the help of RS2 Technologies and Mercury Security.

Challenges:
- The access control system had to interface with GMU’s existing physical security and access control system
- The system had to utilize existing readers that employed a variety of reader protocols (Wiegand, magstripe, OSDP, etc.).
- The system needed to operate at an enterprise-wide level across the entire campus and remote campuses.

Solution Provided:
- RS2’s Access It!® Universal enterprise-level software
- Successful integration of the RS2 software and Mercury hardware with a combination of over 3,000 hardwired and wireless IP locks, and a video management system.

How Mercury Helped Solve The Problem
Working with GMU Director of Physical Security Jim McCarthy, RS2 helped McCarthy and his staff design a system that met GMU’s requirements for utilizing as much of its existing Mercury hardware as possible, integrating it with the latest locks, cameras, and other equipment. This was accomplished with a user-friendly (but more powerful) access control system, and eliminating the recurring software maintenance fees that had been one of the less desirable facets of the old system.

Over the past few years, McCarthy has been involved with more than a dozen different construction and renovation projects, so he needed a system that would be robust enough to keep up with GMU’s growth plans and scalable, open, and intuitive enough to be easily used by security professionals at the university level.

RS2’s solution met those requirements by using its Access It!® Universal access control software, Authentic Mercury™ open-platform hardware, a combination of hardwired and wireless IP locks, and a video management system.
City of Turlock expands its infrastructure to open platform

Main Challenges:
In order to meet the needs of an increasing population, Turlock city managers faced the challenge of expanding the city’s overall infrastructure, which recently involved construction of a 55,000 square foot police department, a new transit center for city shuttles and a bus maintenance facility. Other new facilities include a wastewater treatment plant and a large animal shelter.

Solution Provided:
- Pro-Watch® Corporate Edition, powered by Mercury
- VISTA intrusion alarm
- MAXPRO® VMS
- UltraKey joystick controller
- MAXPRO® NVR
- ACUIX™ PTZ cameras
- HD4D3S fixed dome cameras

How Mercury Helped Solve The Problem
To better meet the needs of Turlock’s sprawling city infrastructure, integrator Microbiz recommended an integrated solution from Honeywell to protect facilities, administer employee badges, and manage visitors in public buildings. Pro-Watch, powered by Mercury, was the perfect choice for the city of Turlock for their fast growing needs.

Pro-Watch issues permanent and temporary access cards for employees and visitors, operates doors, monitors the status of the system, and manages cameras remotely from any workstation. It also offers database partitioning—a unique ability that allows each department to see and manage their own cards and readers. This allows each building, hosting individual departments operating on different systems and agendas, to implement their own procedures without sacrificing the ability to manage everything from a central location.

“I think what made this project unique was that we upgraded the head-end first. Now, when other buildings are added, everything is organized and ready to go,” said David Chritton, Microbiz. “There are lots of pieces to this puzzle but the Honeywell system makes it easy to manage. As we add pieces in the future, we know they’ll all work together. The system doesn’t become obsolete—and as the city grows, it will be easy to incorporate new facilities and give the right access to the right people.”

As the upgrade project continues, the integrated surveillance and access control system ultimately ties the individual public buildings together to give officials a more accurate picture of the entire city.
Transition to S2 Security solution made easy
with existing Mercury hardware

Organization
Utah Transit Authority

Location
Salt Lake City, UT, United States

Industry
Transportation

Systems Integrator
Stone Security

Challenges:
 Upgrade system to reduce costs while enhancing user experience
 Allow for smooth conversion to new system and future expansion

Solution Provided:
 Leveraged existing open platform Mercury hardware
 Designed system to scale with UTA’s needs

Results:
 Transitioned easily to S2 Security access control system
 Enabled UTA to expand system at their own pace

Challenge

Utah Transit Authority (UTA) provides transportation for the three million people throughout Utah’s 1,400 square-mile Wasatch Front, including Salt Lake City and other nearby metropolitan areas. Over 2,500 employees operate and maintain light rail, commuter rail, streetcars and buses from the Salt Lake City headquarters, eight major hubs and other storage facilities.

UTA wanted to upgrade its access control system for lower cost of maintenance and greater ease of use, while accommodating future expansion. “We saw an opportunity for conversion by using the open platform Mercury hardware in UTA’s existing system,” explains Joey Edmunds of Stone Security, the systems integrator for the project. “We knew that we would be able to address the project one step at a time to spread out installation costs and make deployment easier.”

Solution

Stone Security recommended transitioning to S2 NetBox access control system to address ongoing cost concerns as well as ease of use. “The zero software footprint, browser-based system was a deciding factor for the UTA IT group, along with the user friendliness of the system,” observes Edmunds.

The initial system takeover included nearly 320 card readers across the eight main facilities and several smaller buildings.
We are proud to have S2 Security as an Authentic Mercury partner as we celebrate over 6 years of success together.

Transition to S2 Security solution made easy with existing Mercury hardware

Challenge

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The system head end was replaced with S2 NetBox Enterprise, which also seamlessly integrated with intrusion detection by connecting to existing Mercury panel inputs and relay outputs. Inputs connect to door position switches, and outputs drive piezo sounders, audible alarms and strobe lights. “The S2 solution has transformed a 2-dimensional access control system into an actionable system that tells our team what to investigate,” says Thomas Ostby, Manager of Security, UTA.

UTA developed standards for which doors were open to the public versus to employees. Access levels for employees were further defined for critical infrastructure such as data centers and bus control centers. The browser-based S2 system enables the team to easily make these configurations and monitor access events with the click of a mouse to determine who is coming and going.

The takeover required a high level of planning, coordination and staging to convert to the S2 solution site by site. However, utilizing existing Mercury hardware made the transition a smooth one.

Results

The S2 solution combined with Mercury hardware gives UTA a cost-effective, practical means for expanding the system in the future. A new police building was recently added to the system, and other facilities are planned. UTA also intends to transition all doors under lock and key to electronic access control. “We expected the system takeover to be difficult, but using the existing Mercury hardware made it easy,” notes Ostby. “The level of detail and what you can do with the S2 system is really limitless.”

“We expected the system takeover to be difficult, but using the existing Mercury hardware made it easy.”

-Thomas Ostby
Manager of Security

Photographs are compliments of Utah Transit Authority
Tarrant Regional Water District (TRWD) has been providing quality water to almost two million people in the North Central Texas area for more than 80 years. TRWD serves more than 30 wholesale customers, including the cities of Fort Worth, Arlington, Mansfield and the Trinity River Authority. Operations span an eleven-county area and include dam maintenance at the Water District’s four reservoirs, as well as the more than 150 miles of pipeline used for water transport.

How Genetec and Mercury Helped Solve the Problem

The new Genetec Security Center and Authentic Mercury controllers delivered a unified platform with a single interface for TRWD’s security system, simplifying access control management and operations of 343 video surveillance cameras and 411 HID readers. Additionally TRWD can now integrate license plate management and third-party solutions with ease. New out-of-the-box features, which were previously customized and costly configurations, provide alarm monitoring procedures, pop ups and other important functionality. Issues with hard coding inputs of field equipment were also solved with the flexibility that Mercury’s open hardware provides. Today, TRWD can easily modify inputs/outputs on equipment to best suit each particular scenario.

Key Genetec Security Center features used:

- Plan Manager for interactive mapping, enhanced visualization and situational awareness
- Mission Control for advanced incident response capabilities
- Threat Level Management to quickly change system behavior based on potential threats

The Results

The new system leveraged existing HID readers and Mercury panels to optimize the District’s infrastructure investment, and the TRWD security team has also reported a reduction in the hardware purchases previously required for their old system. In addition, the team has noted less equipment down time due to Genetec’s experienced technical support. Committed to the safety of staff, visitors, contractors and District assets, TRWD Law Enforcement is now able to view locations before arriving on scene, which decreases the risks associated with both personnel and property.

We are proud to have Genetec as an Authentic Mercury partner as we celebrate 5 years of success together.
London-based start-up AirPortr has developed an innovative luggage transfer service that is taking the strain for air travelers. To maximize security across its expanding operations, the company chose a Maxxess eFusion/Authentic Mercury solution to help protect its business, while paving the way for future development and global growth.

The Challenge:
AirPortr (portr.com) was set up in London by three frequent fliers with a shared vision to create and shape a better way to travel. The service has created an easy and convenient way for tourists and business travelers to transfer their luggage to and from London Airports — allowing them to make the most of their valuable time without cumbersome bags in tow. Customers flying into London Heathrow, Gatwick or City Airports, can pre-book the service at portr.com or with the AirPortr teams in the arrivals hall. The luggage items (incl. sports equipment) are then delivered to the customer’s preferred London address (hotel, office or home), at an agreed time later the same day. The return journey from London address to airport can also be booked. To build a trusted brand in the highly risk-conscious air travel sector, AirPortr places security at the heart of its operations. It ensures the complete security of all luggage within its stewardship and ensures full compliance with the airline industry’s (airlines & airports) most stringent security demands. At the same time as protecting all luggage from damage, tampering and theft, the company needed a scalable security solution to support its global growth ambitions.

The Answer
The answer was a Maxxess and Mercury solution along with our integration partner Texuna.

We are proud to have Maxxess as an Authentic Mercury partner as we celebrate 12 years of success together.
The easiest way to move house:

Take the bridge. **Introducing the new MS Bridge from Mercury.**

It’s the “screwdriverless” upgrade for Software House®.

New MS Bridge multi-device interface panels are designed to fit the specific physical parameters of Software House’s® Pro Series access systems. To upgrade, simply disconnect the Software House® Pro board and connect the appropriate Mercury MS Bridge panel for an easy, “screwdriverless” changeover to the Authentic Mercury open platform. It is the easy, fast, and effective way to give your legacy system new wings.

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“Screwdriverless” Migration from Legacy and Obsolete Systems to Flexible Solutions for Open Access Control

Overview
New technologies and acquisitions within the access control industry often lead to the forced obsolescence and/or upgrade of proprietary offerings. With thousands of systems in place, vendors seek options to retain customers using these legacy and obsolete systems. There are two approaches currently employed by vendors working with customers who have legacy systems:

Rip and replace obsolete and legacy system with another proprietary access control solution
- Many vendors offer alternative solutions that are generally heavily discounted and aimed at minimizing the investment needed for enterprise-wide replacement of legacy access control systems. These vendors seek to solve the outdated feature set or obsolescence of a system by replacing it with a newer proprietary offering of their own.
- In essence, this approach provides a path for customers to simply move from one inflexible proprietary system to another. While this may provide a short-term solution to the immediate problem -- and sometimes at an artificially lower cost -- it merely perpetuates the issue of being locked into a single-vendor proprietary solution.

Replace legacy or obsolete system hardware with new hardware built on open architecture
- Using a direct board replacement approach eliminates the need to re-wire the legacy peripheral devices, significantly improving the economics for a system migration to a new platform. It also enables customers to move beyond the limitations of proprietary hardware into a current, dynamic and open access control infrastructure.
- This approach also makes it possible to take advantage of advanced features and functionality based on an architecture designed for interoperability and future enhancements.

At the same time, some customers prefer not to make any change at all; these customers only consider replacing their access control solution when the current system fails. While this may save money in the short term, this approach leaves their system at risk for failure and potentially incapable of upgrades to add new features, install bug fixes and make cyber security improvements.

From Proprietary to Open Access Control
The Authentic Mercury open architecture model makes it possible for end-user organizations to choose from industry-leading access control software providers, both at time of product selection or in the future, should they need to change software providers at any given time. Mercury’s approach provides a streamlined path to move organizations from proprietary and/or obsolete systems to an open, flexible and interoperable platform for systematic access control.

For more information download the complete white paper now:
www.mercury-security.com/bridgetothefuture.html