

McAfee Embedded Security

Enhanced Security for Today's Intelligent Systems

- ✓ McAfee Application Control
- ✓ McAfee Embedded Control
- ✓ McAfee Integrity Control



ADVANTECH

Enabling an Intelligent Planet



www.advantech.com

What Do Our Customers Say?

“With this technology and compliance-ready ATMs, our bank customers don't have to worry about security issues affecting their business or their consumer.”

A global leader in assisted and self-service retail and financial systems, is now utilizing McAfee Embedded Security to solve their security problems:

Problems encountered:

- Lack of zero-day security
- Unauthorized software changes on production ATMs

McAfee Solution helps:

Phase 1

- Provide zero-day comprehensive security
- Transparent, small footprint & no overhead
- Deploy and forget, without ongoing updates
- Cost effective

Phase 2

- Insider threat mitigation, no unauthorized changes
- Complete ATM channel change control
- Standardized on NCR APTRA platform
- Helps assure PCI compliance



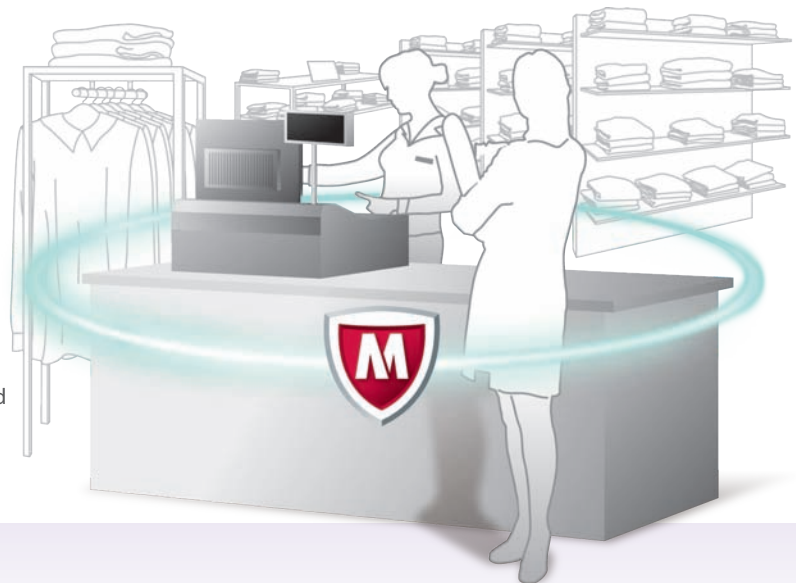
“Embedding McAfee gives us complete control and certainty over what changes on each device.”

A leading developer of point-of-sale systems, adopts McAfee Embedded Security to get complete control over policy-based changes.

- Reduce patching on Windows XP Embedded OS
- No performance draining security
- Need for service provider partners to make changes
- Low touch - Reduce support costs
- Compliance

McAfee Solution helps:

- Prevents unapproved installs to reduce in-field breakage
- Reduces number of touch points to the device
- Application control reduces patching cycles
- Runs quietly in the background on light-weight systems
- Change control provides tight control over what is installed
- Delivers PCI compliant device to retailers

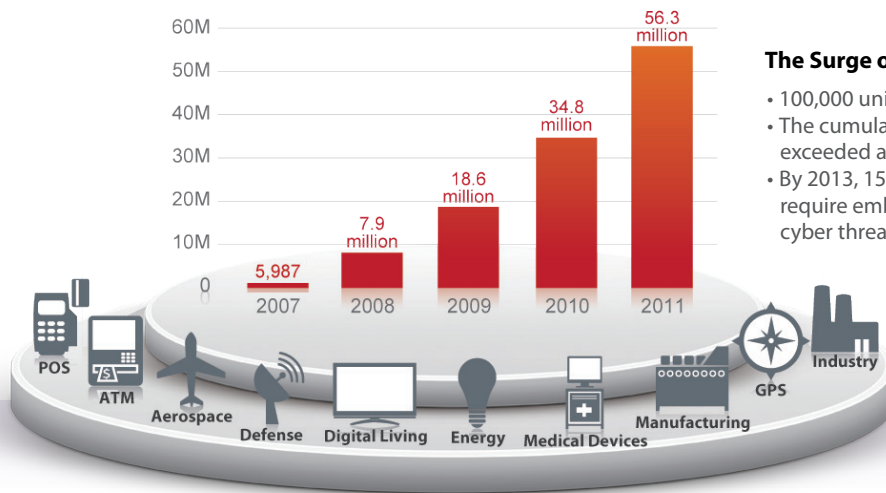


Why Embedded Security is Critical for Intelligent Systems?

The Explosion of 15 Billion Intelligent Connected Devices & Big Data

Global connectivity is proving an ever-more necessary feature of life in today's digital world. By 2015, the number of intelligent connected devices online is expected to grow to 15 billion, making some 1 trillion connections or more. This unprecedented growth is generating data stores that are approaching 35 trillion gigabytes in size, with machine-generated data further fueling the data explosion.

However, with the explosion in connections and data comes a heightened focus on and concern about the security and trustworthiness of that data. How to safeguard the valuable data for all embedded devices – from point-of-sale (POS) systems, ATMs, medical equipment, industrial control systems, mobile devices, multifunction printers, automotive and aeronautical systems, and beyond, is critical. Failure to adequately ensure the security of data can make people, businesses, and even countries vulnerable to potentially catastrophic breaches.



The Surge of the Malware Explosion

- 100,000 unique new malwares are found daily.
- The cumulative number of malware threats exceeded an incredible 56.3 million by 2011.
- By 2013, 15 billion connected devices will require embedded security solution against cyber threats

Intelligent Systems Are Facing More and More Challenges in Today's Digital World

Malware Attacks and Zero Day Threats

Unknown zero day polymorphic threats via malware such as worms, viruses, Trojans and buffer-overflow threats can lead to system catastrophes, such as system crash down, critical data stolen, and subsequent visible or invisible property loss.

Traditional Anti-virus Overhead

- » Updates are too frequent and consume too many network resources during download
- » The storage footprint of the antivirus software and its updates are too large for installation
- » Scan-based solutions consume the limited CPU and memory resources needed for operation

Patching and Updates

The underlying operating systems and applications are rarely, if ever, patched; many of these devices run out-of-date operating systems that are no longer supported which means that they can't be patched and updated.

Rise in Support Costs

- » Unauthorized changes during support and maintenance procedures lead to in-field breakage
- » Need to test and validate every patch
- » Onsite personnel support such as centralized software distribution model does not suit at all

Compliance drift

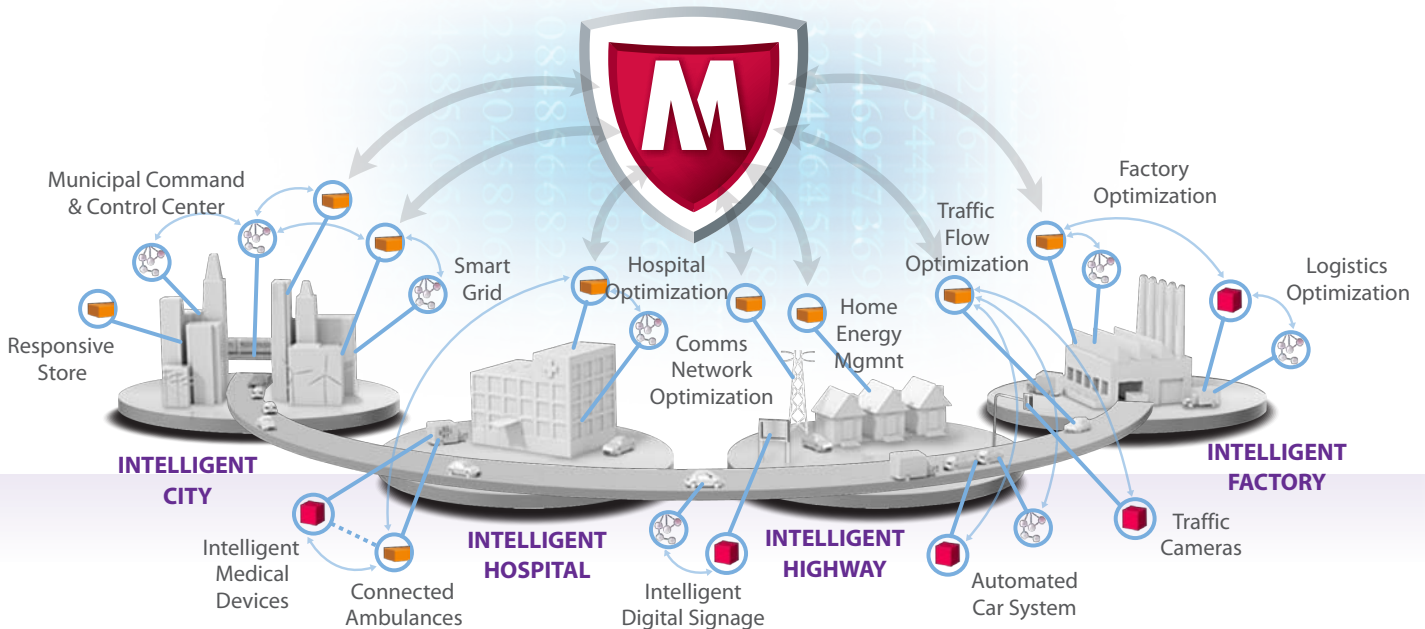
Need to be compliant with security standards such as FDA, HIPAA, PCI and other regulatory controls.



About McAfee Embedded Security Solutions

Managing and Securing from Embedded, Infrastructure, to Big Data in the Cloud

McAfee Embedded Security Solutions are the industry's first and only solution to secure embedded devices and automate the enforcement of software change control policies, helping manufacturers ensure that their products and devices are protected from cyberthreats and attacks. McAfee solutions span a wide range of technologies to address the above challenges, including application whitelisting, change management and integrity. Our solutions can be tailored to meet the specific design requirements for a manufacturer's device and its architectures. It helps accelerate time to market by providing a quick to deploy software solution that provides out of box security, lockdown, software change control and compliance, the essentials of a production ready system.



The Key Benefits of McAfee Embedded Security Solutions Include:



Out of box Security (Get zero-day protection)

Protect against existing and zero day threats including worms, viruses, Trojans, malware, buffer overflow attacks, rootkits etc.



Enables Software Change Control

Enforce system manufacturer's software change policies. Control what software gets installed and runs during system's lifecycle. Ensure only software authorized by system manufacturer gets installed and run on in-field systems.



Reduced Support Costs

Reduce in-field breakage by preventing any unauthorized changes. Lockdown hard to service systems in remote locations.



Extend the Lifespan of Legacy Systems

Protect older systems that OS and security vendors no longer support, such as Windows NT and Windows 2000, while alleviating the need to patch these systems.



Control over Patching

Gain increased time for testing of patches, reduce the overhead from frequent emergency patching required to stay secure.



Low Touch

Works out of the box; requires little or no training and overhead; does not impact requirements of low footprint, performance, and availability.



Compliance Ready

Control the state of system with audit logs of every authorized change or unauthorized attempt.



Integration Ready

Integrates with manufacturer/channel or its manufacturing, provisioning, monitoring, change management and in-field maintenance processes.

McAfee Embedded Security Offerings

Advantech is a McAfee Authorized Embedded Distributor in Asia Pacific. With 30-year expertise in the embedded platform and value-added service provider, Advantech offers 3 McAfee embedded security products based on the needs of customers:

Level 1: McAfee Application Control

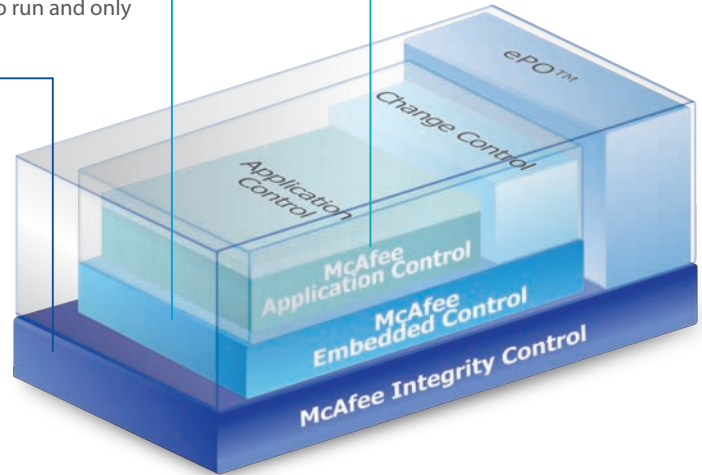
Application Control is McAfee's fundamental product to provide an effective way to block unauthorized applications and code on fixed-function devices.

Level 2: McAfee Embedded Control

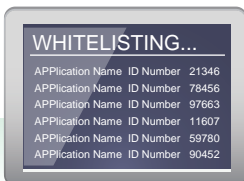
McAfee Embedded Control combines Application Control and Change Control, providing advanced protection by only allowing authorized code to run and only authorized changes to be made.

Level 3: McAfee Integrity Control

McAfee Integrity Control combines McAfee Embedded Control and the McAfee ePolicy Orchestrator® (McAfee ePO™) console—providing integrated audit and compliance reports to help satisfy multiple compliance regulations.



Key Features



Application Control (Whitelisting)

- Get control of unauthorized software installations
- Prevent malware and zero-day exploits
- Reduce patching frequency

	Blacklisting	Whitelisting
Virus signature file updates	Consume considerable network bandwidth.	No virus signature updates needed (Ideal for no network device)
Device Performance	A device may lack the CPU performance, memory and storage	"Light" approach (1/5 the memory of blacklisting and about 1% of a CPU)
Out-of-date patches (end-of-life OS, inaccessible device)	A device may become vulnerable	Offers compensation (e.g. memory protection)
Zero-day attacks	Difficult to counteract	Protection against zero-day attacks
IT Support	Support hours needed to send virus updates or even in daily basis	Does not apply; typically a hands-off solution
License Model	License per year (renew every year)	Perpetual license per device (one time)



Change Control

- Enforce software change policy
- Gain visibility and accountability into attempted changes
- Reduce support costs and warranty claims



Centralized Management with ePolicy Orchestrator® (ePO™)

- Deploy McAfee software easily and automatically
- Manage McAfee Configurations and policies from a single location
- Monitor events as they happen
- Generate performance and compliance reports automatically

Your Trusted Partner of Software Ecosystem

Advantech is the authorized distributor of a wide array of world-class software products, and provides unique value-added services for your intelligent systems.



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