



Securing Transactions in the Banking Infrastructure with Atalla Payment HSM

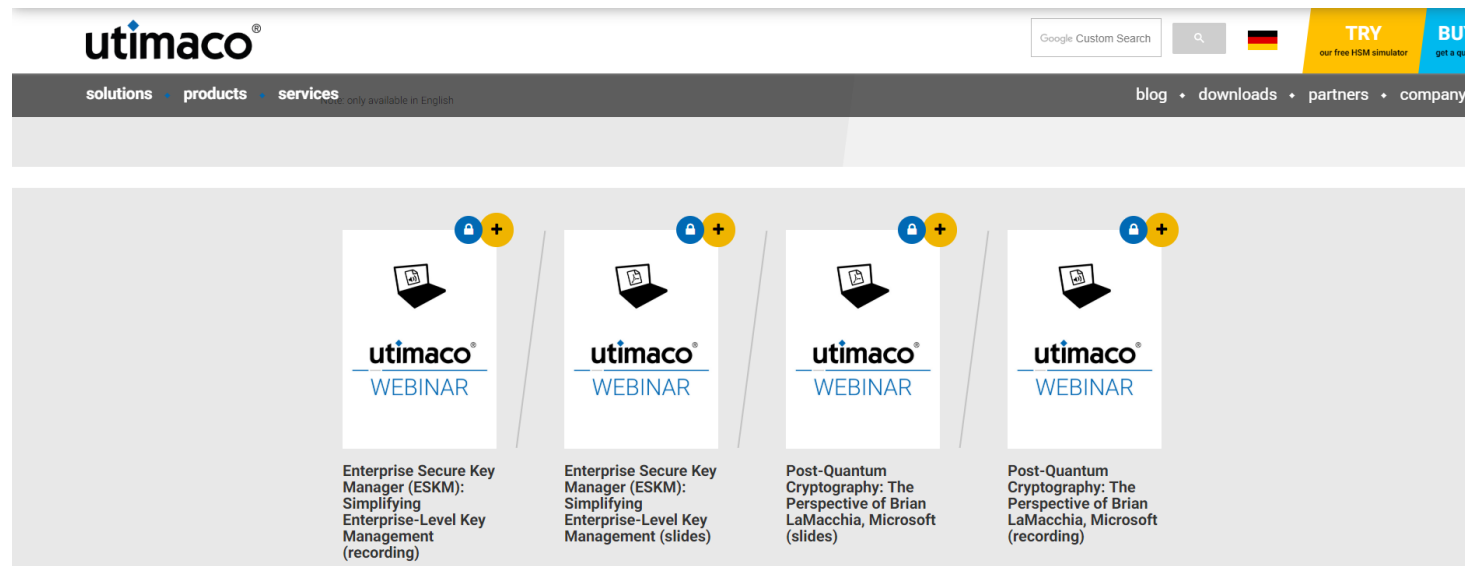
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Eriberto Velazquez (Professional Services Engineer)

utimaco[®]

It's all about protecting your data and business!

This is the second webinar from Utimaco's Data Protection Series:

- Enterprise Secure Key Manager (ESKM): Simplifying Enterprise-Level Key Management
 - Can be viewed here: <https://hsm.utimaco.com/downloads/webinars/>



Also known as - HSM

- A hardware security module (HSM) is a physical computing device that safeguards and manages digital keys for strong authentication and provides crypto processing.
- Key Manager vs HSM
 - Key Manager – Manages Key Lifecycles and provides secure storage for cryptographic keys
 - Typically for Data-at-Rest encryption use-cases
 - Generally not responsible for data encryption
 - HSM – Crypto-Processor embedded in tamper-reactive hardware
 - Designed for encryption / decryption of keys, signing and payment processing
 - Root of Trust
 - High-speed crypto-processing
 - Compliance driven



Payments vs General Purpose

- Payment HSM
 - Used by banks/ retailers / payment processors for secure cashless transaction processing
- Use cases
 - PIN Processing & ATM Interchange
 - Processing Transaction Data
 - Payment Card Verification
 - Electronic Funds Interchange
 - EMV Transaction Processing
 - Cardholder authentication



- General Purpose HSM
 - Provides Root of Trust for Non-Banking infrastructure
- Use cases
 - Public Key Infrastructure (PKI)
 - Document & Code Signing
 - Database Encryption
- Next Webinar on – 28 August 2019
 - Protecting Data and Critical Infrastructure with Utimaco Hardware Security Modules (HSMs)
 - Register Today!



What Am I?

Secure

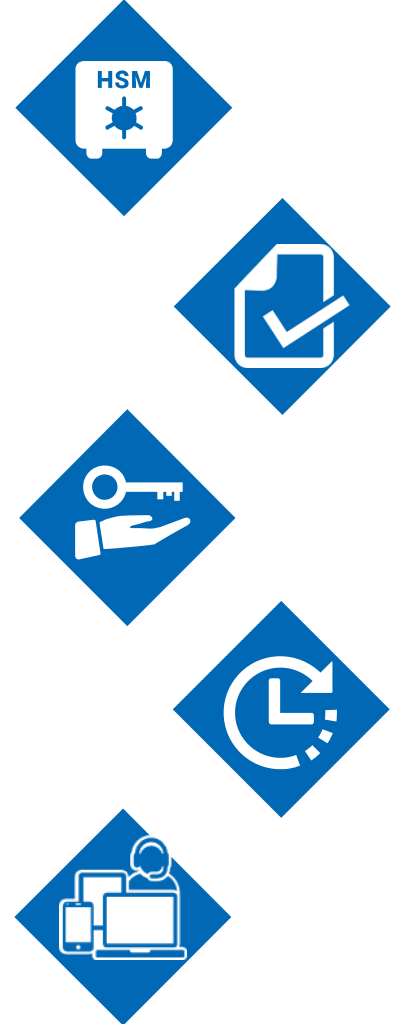
Compliance Driven

Zero-trust Environment

Reliable

Manageable

- Physical and Logical Security
- Tamper Reactive Hardware Appliance
- AKB Key Block For AES and TDES Key Management
- FIPS 140-2 Level 3
- PCI PTS V3.0 Certified
- TR-31 Key Block Support
- Dual Access And Split Knowledge Enforcement
- Encrypted Convenient Configuration, Management, and Key Loading
- Certificate Based Authentication
- Setup Once, Correctly, And Forget About It!
- Highly Redundant Hardware
- NIC Teaming
- Compliant Remote HSM Management
- Audit Logging
- Syslog and SNMP Support



Innovation in Payments

Key Use Cases

Atalla AT1000

Credit, Debit/ATM cards:
Acquirer, Issuer, Merchants



Key Injection:
ATM/POS/Terminals



Tokenization, IoT, Card
Personalization



E-Wallets, Online and
Mobile Payments



Key Verticals: Financial Services, Retail, Payment Processors

Standards & Compliance

PCI PTS HSM

Ensures logical and physical security to protect cardholder data

FIPS 140-2 Level 3

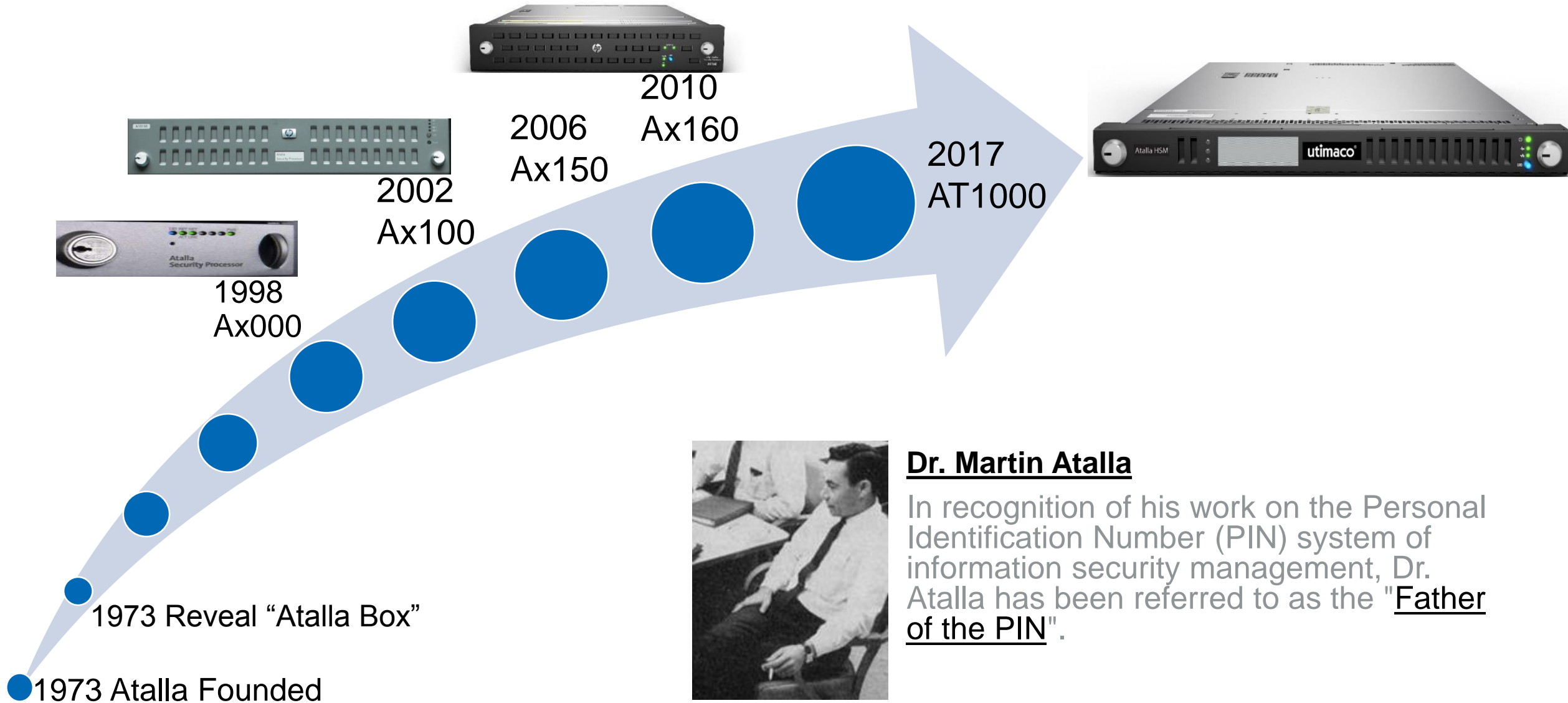
Set of standards that define encryption algorithms and physical security

TR-31 Key Block

Key Blocks protects the secrecy and integrity of encrypted keys

Payment Processing Standards

MasterCard, Visa, American Express, Union Pay, Discover, Rupay, EuroPay



Dr. Martin Atalla

In recognition of his work on the Personal Identification Number (PIN) system of information security management, Dr. Atalla has been referred to as the "Father of the PIN".

Next Generation HSM – AT1000

Industry Leading Payment Hardware Security Module

- Atalla Key Block for AES and TDEA or 3DES key management
- In-field scalable performance model, up to 10000 TPS
- Multiple MFK Support – up to 10 partitions per HSM
- Integrates with all major payment and switching applications
- Close integration with HPE NonStop Systems
- 4x1Gbps NIC – Supports Teaming
- TLS protected and authenticated sessions
- Optional customization
- Backward compatible



New and improved!

- Front Panel Display
 - designed for lights out datacenters
 - Easy configuration
- Remote Management
 - Administer AT1000 remotely from multiple locations
 - Monitoring – Remote Syslog and SNMP Alerts
- Dual Control
 - Dual front bezel locking system.
 - Dual Access enforced to complete a configuration change
- AES Master Key support
 - Ready for future
- More Reliable Hardware
 - More energy efficient and small form factor (1U appliance)



Portfolio



Utimaco Atalla Hardware Security Module (HSM)

Also known as Atalla Payments HSM – leading product in payments security



Enterprise Secure Key Manager (ESKM)

Creates, serves, and protects encryption keys for enterprise key management



Utimaco CryptoServer

General Purpose HSM – Provides Root of Trust



Utimaco Cloud Encryption (UCE)

Bring your own keys to the Cloud

Industry Leading Payment Hardware Security Module

Value Proposition

- Industry's leading payment API and command set
- True remote management capabilities
- Integration with all major payment and switching applications
- Close integration with HPE NonStop Systems to provide a fully redundant payment solution
- Performance driven – up to 10,000 TPS
- Customization to adapt your requirements
- Legacy TDES and future-proof AES support



Get Started with AT1000 today

- **HW demo:** Easy to evaluate AT1000
- **Easy deployment:** Install and configure quickly and remotely
- **Simple licensing:** Field upgradeable performance and comprehensive command set
- **Reliable:** Decades of innovation in payment security
- **Grows with your business:** TR-31, AES keys

How do we lead?

Innovation

46 Patents

Creative engineers delivering security inventions and driving security thinking

Rock-solid security

**FIPS 140-2 validated
Level 2, 3, and 4**

Our Key Management Solutions are built for the highest standards

Trusted name since 1972

\$ Trillions

Utimaco Atalla secures 1 in 3 card transactions; also processes billions of card transactions annually

Q&A – send to All Panelists

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...and we invented security that you can take for granted!!!