ENTRUST HSMs ENHANCE THE SECURITY OF MEDICAL DEVICES

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SECURING A WORLD IN MOTION

Healthcare sector is amongst the strong market for security and risk management vendors to help protect patient data, protect critical healthcare devices, and improve compliance with numerous regulations.”

SPARK Matrix: IoT IAM, 2020

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Entrust and its technology partners deliver complete solutions that secure medical device manufacturing, ensure trust in their deployed ecosystems, and protect data privacy and integrity

DEVICE AUTHORITY
Trust for every Thing

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IDENTOS

PrimeFactors
APPLIED DATA PROTECTION

VENAFI

MICRO FOCUS
Voltage

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Challenges as medicine goes digital

Increasing cyber attacks

Data privacy regulations

Touchless access

Use of smart devices

Expanding interconnectivity

Need a foundation of trust

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Data privacy regulations

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Healthcare workers require safe secure access to systems

Passwords aren’t hygienic

Healthcare going touchless
and passwordless

Many hospitals use physical smart cards to access healthcare computers

With virus known to spread by surface transmission, healthcare workers need a safe alternative

Going touchless – smart card security without the physical smart card

Smart credentials are provisioned on workers’ phones. Phones stay in pockets and PPE-clad workers are prompted or a PIN on computer to login

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Connected devices need security

Smart phones

Wearables

Bedside monitors

Insulin pumps

Pacemakers

Anesthesia machines

Surgical robots

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Securing medical system access and devices

User authentication ← Touchless and passwordless

Device authentication ← Device credentialing at manufacturing

Integrity and privacy ← Device and software authentication upon deployment

Encryption ← Data protection during use

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Building a root of trust

User authentication — Touchless and passwordless

Device authentication — Device credentialing

Integrity and privacy — Device is use

Encryption — Data at rest, in motion, and in use

Root of trust

- System access
- Device manufacturing
- Remote monitoring/ treatment
- Remote diagnosis

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Entrust HSMs: A foundation of trust

Highest level of protection for encryption or signing keys

Implement and enforce customer-defined policy

“Harden” applications that use cryptography

Source of high quality random numbers for keys

HSMs are certified, trusted platforms for performing cryptographic operations and protecting keys

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Entrust HSM family of products

Cloud integration

Entrust nShield Solo
Server-embedded PCI ecard

Remote monitoring

Entrust nShield Edge
Low cost, portable

Entrust nShield Connect

Network attached, shared

Develop packages

Time stamping package

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Use cases: Identity for healthcare

Identity Proofing – fully digital identity verification

Best-in-class multi-factor authentication (MFA)

Credential-based passwordless/touchless access

Secure portals – employee, patient

Single sign-on (SSO)

File encryption and document signing

Adaptive risk-based authentication

Self-service password resets

Healthcare professionals

Doctors, nurses, clinicians

Secure access to patient records and care systems from anywhere. Passwordless and touchless options.

Secure delivery of test requisitions for patients including third party lab partners

Secure receipt of patient test results

Secure patient communications

Mobile signing of prescriptions and documents

Secure access to email and employee portal

Healthcare support staff

Admin, Operations

Secure access to all apps, networks, & VPN from anywhere

Digital patient onboarding

Secure delivery of patient support services: records, billing, insurance forms, etc.

Secure delivery of support services to healthcare employees: HR, employee portals, etc.

Patients

New & existing

Self-service digital identity verification

Secure digital onboarding – option for virtual patient ID

Secure access to patient portals – healthcare, insurance

Self-service password resets

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Use cases: Secure connectivity and data sharing

Patient-Centric Care

- Customer need:
  - Provide secure connectivity for all external patients
  - Drive patient-centered culture through technology
  - Promote growth and flexibility for future expansion
- Solution:
  - Encryption as a service subscription platform integrated with Entrust nShield to protect and manage cryptographic keys
- Benefits:
  - Enhanced online communications with patients
  - Ensure PII/PHI is always secure for compliance
  - Brings staff, clinicians, and patients closer together

Clinical Trials

- Customer need:
  - Secure paperless cloud-based data sharing
  - Automate document handling and exchange
  - Trusted signature capture on mobile devices
- Solution:
  - Entrust nShield root of trust secures customer's cloud-based clinical trial digital signing solution
- Benefits:
  - Accelerate delivery of new drugs to market
  - Reduce cost/provide competitive advantage
  - Facilitate compliance to regulatory standards

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Entrust Security

20+

Years of delivering trusted threat protection and enabling compliance

Deep expertise and track record in applied cryptography

FIPS Level 3 Validated 140-2

Common Criteria

HSM market leader with a long history of industry certifications and validation

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Trust

Integrity

Control

- Cloud IoT Blockchain Payments
  - Solutions delivering trust for business critical applications and information

1000+

- Organizations rely on Entrust to secure and support their applications and information
  - 57 of the Global Fortune 100
  - 10 of the top 20 FTSE 100

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Trusted by clients and partners worldwide

$800M+
Revenue

2,500+
Employees

50
Years of innovation

1000+
Technology and channel partners

Market leader in the
4.7B
annual financial card and government ID issuance market

690K
websites secured globally

45K+
instant issuance deployments worldwide

24M+
SWIFT messages encrypted & secured daily

10M
secure identity & payment credentials issued daily

57
Of Global Fortune 100 companies use our HSM

25
countries use our PKI, as well as the UN, Interpol & NATO

95M+
protected workforce and consumer identities

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