

# Convergence of Identity and Access Management

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# GOLD STANDARD (ENCRYPTION-BASED) SECURITY

We craft solutions that protect the most sensitive personal data from unauthorized access and meet strict compliance regulations. Our expertise spans four product lines:



**KEY MANAGEMENT**



**MOBILE APP SECURITY**



**DIGITAL IDENTITIES & SIGNATURES**



**PAYMENTS**

The art of cryptographic security requires us to be at the cutting edge of data and computer science. Every year, we invest millions into Research and Development to keep you and your customers safe.



**30+ YEARS OF INNOVATION**



**30+ BLUE CHIP CLIENTS**

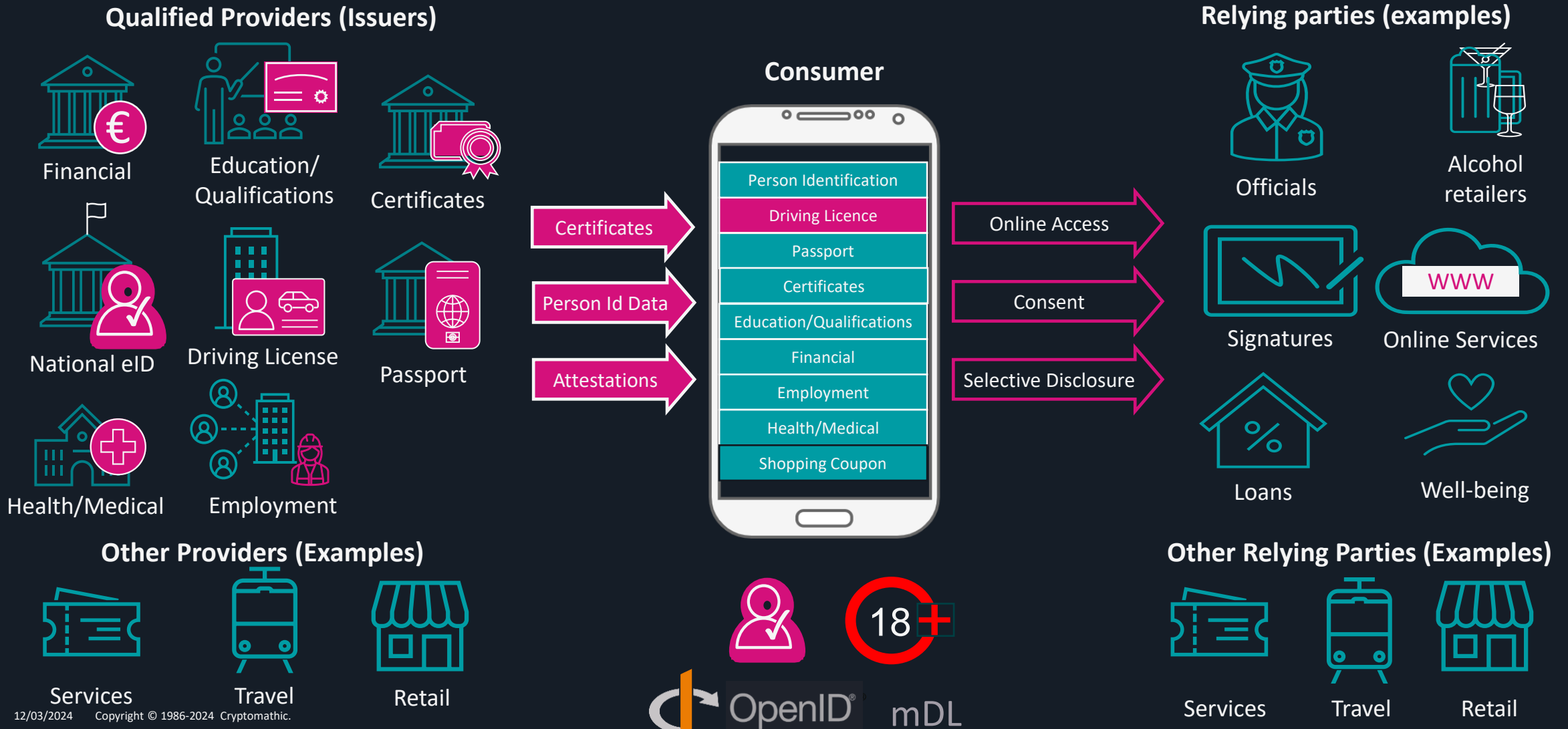


**30+ COUNTRIES SERVED**



**20+ INDUSTRIES PROTECTED**

# WALLET APP SERVICES





# EU Funded Large Scale Projects



**Potential**  
For European Digital Identity

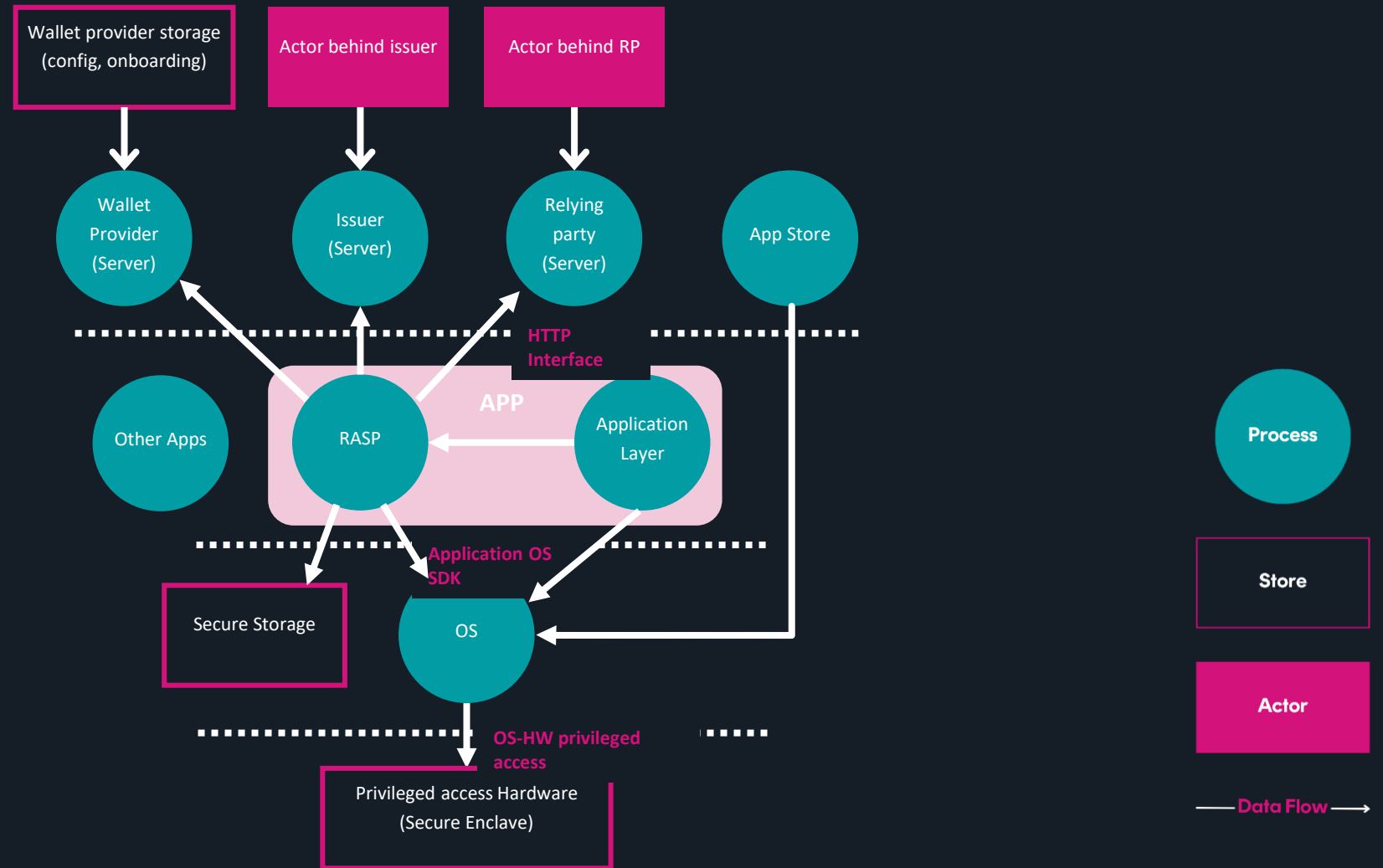


1. POTENTIAL – Pilots for European Digital Identity Wallet Consortium  
Access to government services  
Opening of a bank account  
Registration for a SIM card  
Mobile driving licence  
eSignatures  
ePrescriptions
2. EWC – EU Digital Identity Wallet Consortium  
The storage and display of digital travel credentials  
The organisation of digital wallets  
The organisation of payments
3. NOBID – Nordic-Baltic eID Wallet Consortium  
Authorisation of payments for products and services
4. DC4EU – Digital Credentials for Europe Consortium  
Educational sector and the social security domain.

# APP(WALLET) VULNERABILITY ASSESSMENTS AND THREATS



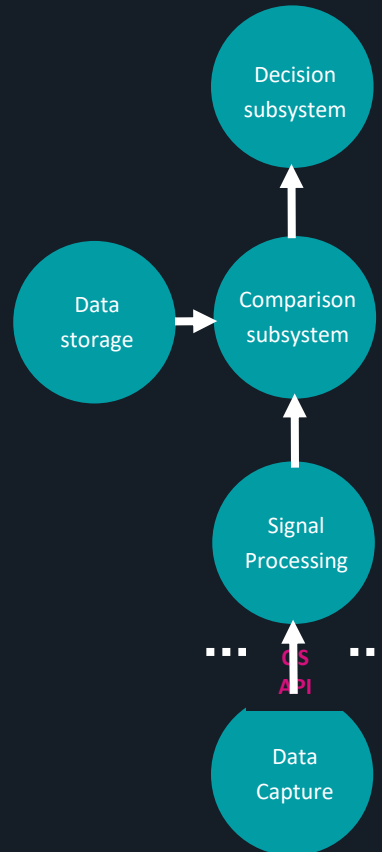
OWASP Threat Dragon is a modelling tool used to create threat model diagrams as part of a secure development lifecycle.



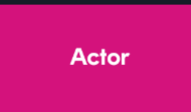
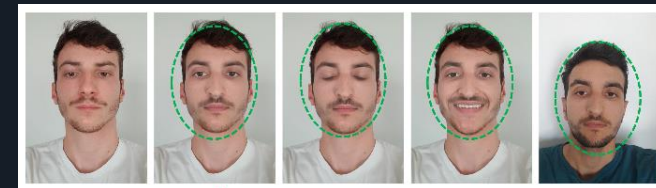
# VIDEO CAPTURE VULNERABILITY ASSESSMENTS AND THREATS



OWASP Threat Dragon is a modelling tool used to create threat model diagrams as part of a secure development lifecycle.



*How video injection attacks can even challenge state-of-the-art Face Presentation Attack Detection Systems (2023)*



# THANK YOU



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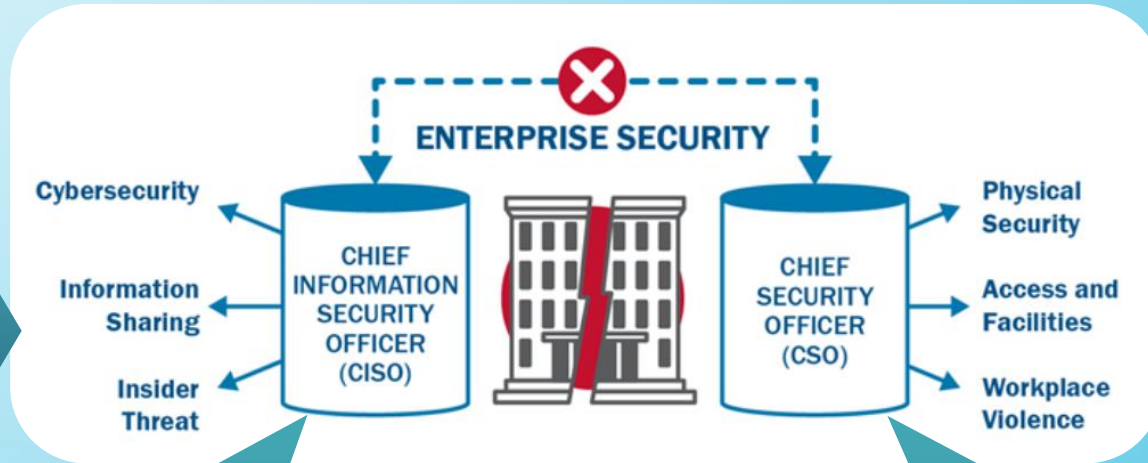
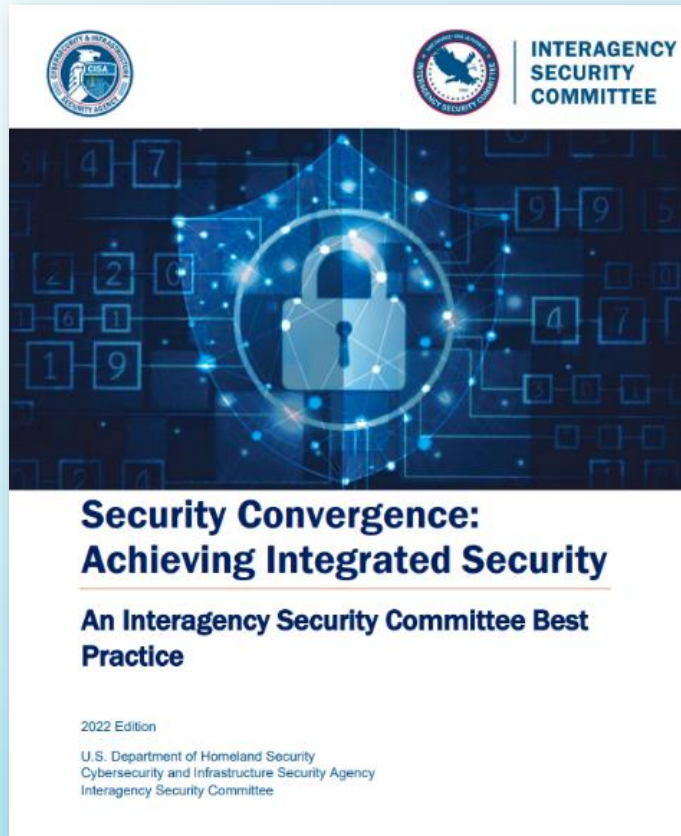
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# Convergence is Happening: Physical & Wallet Credentials

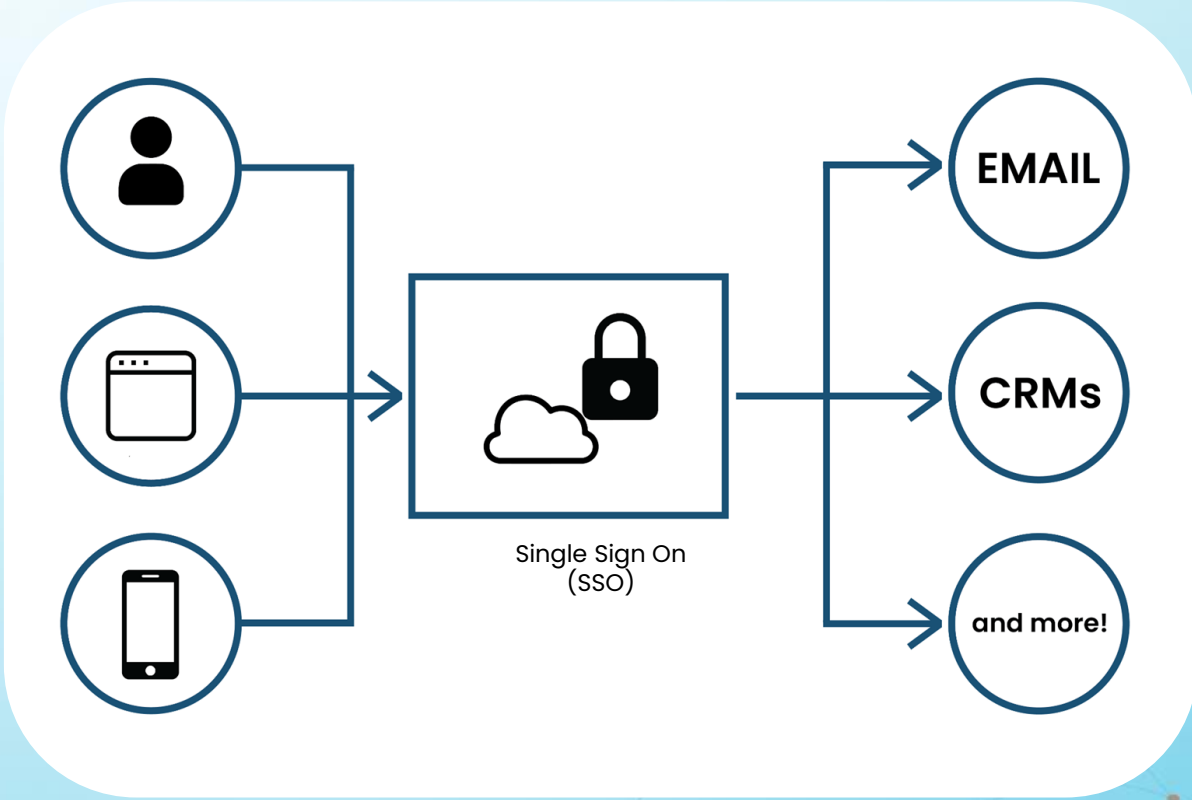


IAM, SSO, MFA,  
Network Access  
Credentials

Vetting, ID  
Credential, On/Off  
boarding

# Access?

## All Access to Systems, IP, Documentation



## All Access to Facilities



# Converged Physical Credential

125 KHz Prox®

DESFire® Ev3  
LEAF Standards  
NFC

PIV  
FIDO passkey



# HYPR

IDEMIA

wavelynx



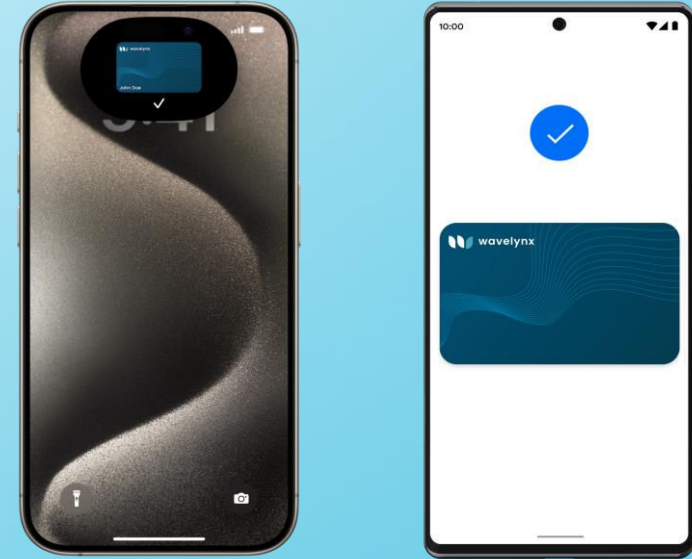
IDENTITY & PAYMENTS  
**SUMMIT**

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# How Do Wallet Credentials Solve this?

- Leverage IT platforms for endpoint management to ensure device security
- Leverage IT platforms for SSO to ensure authenticated user
- Integrate physical access control software to automate lifecycle management of users, credentials, and permissions



Wallet Credentials

# Corporate SSO Identity



# Why wallet?

- More secure than all other credentials
- Superior provisioning and administration
- Unparalleled user experience for all users



# Convergence of Identity and Access Management

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Solutions Architect  
Intercede

intercede





# About Intercede



MyID software manages millions of digital identities worldwide



Trusted by governments, large enterprises, military and police



More than 20 years domain expertise - feature-rich product and expert staff



Supported by a global partner network and our own UK and US offices

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# Intercede capabilities



## Registration and ID Verification

- Biographic data capture
- Fingerprint capture
- Facial biometric capture
- ID document validation
- Background checks
- 1:Many biometric matching



## Credential Management

- Issuance policy
- Central and local issuance
- Lifecycle management
- Audit and reporting
- Key management
- PKI integration
- FIDO



## Multi-Factor Authentication

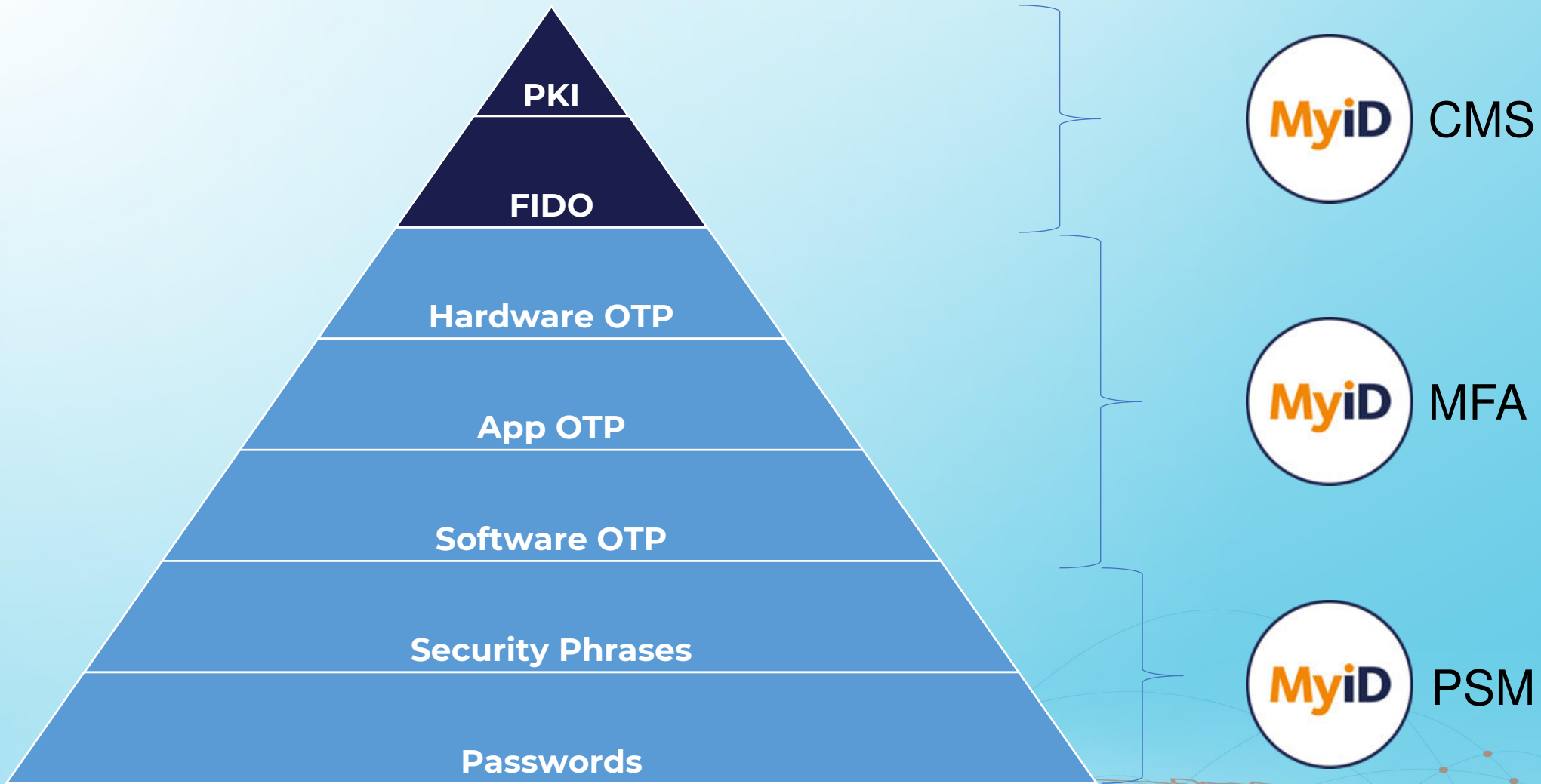
- FIDO
- Hardware OTP
- Push notifications app
- Software OTP
- Deviceless PIN grid OTP
- OTP over SMS



## Password Security Management

- Compromised password check
- Password policy
- Policy enforcement

# Stronger authentication from passwords to PKI



# History of convergence in LACS and PACS

- 1990's: PACS was king. LACS was emerging.
- 2000's: LACS became more prominent. Visions of integrated LACS and PACS. iPhone introduced (2007).
- 2010's: More advancement in convergence. FIDO introduced (2012). The mobile team emerges.
- 2020's: Disparate LACS and PACS convergence.

# Reasons for slow convergence

- The tale of “two kingdoms”
- Shifting requirements
- Infrastructure changes
- Different vendor sets
- Technological advancements



# Evolving requirements and landscape

- Mobile technology – “the third kingdom”
- Multiple personas (identities) and roles
- MFA options (software, hardware, hybrid)
- FIDO (Consumer → Enterprise)
- Password security management

# Current trends in convergence

- Federated IDs and open specifications
- Smart cards and tokens
- Mobile (MDMs)
- FIDO (Enterprise)
- Biometrics
- Digital wallets

“Everything is converging” – One size does not fit all.

# Convergence from our customers' view

- Higher assurance logical and physical access (Gov, Intell)
- Modernization of PACS. REST API integration. (e.g., On-demand revocation)
- Identity and access management governance
  - On-boarding
  - Process integration  
(Ex.: Onboard in Sailpoint, pass identity into CMS, then to LACS and PACS.)
  - Central identity orchestration point
  - Can reduce cost, increase security
- Data breaches addressed

# Thank you!

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**intercede**





# Business Value of Identity Convergence in Physical Access



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People Management

Site Management

Business Management

Building Management

**Access control**  
Who, when, where,  
schedules, privileges



**Visitor management**  
Kiosk, contractor,  
meeting automation



**Emergency management**  
Site lock downs,  
notifications, evacuation



**Credential management**  
Allocation, expiry, credential types



**Prove compliance**  
Competency management,  
standards



**Health and safety**  
Fatigue and exposure,  
drug and alcohol,  
time and attendance, guard tours



**Operational efficiency**  
Reporting, audit trails,  
data provision



**Site monitoring**  
Site plan visibility,  
video management



**Alarm management**  
Security, fire, duress,  
alarm zone schedules



**Perimeter security**  
Energized fencing, perimeter sensors



**Multi-site consolidation**  
Distributed sites



**Building systems**  
Building systems automation,  
Elevator integrations,  
Intercom integrations,  
Printer resource management



**Resource allocation**  
Asset booking, locker management,  
schedule management,  
car park management

IDENTITY & PAYMENTS  
**SUMMIT**

# Cardholder Info Pull from Systems

- Personal Information
- Competencies
  - Trainings
  - Certificates
- Access
  - Locations
  - Machines
  - Workstations
  - Parking Spots
- Personal Data Fields
  - Computer User ID
  - Parking Pass #
  - Contractor Name
  - Favorite Ice Cream Flavor
- Credentials

The screenshot displays a web-based interface for managing cardholders. At the top, there is a search bar and a dropdown menu set to 'Name'. Below this is a table listing cardholders:

First Name	Last Name	Department	Description
Bill	Connors	Management	CFO
Billy	Bob	Contractor	
Bob	Bobson	Contractor	

The main view shows details for 'Bill Connors'. On the left, there are input fields for: First Name (Bill), Last Name (Connors), Description (CFO), Division (Common - Avail...), User Code, Department (Management), Email, Mobile Phone, and Safety Training Expiry. In the center, there is a 'Cardholder Images' section with a photo of an older man. On the right, there are sections for 'Cardholder Access Groups' (Management, Office), 'Cardholder Cards' (Gallagher Demo Card - A499...), and 'Cardholder Competencies' (CPR Cert, Drivers License, EMT Certification, Safety Training). At the bottom, there are buttons for 'Add Actions', 'Assign Operator Groups', and 'Copy Operator Groups'.





# Shuttle Bus Use Case

- Access control not to open doors
- Identity leveraged to know who they are
- Business continuity benefits
  - Show up for shift
    - Tied to HR scheduler
  - Additional worker needed
  - Mining – ability to clear blast zones quickly

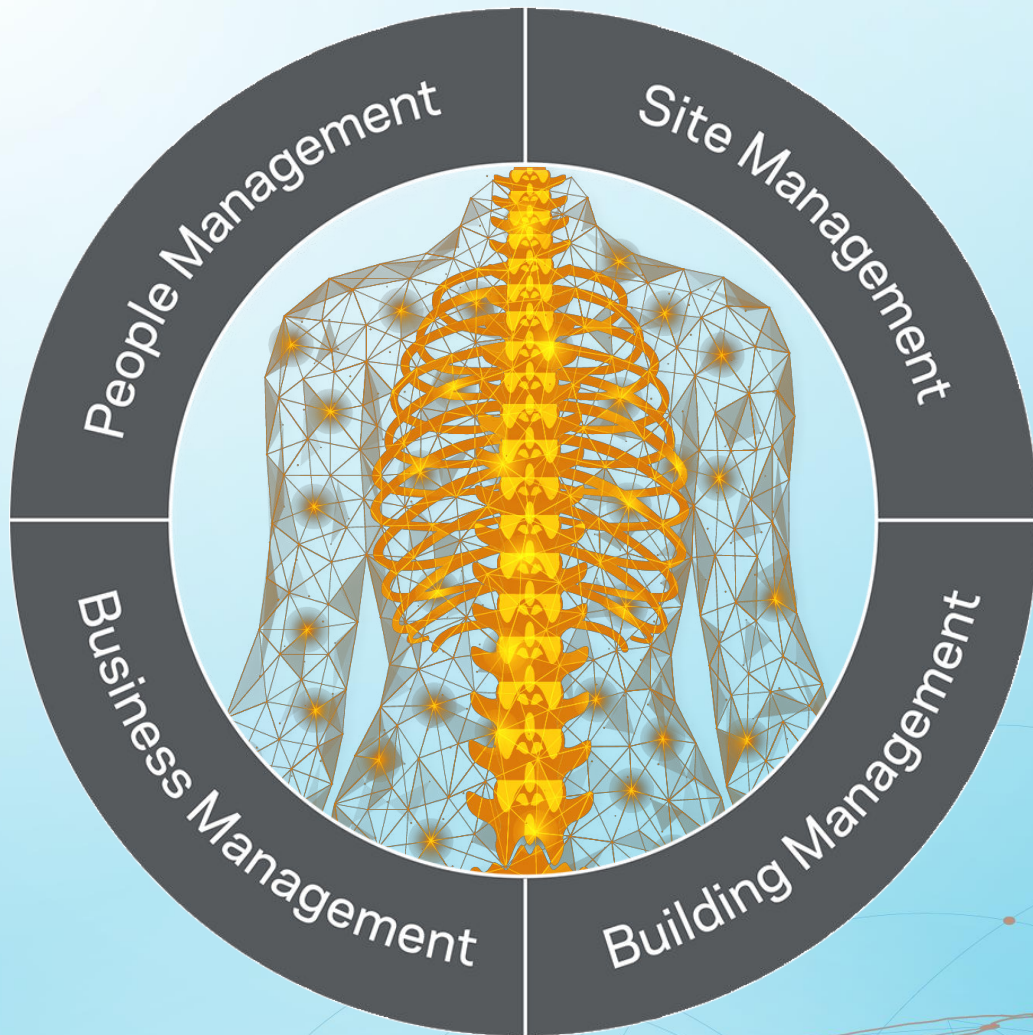
# Forklift / Machinery Use Case

- Enforcing compliance requirements
- Tied to LMS
- Notifications & alerts, warnings
- Audit trails & reports





# Global Customer Example



14 Systems  
26 Integrations

- Automatic provisioning & access from AD & HR systems
- Space Utilization – conference rooms, parking spaces, lockers
- Employee location tracking
- Shuttle bus
- Ordering corporate clothing
- Time & attendance
- Credential management
- Competency management – machine safety, workstation access
- Randomized drug testing
- Temperature checks during pandemic
- Reports, event data analysis
- BACnet integration for HVAC & lights
- Access control & intrusion
- Perimeter detection – multiple solutions