THALES
Building a future we can all trust
CyberSecurity Products (CSP) Business Unit
Bechtle TECH Rendez-Vous Q4
bechtle

Thales in numbers

83,000

EMPLOYEES

€20.6 BN

REVENUES

Over €4 BN

INCLUDING €1,1 BN
IN SELF-FUNDED R&D

68 Countries

A GLOBAL
FOOTPRINT

Rapidly built a GLOBAL Top5 cybersecurity vendor…

FROM < $0.5B REVENUE

An HSM Equipment supplier
A local cyber services player

TO < $2B REVENUE

A global cybersecurity leader
Global leader in data/app sec, IAM
Premium provider of cyber services
Trusted partner for major sovereign protection projects

X4
since 2016

ENABLER ACROSS ALL THALES BUSINESSES

Thales reduces the complexity of compliance with platforms that protect and manage applications, data, and identities at scale

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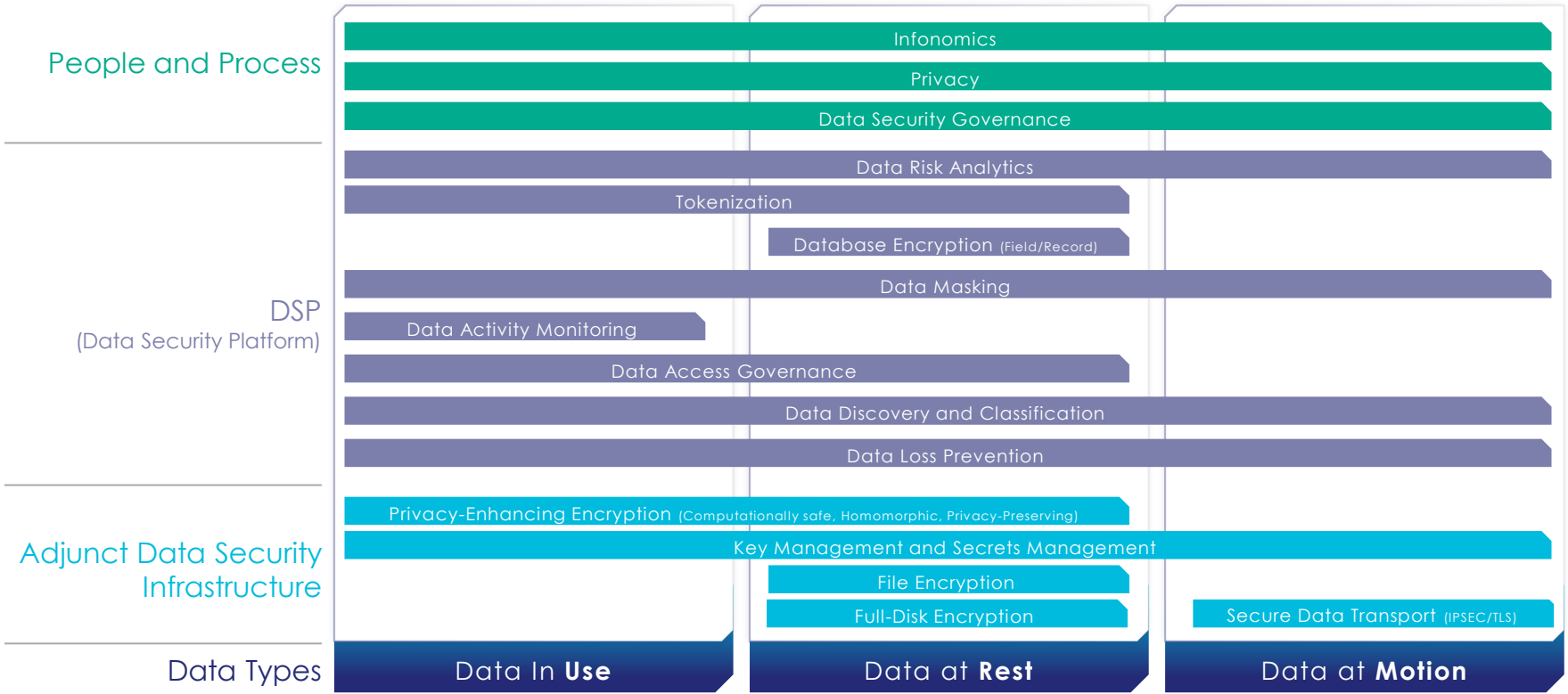
+
imperva
a Thales company

The Gartner approach



Data Security

Identify, protect, monitor, report, and govern sensitive data across hybrid IT.

Our Data Security Portfolio

Data Discovery & Classification

File, DB, & App. Encryption

Enterprise & Cloud Key Management

Secrets Management

Tokenization & Data Masking

Data Governance & Monitoring

Threat Detection & Response

Hardware Security Modules

High Speed Encryption

Protects Anything

Personal Information

Intellectual Property

Internet of Things

Customer data

Enterprise data

Financial data

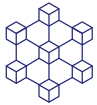
Secrets & credentials

Anywhere

Applications

Data centers

Containers

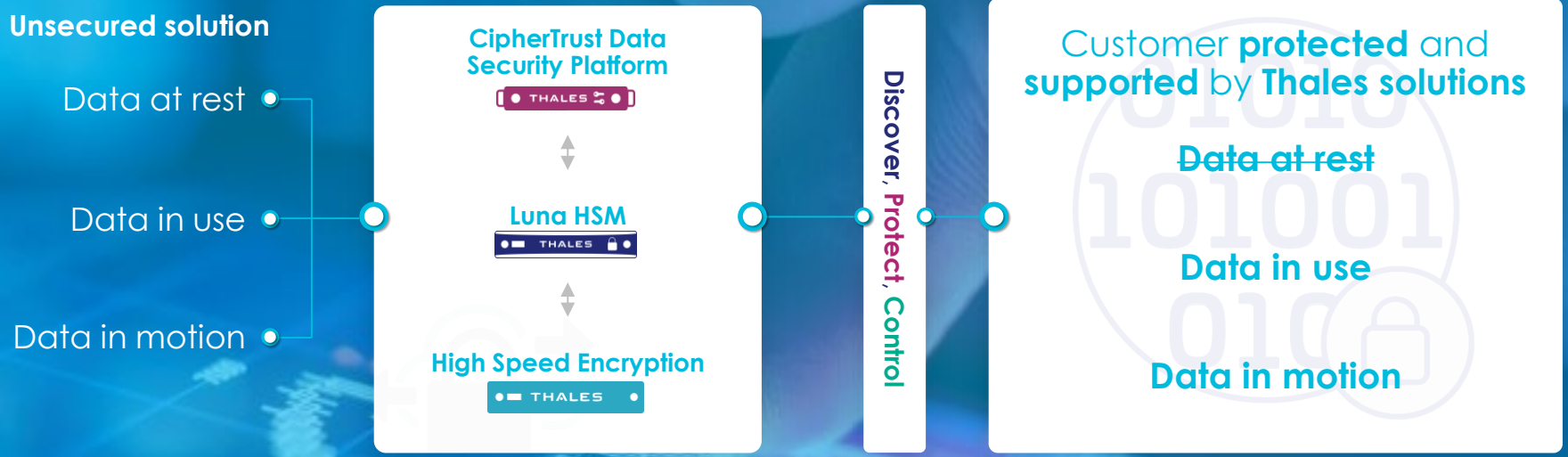

Networks

Virtual

Clouds

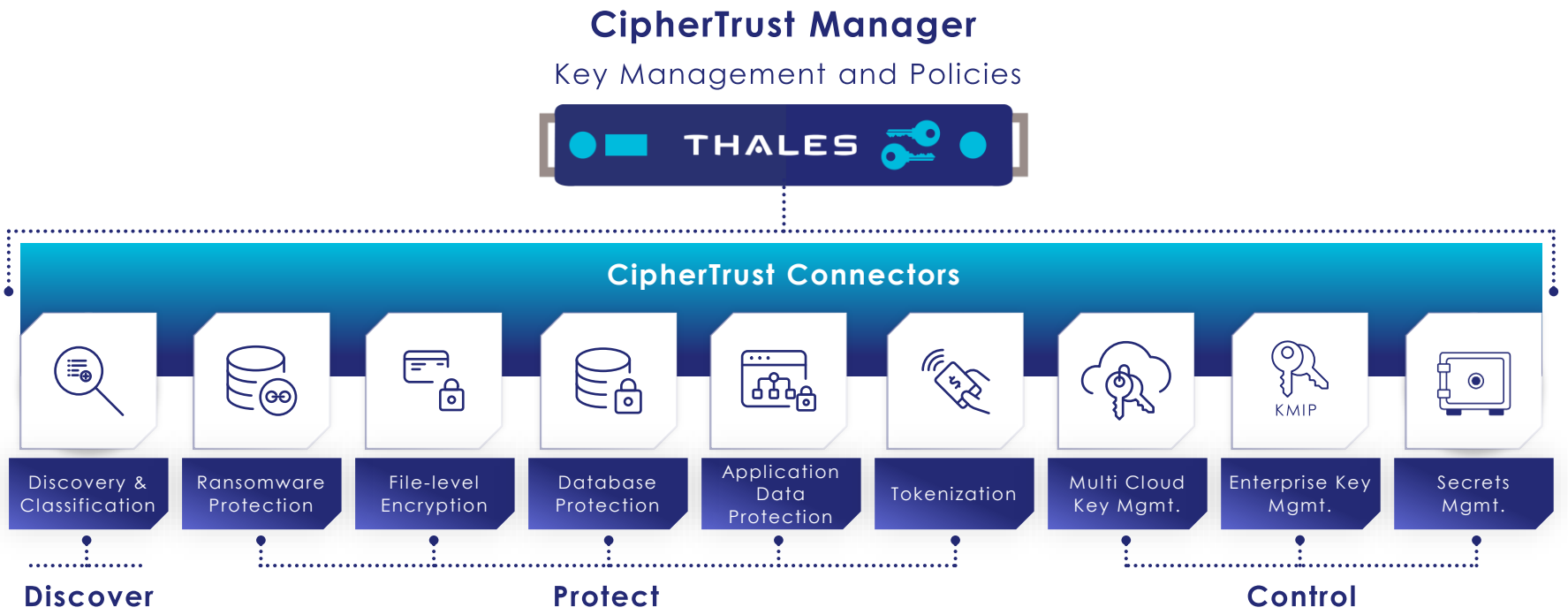
Big data

Thales Dataprotection Portfolio



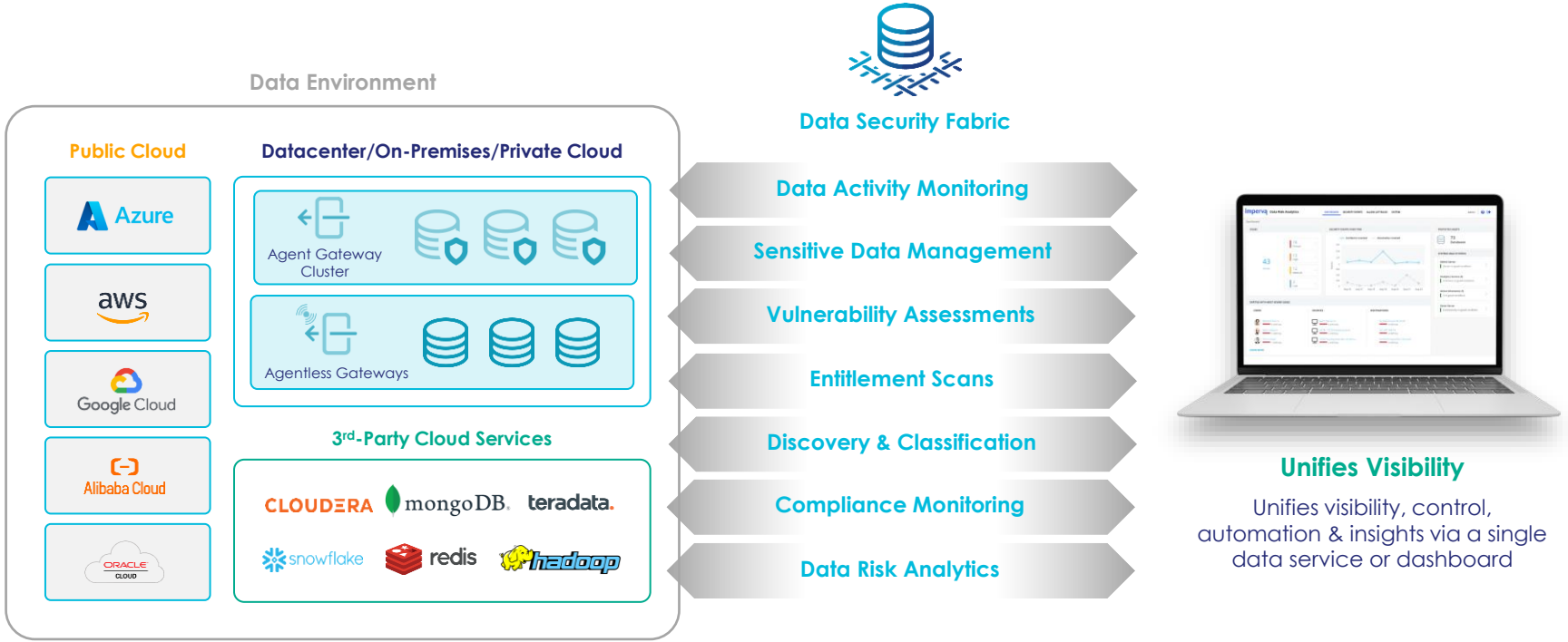
The Thales data security portfolio is a **single vendor solution** providing customer-controlled encryption and key management for all data in all states

CipherTrust Data Security Platform



Actionable insights automation

Imperva DSF provides a streamlined views that help customers automate their audit and security risk response and compliance processes

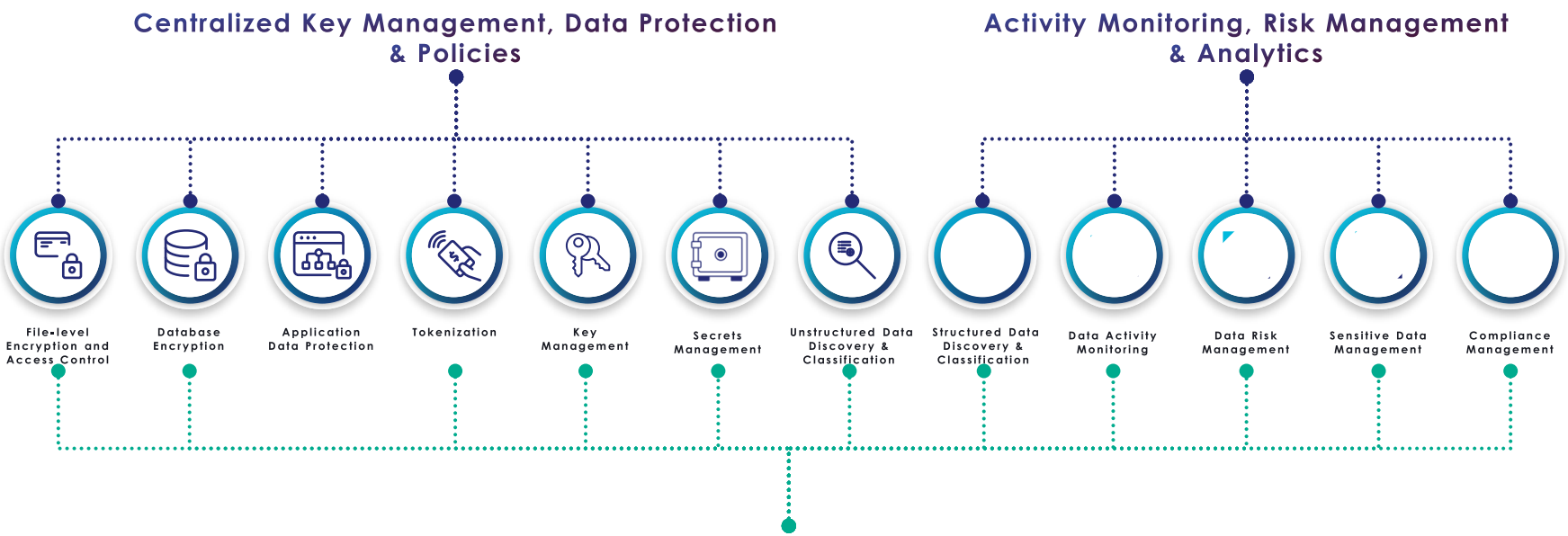


Unifies Visibility

Unifies visibility, control, automation & insights via a single data service or dashboard

CipherTrust Data Security Platform

Unified data security across hybrid environments



Application Security

Protect applications and APIs at scale in the cloud, on-premises, or in a hybrid model.

DDoS Protection

Maximize network and application availability with fast response to network and L7 DDoS attacks

Web Application Firewall

Protects applications out of the box with near zero false positives

Client-Side Protection

Prevent data theft from client-side attacks like formjacking, digital skimming, and Magecart

Bot Protection

Protect website, mobile apps, and APIs from automated attacks

API Security

Protects APIs and API Data anywhere

Runtime Protection

Always on Zero Trust protection for applications

Managed DNS

Uninterrupted DNS resolution filters out bad traffic to only respond to legitimate requests

Secure CDN

Content caching, load balancing, and failover to securely deliver applications across the globe

Account Takeover

Prevents against automated account takeover fraud

Imperva AppSec Products Comparison

	Customer Use-Case	Deployment Method	Deployment Location	Deployment Responsibility	Management
Cloud WAF	Easy to implement and operate solution (low TCO) without on-prem footprint. L7 DDoS, CDN, Advanced Bot Protection, ATO protection, CSP protection.	Multi-tenant SaaS	Imperva Global POP Network	Imperva	Imperva Cloud Console
Elastic WAF	Easy to operate solution (low TCO) behind existing CDN. Need for locally deployed data plane. K8s environments available.	Cloud Native (K8s) application.	K8s on-prem or in the Cloud (via ingress plugin)	Customer	Imperva Cloud Console
WAF Gateway	Need to a local data and management plane (compliance). Positive sec. model. Advanced customizations and logging.	HW or VMs. (Transparent) Reverse Proxy, Bridge.	On-Prem or in CSP as IaaS.	Customer	Local Console

Identity and Access Management

Provide seamless, secure and trusted access to applications and digital services.

Identify

- Bring Your Own Identity (BYOI)
- Document Verification, Liveness Detection

Authenticate

- Digital ID Wallets, Mobile ID, Digital Driver's License
- SCA, Phishing-resistant Authentication,
- Single Sign-on, Passwordless

Authorize

- Adaptive Access
- Fine-grained Authorization
- Delegation and Relationship Management

Delete

- Account Deletion
- Right to forget

SIGN UP → **LOG IN** → **USE** → **LEAVE**

Workforce & Customer IAM - User Journey & Consent

- User Journey Orchestration, Authentication Journey
- Consent and Preference Management
- Progressive Profiling

Multi-Factor Authentication

- PKI CBA
- OTP Hardware
- fido

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Thales IAM

At a glance

www.thalesgroup.com

Workforce IAM Portfolio – At a glance – Secure and passwordless MFA with modern IDPaaS or on-premise authentication platform

Hardware authenticators for PKI and FIDO

Credential and device management (CMS)

Versasec CMS

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Thales Lifecycle Authenticator Management

Cloud-Based Access Management Platform

SafeNet Trusted Access by THALES

Authentication Access policies SSO

On-Premise Authentication Platform

THALES SafeNet Authentication Service

On-prem authentication with automated token provisioning and fulfillment for the Enterprise

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Why passwordless

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Password is the new mainframe

THREAT

‘12345678’
‘password’

Still the most popular passwords

84%

Data breaches related with weak or stolen passwords

COST

20-50%

Helpdesk calls are password related

HASSLE

130

Accounts associated with an email address

50-80%

Users reuse password across accounts

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How to do passwordless

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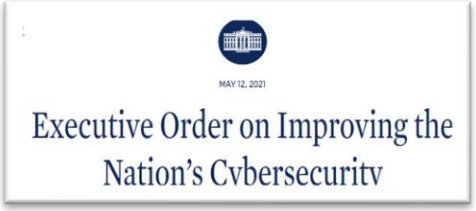
The raise of requirements for Phishing-Resistant authentication

Since 2021, to protect sensitive data from rising cyber threats, Governmental cybersecurity agencies are increasing their requirements and IAM market analysts are recommending the use of phishing-resistant authentication methods (US EO14028, CISA, NIST, ENISA, Gartner ..)



"Federal agencies must require their users to use a **phishing-resistant methods, FIDO2, PIV and derived PIV** to access agency-hosted account",

enisa
EUROPEAN UNION AGENCY FOR CYBERSECURITY

"Avoid using SMS and voice calls. Instead consider deploying **phishing-resistant** tokens such as **smart cards** and **FIDO2 security keys**,

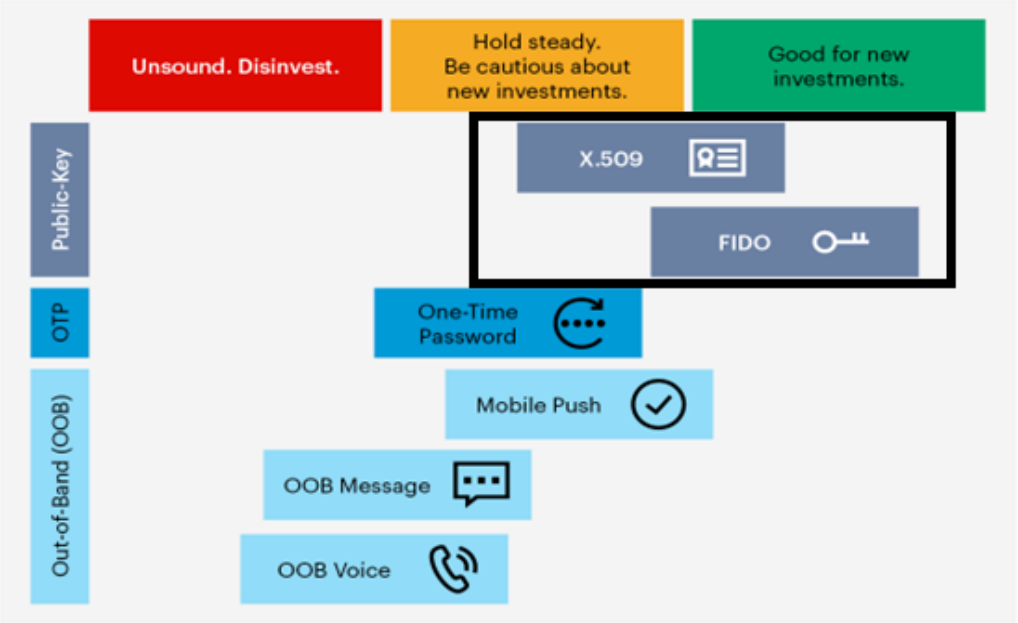
CYBERSECURITY & INFRASTRUCTURE SECURITY AGENCY
CISA

"**Enforce phishing-resistant MFA** to the greatest extent possible"

CISA Guidance on **Phishing-Resistant and Number Matching MFA,**

What Gartner says

The Strategic Value of Different Kinds of Authentication Token



Source: Gartner
724226_C

Gartner

Latest Gartner Estimate

90%

MFA will be based on FIDO by 2027

> **"By 2027, more than 90% of MFA transactions using a token will be based on FIDO Authentication"**
>
> - Paul Rabinovitch Gartner, IAM Summit UK 2025

Joint press statement from Microsoft, Apple and Google

- First time in history
- Support of FIDO keys / passkeys
- Apple, Google, and Microsoft commit to expanded support for FIDO standard to accelerate availability of passwordless sign-ins
- https://www.apple.com/ro/newsroom/2022/05/apple-google-and-microsoft-commit-to-expanded-support-for-fido-standard/

PRESS RELEASE
05 May 2022

Apple, Google, and Microsoft commit to expanded support for FIDO standard to accelerate availability of passwordless sign-ins

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FIDO (Fast IDentity Online)

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What is FIDO? (Fast Identity Online)

Mission

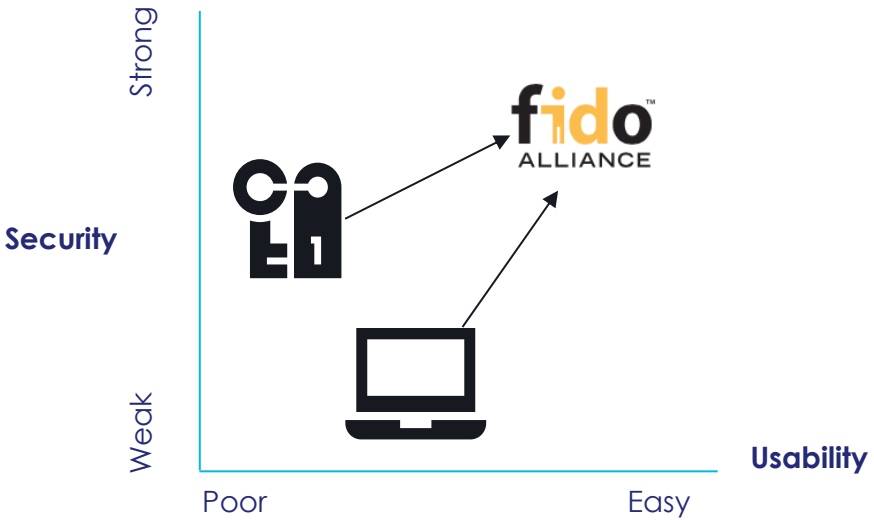
- Authentication standard
- Reduce world's reliance on passwords

250+

members

600

FIDO certified solutions



FIDO Authentication Benefits

Strong Security in Authentication

- Asymmetric Public Key Cryptography (RSA, ECC)
- Possession Based Authentication

Passwordless and Anti Phishing

- Keys bound to a domain; if fake, authentication fails

Prevent MIM (Man in the Middle Attacks)

- Keys stored locally in the FIDO device
- Eliminates dependence on server-side credentials

Simple to set up and use

- Single gesture, password removed and replaced by PIN
- Open standards, no infrastructure to deploy

PKI vs. FIDO

PKI (Public Key Infrastructure)	FIDO (Fast Identity Online)
Authentication + encryption + signing	Passwordless, phishing-proof authentication
Secure email, document signing, VPNs, device trust, regulated environments	Web logins, SaaS apps, cloud accounts, enterprise SSO
More technical; certificate handling required	Easy; biometrics or security key tap
Needs certificates, CA, renewal, lifecycle management	Very simple: key, phone, or built-in authenticator

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Thales IAM Devices

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Thales Smart Card Benefits

Plug & Play
minidriver enabled smart cards

Different interface options
Contact / Contactless / Hybrid

High security levels
FIPS 140-2 Level 2 and Level 3
Common Criteria EAL5+ / eIDAS

Customization support
IDPrime smart cards support tailored branding and printing on the smart card, as well as serial number engraving and customized security features

Various applets
PKI / FIDO / PIV

Enhanced cryptographic
RSA (RSA 4K)& Elliptic curves (ECC 521)

Flexible security policy
Extended on-board PIN Policy

Thales Token Benefits

Plug & Play
minidriver-enabled tokens

Different form factors
USB-A / USB-C / Contactless

High security levels
FIPS 140-2 Level 2 and Level 3
Common Criteria EAL5+ / eIDAS

Customization support
IDPrime tokens support tailored branding and printing on the tokens, as well as serial number engraving

Various applets
PKI / FIDO / PIV

Enhanced cryptographic
RSA (RSA 4K)& Elliptic curves (ECC 521)

Flexible security policy
Extended on-board PIN Policy

High security levels and certifications

- Long-term cooperation with different certification bodies (NIST - US, Common Criteria – EU, FIDO)
- Crypto libraries are developed by Thales (since decades) to minimize the risk of supply chain issues
- Different certifications
  - Common Criteria (for Java Card and for PKI applet)
  - eIDAS
  - FIPS 140-2
  - FIPS 140-3
  - FIPS 201 - PIV
  - FIDO
  - ANSSI

Hybrid cards – Integration with major Physical Access Control vendors

NXP

- Mifare Classic
- Mifare DESFire EV1/EV2/EV3

HID

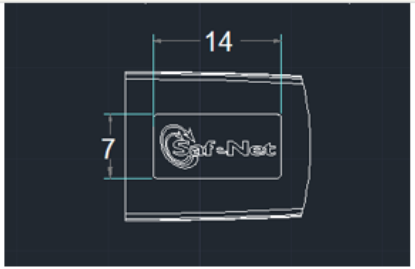
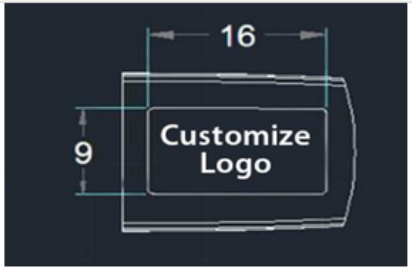
- Prox
- IClass
- SeOS

Legic

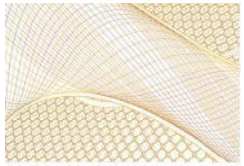
- Prime
- Advant

External look customization

- Smart cards
  - Secure printing
  - Artwork printing
  - Laser graving
- Tokens
  - Different colors
  - Company logo

Logo Dimensions		
Device	Engraving/ Embossing	Pad Printing
SafeNet 5110		
Width x Height	16 mm x 9 mm	16 mm x 9 mm

Card body security features



Guilloche
- Continuous thin lines
- Non-repetitive on detail level
- Provides **basic protection** for the card body **against scanning and copying**

Microtext
- Basic **copy and scanning protection**
- Small characters that look like a line when looked without a loupe (200-300 microns in height)
- May consist of deliberate errors

Rainbow printing
- **Colors change continuously** along printed lines, typically from one colour to another and back
- Unlimited number of colors achieved provides **protection against copying and reproduction**

OVI
- Special high-security printing ink typically used to print a logo or text
- Color changes when tilting the card
- The optically variable effect **cannot be copied**

UV Printing
- Security printed element printed with special inks
- Inks become visible when illuminated with UV light

Holographic overlay
- Holographic element within a plastic protective layer on top of personal data
- **Protect** the personalization **against wear and tear**

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Credential Management (CMS)

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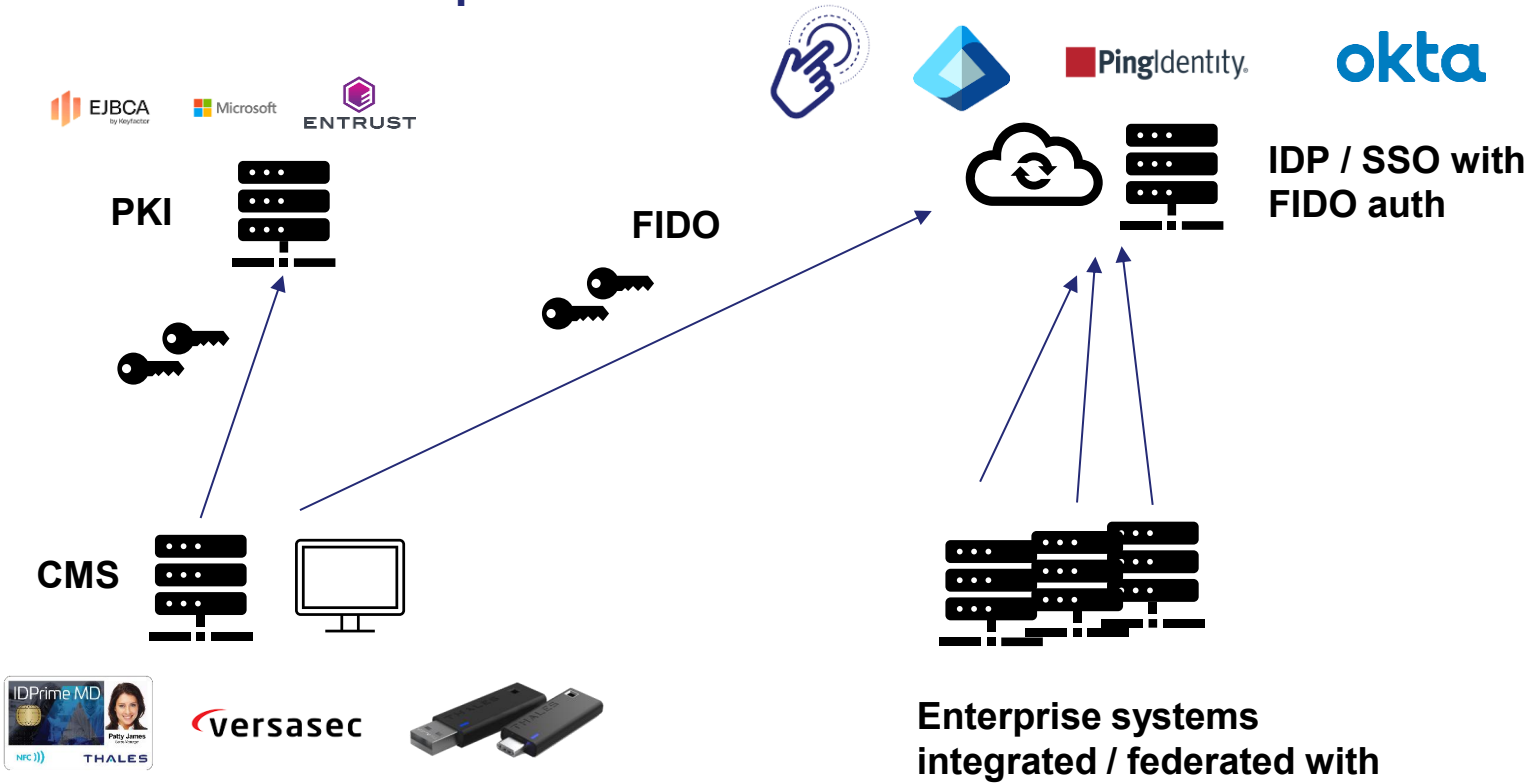
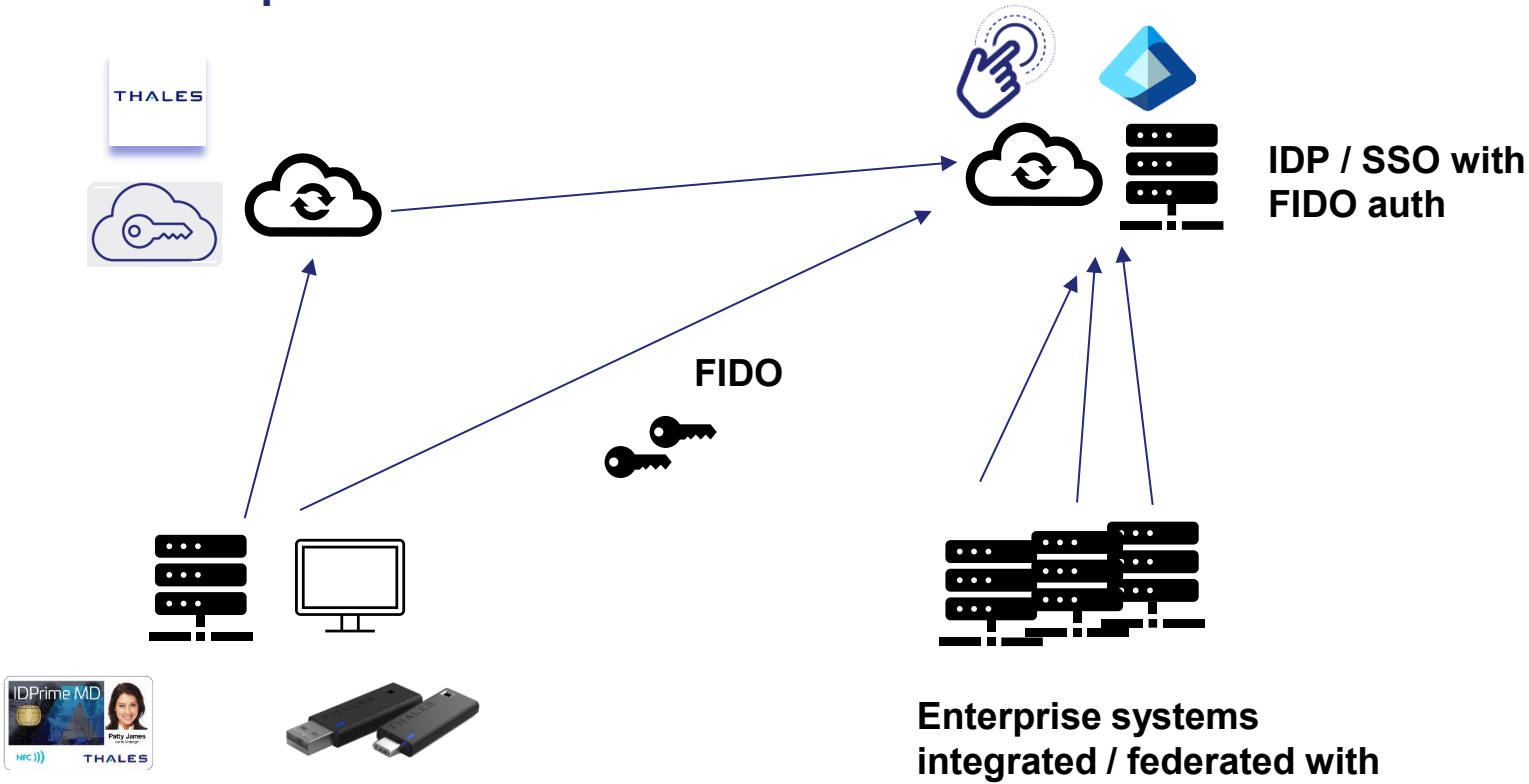
FIDO and PKI enterprise enrollment with Versasec CMS



FIDO Enterprise enrollment with Thales' Lifecycle Authenticator Management



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Authentication platforms

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Safenet Trusted Access – Thales' IDPaaS solution

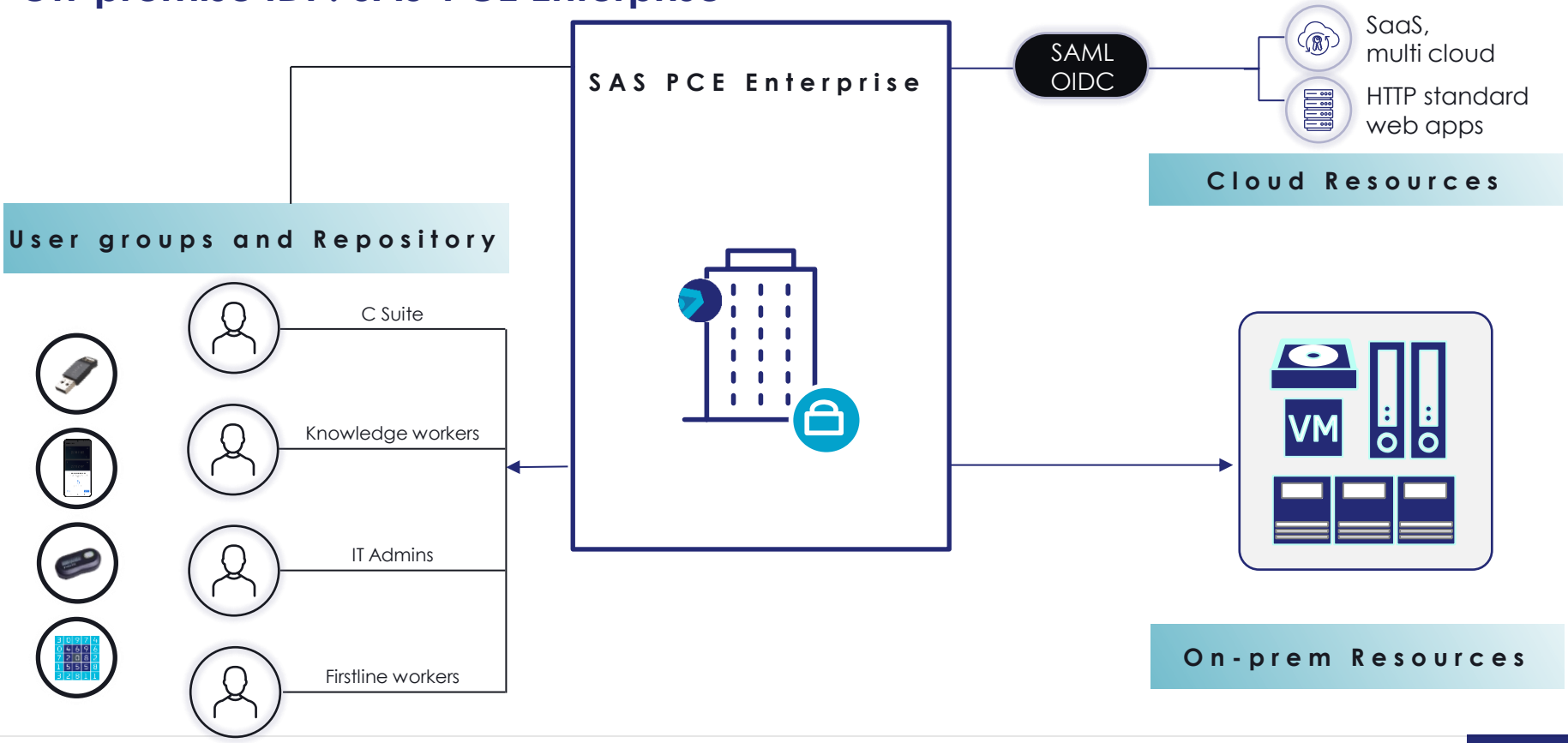
Make effective choices for MFA by focusing on **risk-appropriate options**, rather than check-box compliance, and **encompassing diverse UX needs**

Gartner

Access management and authentication, delivered as a service

Multifactor authentication	Modern authentication	Access management
Tokens	Adaptive Policies	Single sign on
Credentials	Passwordless	Authorization
	Continuous & intelligent Signals Analytics/UEBA Risk assessments Identity validation	

On-premise IDP: SAS-PCE Enterprise



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Thank you

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https://kahoot.it

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