

# Integrated Authentication System: Secfense Suite + Thales CMS + YubiKey

## Solution Overview

The combination of three complementary components Secfense Suite, Thales Certificate Management System, and YubiKey enables the creation of a comprehensive and flexible user authentication architecture tailored to diverse technical scenarios and security requirements across the organization.

### 1. Secfense Suite

Secfense provides an intermediary layer between the user and the application, enabling:

- Deployment of FIDO-based Multi-Factor Authentication (MFA) for any web application without modifying application code, even in legacy or unsupported systems.
- Integration with identity providers (IdPs) using SAML and OpenID Connect standards, allowing passwordless (passkey-based) login to:
  - SaaS platforms (e.g., HubSpot, WorkForce),
  - VPNs,
  - applications supporting identity federation.

### 2. Thales Certificate Management System (CMS)

Thales CMS allows for:

- Centralized lifecycle management of X.509 certificates used in PKI environments,
- Automation of certificate issuance, renewal, and revocation,
- Integration with operating systems (e.g., Windows) and solutions supporting certificate-based authentication (e.g., RDP login, desktop applications, VPN).

### 3. YubiKey Hardware Tokens

YubiKey devices from Yubico serve a dual purpose:

- **FIDO2/WebAuthn authenticator** - enabling passwordless login (passkeys) in line with current FIDO Alliance standards,
- **Client certificate carrier** - supporting PKI-based authentication (e.g., operating system logins, VPN, and network service access).

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## Key Benefits of the Integration

**Flexibility** - full coverage of authentication scenarios: from modern web applications to legacy, business-critical systems.

**Security enhancement** - passwordless user workflows, strong identity assurance using certificates and hardware tokens.

**Fast deployment** - MFA and identity federation can be added without code changes, thanks to Secfense's unique reverse proxy approach.

**Regulatory compliance** - alignment with GDPR, NIS2, DORA, and PSD2 through strong, phishing-resistant digital identity mechanisms.

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### Use Cases

Applicable across industries such as banking, public administration, critical infrastructure, healthcare, energy, and manufacturing.

