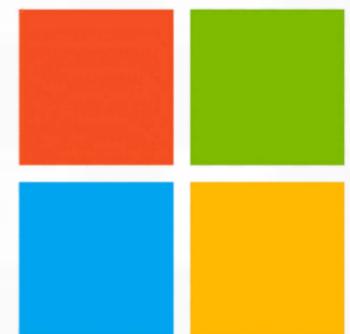




BOOST DIGITAL PROTECTION: ACTIVE DIRECTORY CERTIFICATE SERVICES

Futurex Digital Protection with AD CS

Microsoft's Active Directory Certificate Services (AD CS) is a core component within the Microsoft ecosystem, providing essential certificate issuance and management services. However, storing the private key in software poses significant security risks. Futurex integrates with AD CS to mitigate these risks to offload the private key function to a CryptoHub hardware security module (HSM).

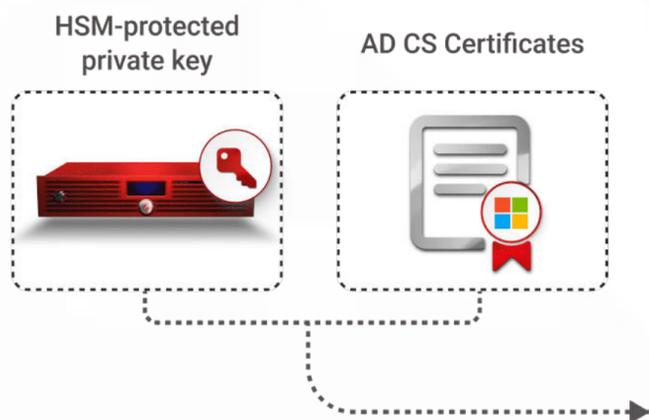


Microsoft

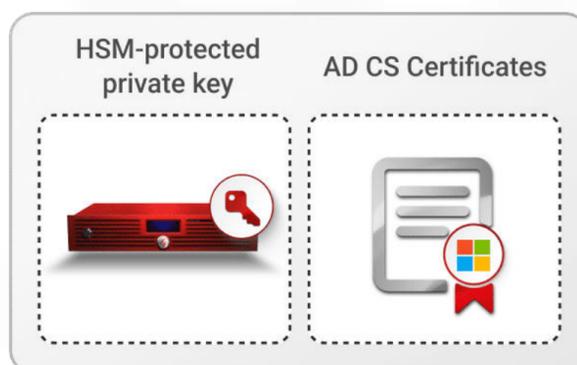
An HSM enhances security by securely storing and managing the private key, protecting it from unauthorized access and potential breaches. Our HSMs meet stringent security standards, including FIPS 140-2 Level 3 certification, and offer robust role-based access management. This centralized key management improves security and aids in disaster recovery (DR). If an AD server is lost, it can be rebuilt with the keys securely stored in the HSM.

Microsoft AD CS / HSM Integration Architecture

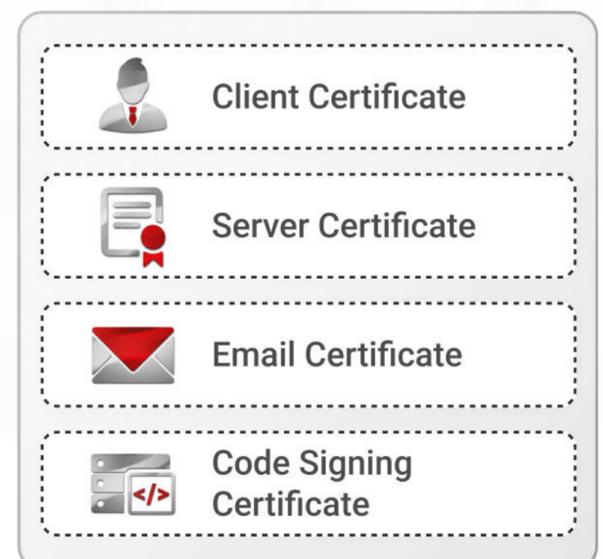
Root CAs



Subordinate CAs



Leaf Certificates





Powerful Security



- ▶ **Certificate Authority Management**
Manages the entire digital certificate lifecycle efficiently and securely
- ▶ **Protection for Root Keys**
Safeguards the most critical cryptographic assets in your PKI with tamper-resistant HSMs.
- ▶ **Protection Against Insider Threats**
Enforces strong access controls and multi-factor authentication for secure PKI

The Futurex Advantage



Integrating with Active Directory Certificate Services is simpler with CryptoHub's intuitive workflow-driven setup. Deploy a robust HSM solution to securely manage and protect your private keys in just a few clicks. This allows your organization to enhance its cryptographic security quickly without the complexity traditionally associated with HSM deployments.

When you choose Futurex, you secure more than just your AD CS environment. CryptoHub is part of a versatile, highly extensible platform that addresses all your enterprise cryptographic needs.

From general-purpose and payment HSMs, enterprise key management, PKI and certificate authority, and data protection, CryptoHub covers all bases.

This comprehensive approach eliminates the need for multiple, siloed products, streamlining your security infrastructure.

▶ Principal Features with Futurex

Compliance: FIPS 140-2 Level 3

Integration Mechanism: Microsoft CNG

High Availability and Synchronization:
Natively Supported

Supported Algorithms: RSA & ECC

Deployment Models:

- On-premises appliance (1U or 2U)
- Cloud - all major CSPs and virtualization platforms supported
- SaaS - 13 data centers worldwide

Supported AD CS Versions:

- Windows Server 2008/R2
- Windows Server 2012/R2
- Windows Server 2016
- Windows Server 2019
- Windows Server 2022

FUTUREX

FUTUREX.COM

For over 40 years, Futurex has been an award-winning leader and innovator in the encryption market, delivering uncompromising enterprise-grade data security solutions. Over 15,000 organizations worldwide trust Futurex to provide groundbreaking hardware security modules, key management servers, and cloud HSM solutions.

864 Old Boerne Road,
Bulverde, Texas 78163

Futurex is headquartered outside of San Antonio, Texas, with regional offices worldwide and over a dozen data centers across five continents. Futurex delivers unmatched support for its clients' mission-critical data encryption and key management requirements.

