

Secure Connections

Entrust's digital certificates are a key component to achieving Zero Trust maturity by providing strong identity, encryption, and signing while enforcing access control.

Overview

One of the greatest challenges organizations have faced in recent times is an expanded attack surface. Applications and systems moving to the cloud, the ability to work from anywhere, and the sheer number of devices and machines connecting into networks means that organizations have more to secure than ever, and much of that exists outside the traditional confines of the IT environment. The security perimeter has disappeared. Strong identity is the new perimeter.

Not only that, but sensitive and confidential data is constantly moving over public and private networks. Whether it's a user logging on to an online portal or sending an email, or as we see in IoT, machine-to-machine communication that occurs without any human intervention. With the increasing volume and sophistication of cyberattacks, it's critical that every single connection and endpoint is secured.

In order to mitigate these issues more and more organizations are looking to implement a Zero Trust strategy to ensure trusted identities are established, access and permissions are enforced, and risk mitigation and response measures are in place. From strong device identity to encryption to micro-segmenting, digital certificates are the most scalable, resilient, and secure way to achieve this.

The Solution

Digital Certificates

Entrust's Secure Connection solutions allow organizations to issue digital certificate-based identities to corporate assets, while also including best practices, governance, and security controls via the PKI including strong issuance and revocation controls and up-to-date certificate policy, operational procedures, and change controls.

Certificate Lifecycle Management (CLM)

The more digital certificates an organization has, the more they require management and automation tools. CLM is an important component of your overall Zero Trust strategy by making sure you have strong issuance protection for your certificates.



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Entrust's CLM solutions providing full visibility into your full certificate estate across environments, centralize control, and provide the automation layer required to mitigate the risks that come with a high volume of certificates across multiple distributed environments.

The Entrust Difference

As globally recognized experts in PKI for more than 26 years, Entrust recognizes that there is no one PKI solution that fits all needs, so we have a portfolio of PKI solutions and deployment models to fit any need.

Entrust's public TLS/SSL certificates offer strong identity verification, least privilege administrations, rapid incident response, and automated controls. Entrust's private certificates offer best practices, governance, and security controls, from how they were architected to strong issuance and revocation controls. All Entrust PKIs and their operations are aligned to industry and regulatory best practices.

Entrust PKI solutions give you flexibility for the life of your PKI.

Entrust digital certificates - both public and private - deliver three key outcomes needed for Zero Trust:

- Strong device identity. From IoT and mobile to servers and virtual machines.
- Encryption. For entities like web servers and networks.
- Enforced access control. To micro-segmented networks, applications, or systems.

In addition to digital certificates, certificate lifecycle management becomes critical. It enforces your Zero Trust strategy and ensures you have strong issuance protection for your certificates and mitigates common risks such as a rogue certificate being issued giving too much access or privilege. Entrust's CLM solutions deliver the visibility, control, and automation organizations require to not only implement Zero Trust today but also to prepare for a post-quantum future.

Entrust's robust CLM Solutions help customers align with the principles of Zero Trust:

- Verify explicitly. Making sure the right certificate is provisioned to the correct endpoint or target.
- Least privilege. Providing the right assurance, access, and privilege by picking the correct certificate and lifecycle controls.
- Assume breach. Contain an attack and limit the loss and damage through revocation.



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Entrust delivers PQ-ready solutions

The threat quantum computing poses to digital security is expected to be realized within the decade, so organizations need to begin preparing today. From gaining visibility of all cryptographic assets across environments, to assessing crypto-agility maturity and developing a strategy and roadmap to implement post-quantum cryptography (PQC), to testing and implementing PQ-ready solutions – such as PKI and HSMs – Entrust can help with the preparedness journey to future-proof your organization.

BENEFITS

- Public and private PKI with up-todate certificate policy, operational procedures, and change controls
- Unified public and private certificate management console providing centralized visibility and control of digital certificates
- Built in crypto-agility
- CA resilience and best-practice incident response
- CA keys stored in certified data centers
- Support all stages of the customer cloud journey
- Extendable to CLM, cryptographic asset discovery, key and secrets management, APIs, and more
- Broad portfolio of solutions that extends beyond identities to securing data, network, apps, and workloads and that integrates with a broad partner ecosystem











