

Implementing a Private PKI to secure internal systems, and how to manage the unique challenges



What is Private PKI?

- A secure, organization-controlled certificate authority (CA)
- Issues digital certificates for authentication, encryption & integrity
- Ensures trust across internal applications, devices & users



Key Benefits of Implementing Private PKI

- **Stronger Security:** Full control over cryptographic assets
- **Cost Efficiency:** Eliminates reliance on external CAs
- **Regulatory Compliance:** Meets industry-specific security mandates
- **Operational Flexibility:** Custom policies for authentication & access control



Common Challenges in Private PKI Deployment

- **Certificate Lifecycle Management** – Expiry tracking, renewals & revocations
- **Integration Complexities** – Compatibility with enterprise applications
- **Scalability** – Managing growing certificate needs across cloud, IoT & hybrid environments
- **Security of Root CA** – Preventing unauthorized access & key compromises
- **Compliance Burden** – Adhering to evolving regulations & audit requirements



eMudhra's Approach to Private PKI Implementation

- **Secure & Scalable Architecture** – On-premise & cloud-based deployment
- **Automated Certificate Management** – Lifecycle tracking & renewal automation
- **Strong Root CA Protection** – HSM-backed key storage for maximum security
- **Seamless Integration** – Supports enterprise apps, VPNs, IoT, and cloud services
- **Regulatory Compliance Assurance** – Adheres to global security standards (NIST, GDPR, ISO 27001)



Why Choose eMudhra for Private PKI?

- **Proven Expertise** – 15+ years in digital identity & cryptography
- **Globally Trusted CA** – Supporting enterprises across industries
- **End-to-End Solutions** – Identity management, digital signing & encryption
- **Enterprise-Grade Security** – HSM-backed key protection & policy enforcement
- **Customizable & Scalable** – Solutions tailored to specific security needs



Success Stories: eMudhra in Action

Case Study 1

Leading Financial Institution

- Implemented Private PKI to secure online transactions & customer authentication
- Reduced fraud risks & achieved regulatory compliance

Case Study 2

Government Agency

- Deployed eMudhra's PKI to secure internal communications & citizen services
- Enhanced operational security while ensuring seamless scalability





Take the Next Step with eMudhra

Partner with us to:

- Secure your internal systems with a robust Private PKI
- Automate certificate lifecycle management & policy enforcement
- Stay compliant with evolving global security standards

Contact us at www.emudhra.com today to get started!

