

# emBlock

# Smart Contract Blockchain Solution















# emBlock takes the complexity out of blockchain. You can deploy your entire ecosystem in 3 simple steps.

Blockchain has quickly moved from a buzzword to a technology that could potentially alter the way many industries work in the future. With privacy, immutability, and non repudiation at the core of the values that blockchain offers, it's a technology which is bound to take off in the coming decade.

eMudhra's emBlock allows enterprises and governments to not just experiment but quickly adopt a scalable blockchain platform capable of executing smart contracts for various use cases such as eKYC, Land Records, Communication, and more.

### Why emBlock?

emBlock is built for enterprises and governments to benefit from immediate consensus, real-time information sharing, and smart contracts.

The platform comes with a simple UI where organizations can set up a hybrid clustered network (on-premise and on the cloud), deploy and setup Blockchain, define organizations, and finally, set up Smart Contracts in an intuitive manner.

Unlike public blockchains, emBlock allows for access control to facilitate need based access in addition to API based provisioning of nodes.

### **Benefits**

- Reduce operational costs significantly through more efficient processing of transactions internally, externally or both.
- Manage access permissions, consensus logic, and other elements which make blockchain usable in most enterprise environments
- Use Digital Signatures in the blockchain ecosystem to map identity to transactions and bring legal non-repudiation to transactions on the chain
- Simple UI with a sequential set up process that makes blockchain adoption for various use cases easy
- Ability to integrate Smart Contracts with business workflows easily

# Enterprise level blockchain deployments can add a lot of value in terms of cost, reliability, and operational efficiency.

emCA for trusted Identity

emBlock is pre-integrated with emCA, eMudhra's Certificate Lifecycle management suite. emCA issues Digital Signatures to various nodes and individuals as required to facilitate end to end legal non repudiation of all transactions on the blockchain ecosystem. Identity, a very important element to business transactions today, can become part of your blockchain ecosystem by default.

### Hyperledger Fabric

Hyperledger fabric offers a multitude of benefits for Enterprise PKI. With the ability to offer permissioned membership and facilitate data on a need-to-know basis, it gives adequate importance to privacy. On the other hand, it works on a modular and scalable architecture which can allow expansion of the ecosystem down the line.

### emLabs

emBlock is a solution which was built out of eMudhra's emLabs. emLabs works on making next generation technologies a reality today and understanding the future of such technologies. emLabs is headed by members who sit on the UN Council for blockchain to understand global impacts of the technology and embed this learning into the solution.

### About emLabs

- Founded in 2015, established in eMudhra HQ in Bengaluru, India.
- Focusing on Blockchain, IoT Security, Cloud PKI, and Identity Governance
- Successfully rolled out emSecure, emAS IAM in the past 6 months
- Works with Regulators across multiple regions to drive PKI Adoption and ease of use
- A member of the Cashless India Pilot driven by Dahlberg and US Aid
- Working with leading chip manufacturers like Infineon to drive IoT security at manufacturing level



# Use Cases

### Know your Customer & Customer Onboarding

Incorporating intelligent software like chatbots and voice responders, companies can look beyond traditional PoS interactions to nurture and grow relationships with customers

### Land Registration & Records Management

Enabling authentication of credentials of users ensuring non tampering of database and transparency. Data can be verified without any human intervention, giving no scope for manipulation

### Lending & Trade Finance

By modeling self-executing contracts on the blockchain, parties across lending and trade finance continuum can automate contract compliance and ensure faster assured payments by preventing disputes that arise from various ambiguities

### Internet of Things

Creating the seamless fabric that helps expand the possibilities for people, society and the economy in our connected world

# Implement your Blockchain network with emBlock



### API based provisioning

emBlock allows provisioning of nodes required for Blockchain network



### Access Control

Unlike public Blockchain like Bitcoin, emBlock allows access control mechanism to only need based access



### Easy Deployment

Using a plug and play deployment, ensure legal non-repudiation and transaction immutability

# About eMudhra:

As the world goes Digital, security is ever more crucial to protect identities, data, and enable trust in a digital society. eMudhra focuses on SECURE Digital Transformation to enable organizations to progress and evolve without sacrificing "Trust," which matters most in our society. With an end-to-end stack around trust services, PKI, Paperless transformation, and Digital Authentication, eMudhra is optimally placed to aid digital journeys where identity assertion is critical.

eMudhra chairs the Asia PKI Consortium, is a board member of the Cloud Signature Consortium and a member of the CA Browser Forum. Having been in business for over 12 years and built a reach that spans more than 50 countries, eMudhra is deeply committed to bringing change and helping societies across not just go digital but go digital in a secure way.



