

# GoChain

## Enterprise Blockchain Manager

Developing, deploying and  
managing blockchain networks



GoLedger



## Who are we?



# GoLedger

We are a company with more than **7 years** in the field.

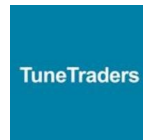
Our mission is to **enable digital transformation** via **Blockchain solutions**.

**We are general members of**



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# Some of our projects



# Samuel Venzi

- CTO @ GoLedger
- Working with Hyperledger Fabric since 2018
- Working with Besu since 2021
- Certified Hyperledger Fabric Administrator (now extinct)
- Hyperledger Fabric Certified Practitioner and Besu Certified Professional
- Exam Developer for HFCEP e BCP
- Maintainer of CC-Tools
- Mentor for LFX projects involving CC-Tools



<https://www.linkedin.com/in/venzi/>

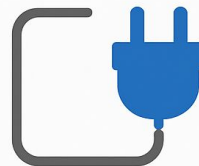
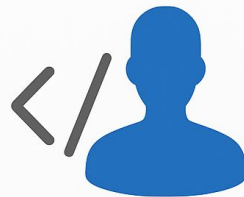
<https://github.com/samuelsenzi>





# Barriers to Enterprise Adoption

1. Complexity of network deployment
  - a. Manual setup of nodes, certificates, policies, contracts
2. Infrastructure and governance challenges
  - a. Multi-org coordination, infrastructure provisioning, visibility
3. Shortage of skilled developers
  - a. Deep understanding of internals
4. Integration with existing systems
  - a. Legacy systems, APIs and ERPs





# What is GoChain?

GoChain is an enterprise-grade blockchain manager designed to simplify and accelerate the deployment, operation, and governance of private blockchain networks.

## Key Capabilities

- Deploy private blockchain networks based on Hyperledger Fabric or Besu
- Manage organizations and scale your network as it grows
- Ensure compliance through built-in governance and policy controls
- Simplify administration with an intuitive no-code interface

# Hyperledger Fabric

- The **most widely used** open-source **permissioned blockchain** framework in the world.
- An IBM project and **one of the first major projects** to join the Hyperledger Foundation, now **LF Decentralized Trust**.
- **Private and corporate** networks, with their own **architecture** and model.
- **Shared governance** model.



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Hyperledger  
FABRIC

# Besu

- **Open-source client** for Ethereum, written in Java.
  - EVM-compatible.
- A ConsenSys project that is now part of the **LF Decentralized Trust** projects.
- Can be used in **public or private** networks.



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besu





# Pillars of GoChain

## Organizations

- **Collaborative** management.
- **Node** and **API** creation.
- **CA identity** management (Fabric)
- Account (EOA) management (Besu)
- Node **monitoring**
- Join **multiple organizations**

## Business Groups

- **Collaborative** governance.
- **Invite organizations** to the group.
- **Approval policy**.
- Create **multiple** channels/private networks.
- Join **multiple** Groups.
- **Chaincode/smart contract** lifecycle.

## Extra Tools

- Provision **cloud infrastructure**.
- Develop **no-code smart contracts**.
- Use **custom code**.
- **Integrate via API**.



# Real-World Use Case: Notarchain

**Notarchain** is a Hyperledger Fabric-based network serving as the backbone for the digital service **e-Notariado**, maintained by Colégio Notarial do Brasil.

- **Exclusive for Notary offices** in Brazil
- Notary offices maintain their own **nodes**
- Registers digital **documents, signatures** in the network
- Enables digital transfers of **real estate deeds** with smart-contracts

Built with GoChain.



# Notarchain: Smart Escritura


Modernizing Real Estate Contracts with Blockchain and Notarial Trust


**Smart Escritura** is a public deed recorded by a notary that includes a digital layer for managing the fulfillment—or breach—of contractual obligations, implemented on the **Notarchain** blockchain.

- A preliminary **real estate contract** is **notarized and digitally structured**
- **Payment terms** are **tracked** through the Smart Escritura platform
- Automatic confirmation when everything is paid, or start of cancellation if payments fail
- Real-time interaction between buyer, seller, and notary



# Real-World Use Case: Notarchain

 **Notarchain**




## Transação


Criado em 03 de fevereiro 2025, 15:38 UTC-03:00


Canal signatures-channel

[Ver Bloco](#) →

### Detalhes

**ID de Transação**  
46a53bc9fc3921...94f020573b9660 

**Criador**  
CNBMSP 


**Assinatura do Payload**  
MEUCIQCQ0tJmzS...J5hrNLyUkQhQ= 

[Exportar Conteúdo](#)

### Conteúdo da Transação

Nome do Chaincode	Versão do Chaincode	Método
signatures	1.8	storeSignature

**Endossos**

 CNBMSP [Ver assinatura](#)

**Modificações à Blockchain**

**Namespace**  
\_lifecycle

**Namespace**  
signatures

**Write Set**

```
sha2_512340cc78a2ce62fda5bb18af2e6814272e1285b554b98b74403fd78f8790b92915aaebc8c06c72fd32797e1268f3475d1e416a9c2667575c52e7395672d78bda
```

```
{  "sigHash": {    "hexValue":    "34C0CC78A2CE62FDA5BB18AF2E6814272E1285B554B98B74403FD78F8790B92915AAEBC8C06C72FD32797E1268F3475D1E416A9C2667575C52E7395672D78BDA",    "algorithm": "SHA2_512"  },  "ocsp": [],  "crls": [    {      "hash": {        "hexValue":        "122F0033C1E4171B5D2BAB2FC0119352FEE17AFF6804F93BD1F899903000995038236F76D683A6C44A4A6C653A8335CE8899037F94B4EED85E46DE6D8FA0C7",        "algorithm": "SHA2_512"      }    }  ]}
```



# Real-World Use Case: Energy Efficiency Label

The **Procel Label** is a Brazilian energy efficiency label awarded to products, buildings, and equipment that meet high performance standards in energy savings, helping consumers identify the most efficient options on the market.

- Labels are awarded with a **QR Code backed by the approval process** recorded on **blockchain**
- **Transparency** for customers when buying products
- **Fairness** to manufacturers that are awarded the label

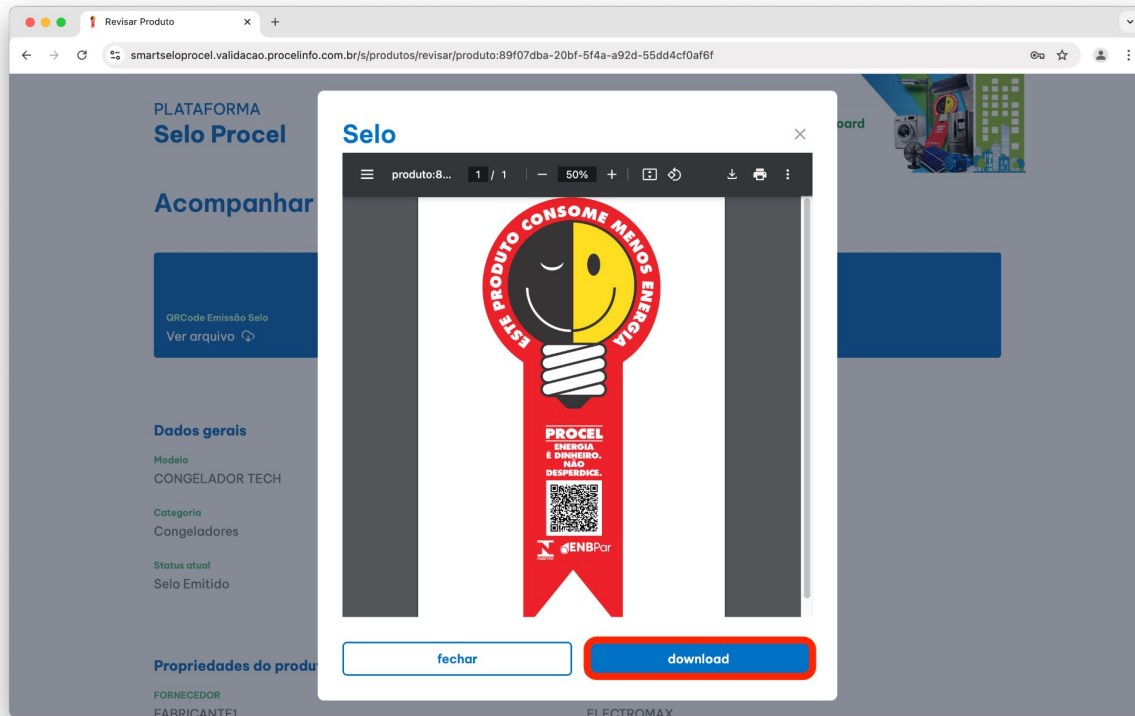
Built with GoChain.



**PROCEL**



# Real-World Use Case: Energy Efficiency Label





# How can we create blockchains in GoChain?

The GoChain platform is composed of 4 environments:

- **GoFabric** for managing Hyperledger Fabric
- **GoBesu** for managing Besu
- **GoInfra** for managing and provisioning infrastructure
- **Builder** for creating smart-contracts and chaincodes



# ***Demo***





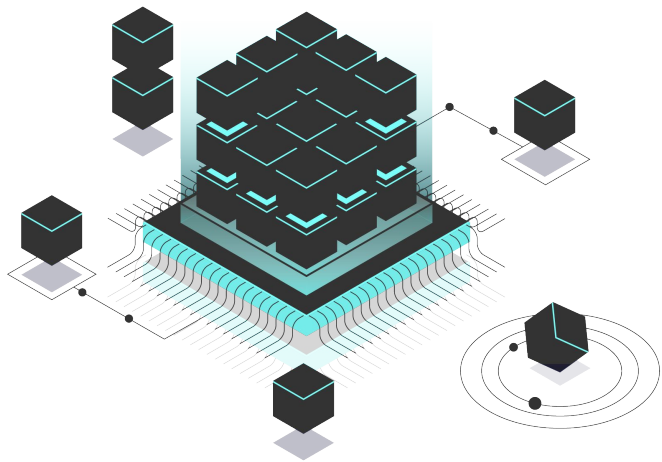
## For more information

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- <https://linkedin.com/in/venzi>

Learn more about GoChain at:

- <https://goledger.io/en/gochain-en/>



# Thank you!