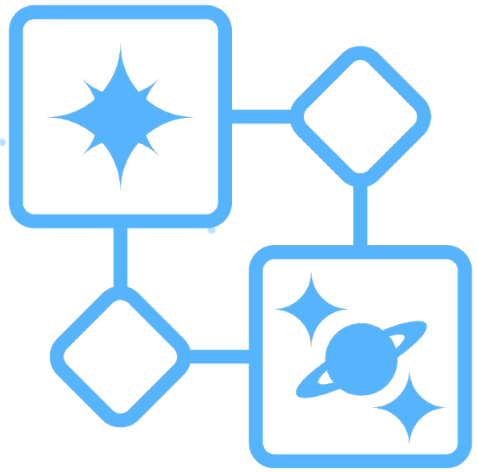
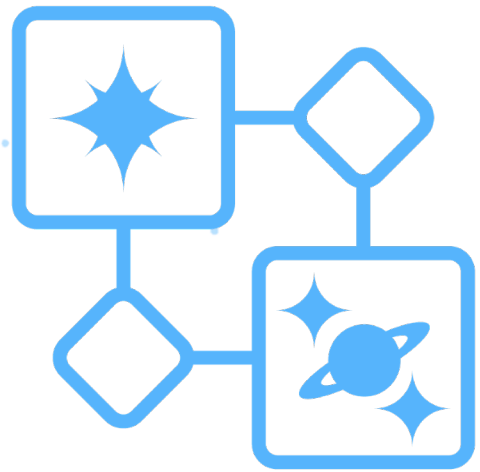


ASTRAKODE

July 6, 2022

SummerSoC
Service Oriented Computing



ASTRAKODE

Problem

“Main difficulties encountered while developing blockchain solutions?” A survey:

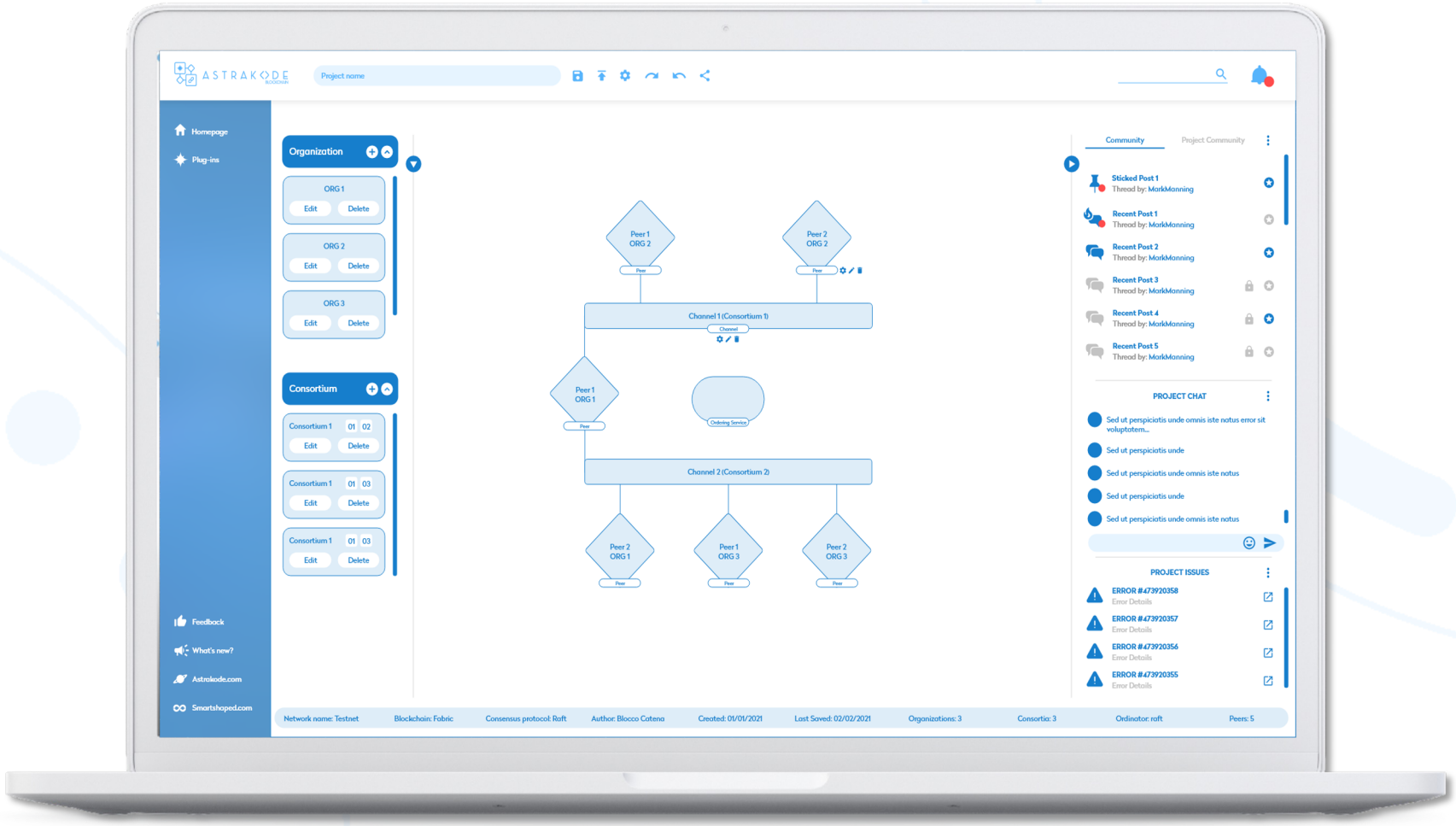
Limited access to the technology due to its **complexity** and **stack size**

Scarcity of qualified professionals able to develop production grade solutions

Scarcity of documentation and other similar resources

In addition to AstraKode’s own experience with the development of similar solutions, the problems identified have also been validated through market research.

The Visual Approach



ASTRAKODE
BLOCKCHAIN

Solution

AstraKode Blockchain (AKB), a low-code solution for (enterprise) blockchain development based on four pillars:

- **Network Composer**, a visual environment for blockchain (Hyperledger Fabric) network creation
- **Smart Contract IDE**, another visual environment for smart contract development
- **Assisted deployment** and **testing** functionalities for both visual environments
- **Built-in community** for peer-to-peer support and documentation/wikis

Why AstraKode Blockchain?

- Unprecedented **speed**, **ease of design** and **accessibility**
- Ability to design, develop, and deploy a production-grade solution **within one platform**
- Low/no code approach makes for **ease of use** and **self-documented and validated projects**
- The platform's **community** offers access to **peer support** and **valuable learning content**

Roadmap

CURRENT VERSION: CERES

Network Composer
Code Generation

Projects: 459

Users: 803

Major Update

Smart Contract IDE

Major Update

Premium Features
Template Marketplace

Major Update

Assisted Deployment
Testing Suite

Major Update

Additional Tech Compatibility
(e.g. Corda, Algorand)

NGI Ontochain – BOWLER Project

Under the European Commission Next Generation Internet initiative, ONTOCHAIN was launched in September 2020. The initiative will provide funding to internet innovators for developing Blockchain-based knowledge management **solutions that address the challenge of secure and transparent knowledge management** as well as **service interoperability on the Internet.**

NGI ONTO CHAIN

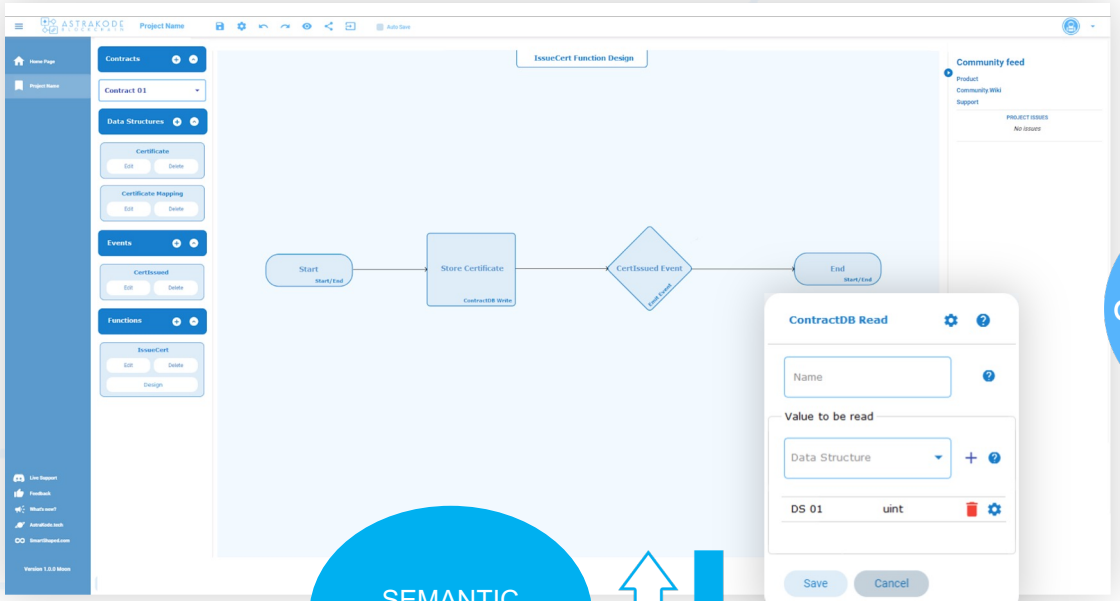
D-VISOR

ASTRAKODE

ASTRAKODE BOWLER

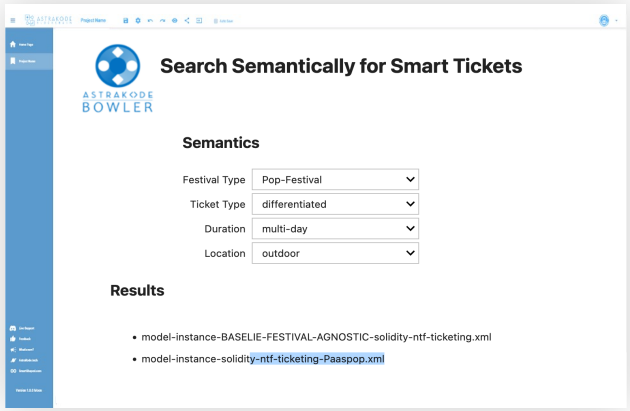
BOWLER will **enable application programmers** who are **not well-versed in blockchain technology** (and smart contract) **to model smart-contract** enabled applications.

BOWLER In Action



CODE GENERATION

SEMANTIC REASONING



&

Search-REST API

Storage-REST API

Semantic transformation

&

SPARQL

{REST API}

Blueprint repository

Blueprint Reasoner

ASTRAKODE BLOCKCHAIN

Open Research Topics / Collaborations

- AstraKode XML Model to RDF Model transformation
- Solidity contract to AstraKode XML Model transformation
- Security assessment in smart contract code and abstract models
- Smart contract optimization / infrastructure optimization
- ChainOps for smart contract-based distributed applications

AstraKode Blockchain – Deep Dive

AstraKode Blockchain - Product Deep Dive - Watch Video

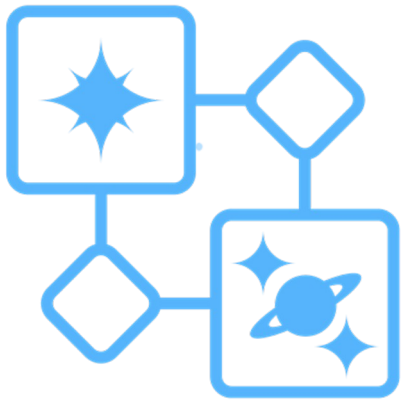
ASTRAKODE
BLOCKCHAIN

Q&A and CTAs

- The platform is **free to use** at the moment and will always have an **extensive free perimeter** from which to download fully **opensource generated code**

- **Partnerships with universities** and research/training institutions on blockchain topics: **astrakode.tech/partnerships**

Thank you!



ASTRAKODE

Website: www.astrakode.tech

HQ: Corso Gabriele Manthoné, 69, Pescara, 65127, Italy

Mail: hello@astrakode.tech