Hyperledger Besu Workshop for Financial Services

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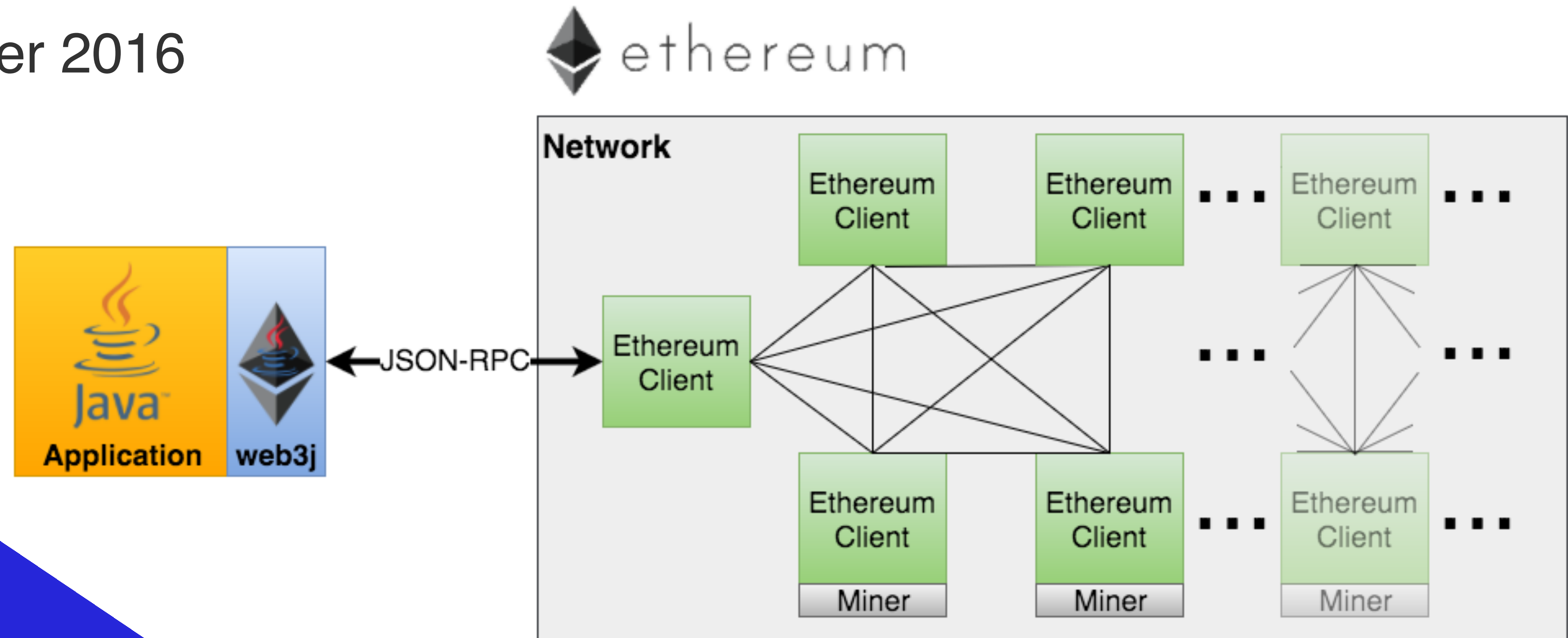
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Web3 Labs

JVM development on Ethereum

Web3j and Besu

Web3j

- Leading open-source developer library for Ethereum

- Over 2 million downloads

- Created: September 2016

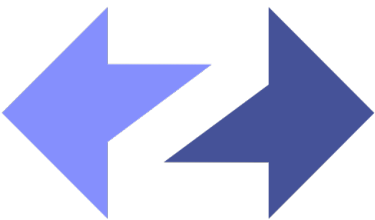- GitHub stars: 4.5k

Corporate users

vmware SAMSUNG IMC

vodafone FNALITY UBS

Web3 users

AlphaWallet

CONSENSYS Magic zkSync

SIMBA Harmony

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Components

Core library

- JSON-RPC, wallets, smart contract wrappers

Build tools

- Gradle and Maven plugins

- **Embedded EVM (Hyperledger Besu)**

- Embedded Solc + version manager

- Testing framework

- IntelliJ debugger

CLI

- Project scaffolding

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Web3j and Besu

Besu

- Acceptance tests

Web3j

- Besu module

- Besu EVM

- Transaction handling

- Besu privacy support

Alternatives

Web3j

✅ Up to date

✅ Supports GoQuorum and Besu JSON-RPC API

✅ Create and send private transactions

✅ Privacy group management

✅ Java direct interaction with Besu

Web3js-Quorum

❌ Outdated ❌

❌ Supports GoQuorum and Besu JSON-RPC API

✅ Create and send private transactions

✅ Privacy group management

❌ Java direct interaction with Besu

Web3 Labs

Web3 Labs started to contribute to Besu development

✅ Actively submitting pull requests to main Besu repository

✅ Participate and sharing ideas in Besu contributors community

✅ Engaging as mentor in different Hyperledger programs

✅ Keeping Web3j compatible with Besu needs

✅ Supporting multiple production deployments in enterprises

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Besu Monitoring Solutions

Operational metrics

- Prometheus/Grafana

- ✅ Node health scenarios

- ❌ Normalise on-chain data

- ❌ Network health scenarios

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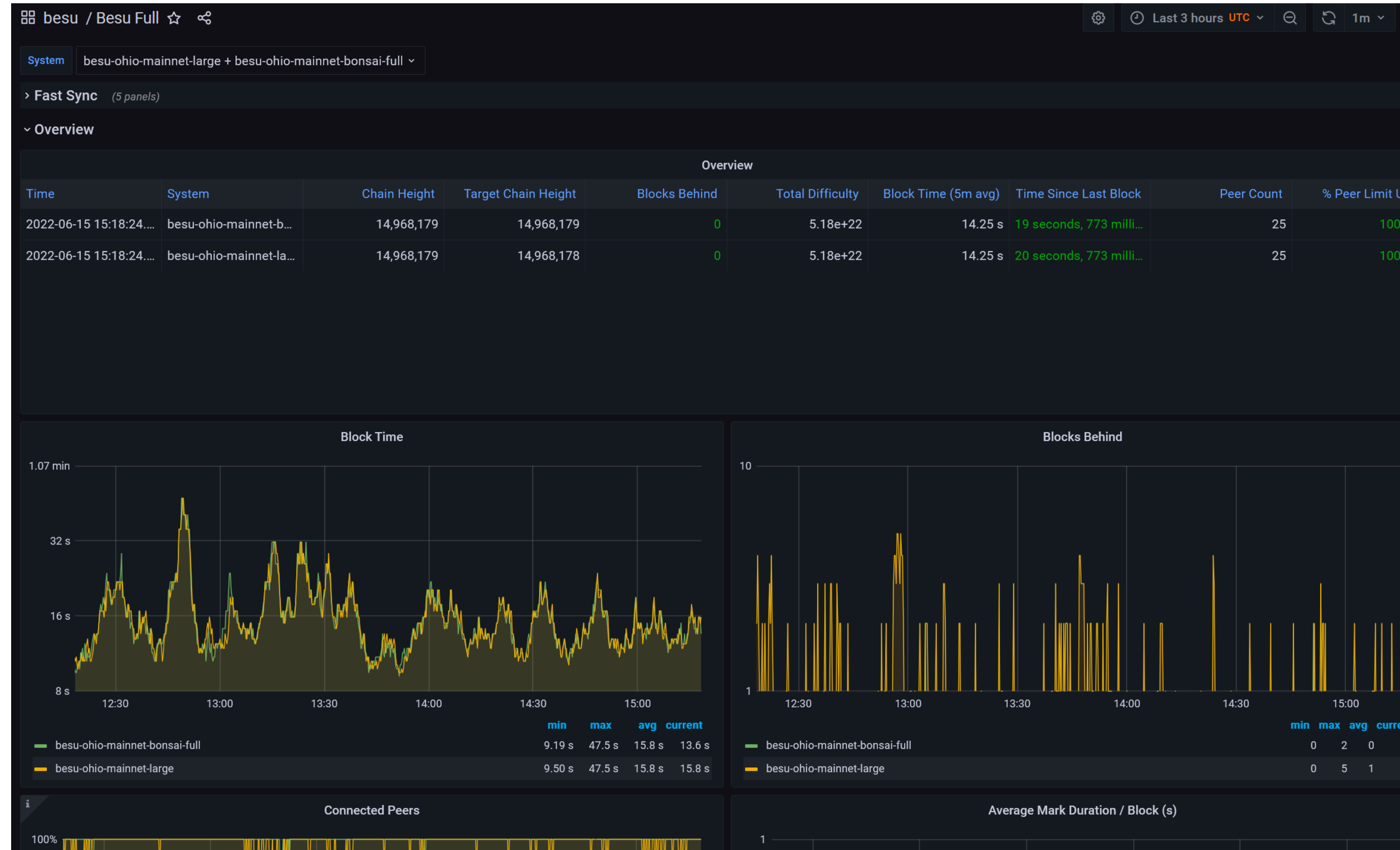
Chainlens

On-chain metrics

- Token, account and contract activity
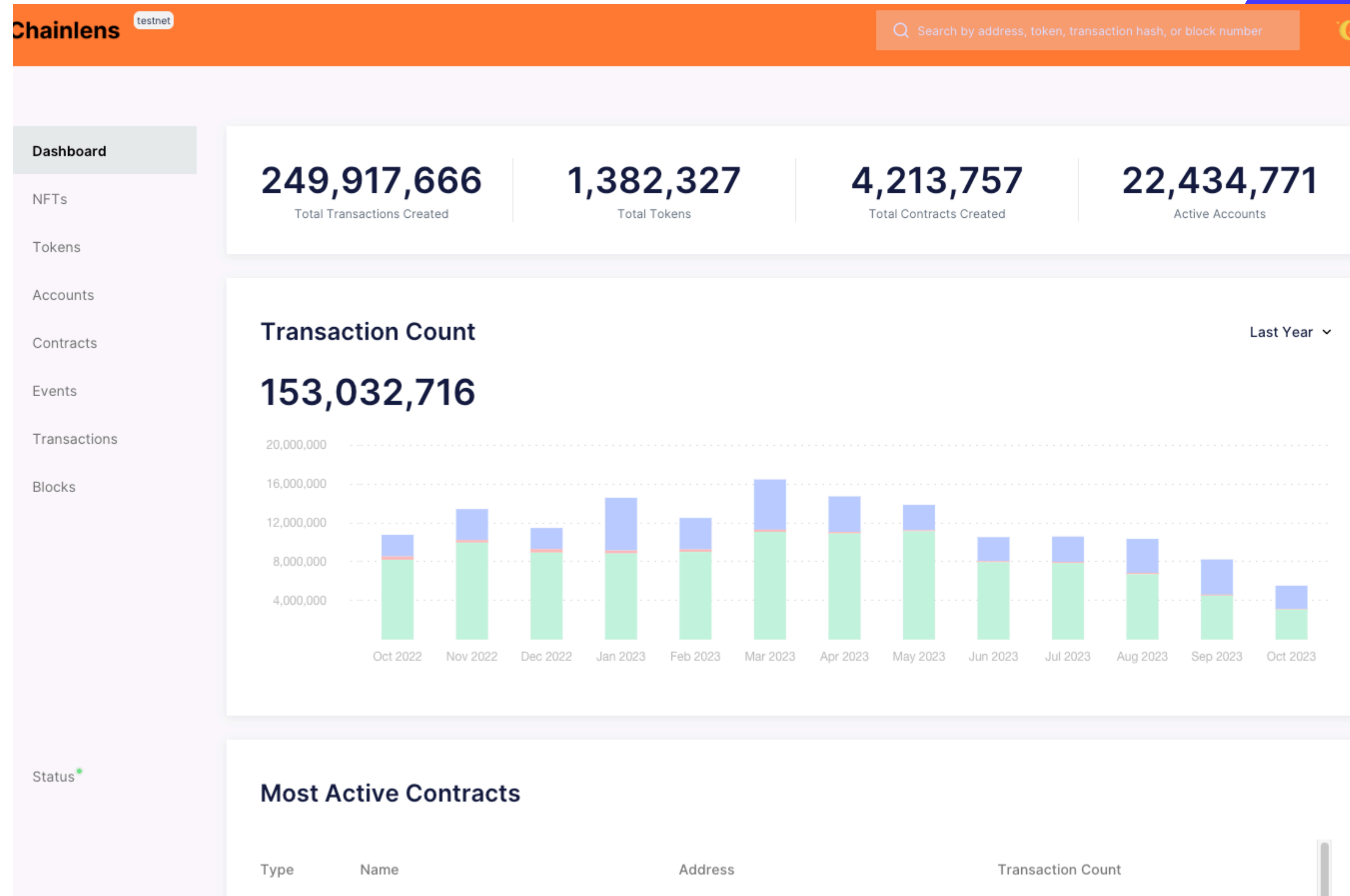
- Events, transactions, blocks

Reporting

- Robust API

- Advanced search, filter and sort

Takeaways

Web3j 🤝 Besu

- Active support for Besu development

- Private transaction handling for Besu permissioned networks

- Monitor Besu networks via Chainlens

- Web3 Labs is actively engaged in the Hyperledger Besu contributors community and supports a number of enterprises in production with Besu.

Web3 Labs

Web3 Labs

Web3 Labs is a leading blockchain strategy and technology company specialising in decentralised infrastructure solutions.

Their Chainlens platform provides data and analytics for EVM blockchains and appchains.

They also provide commercial support for Hyperledger Besu and Quorum.

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