

Small optimizations for critical decisions

30.March.2023

AGENDA

System overview

There's a lib for that

The last mile

Compaction

WebSocket API misconceptions

Micro-frontends

Infrastructure for frontend

Refactoring

A note on quality

Q&A



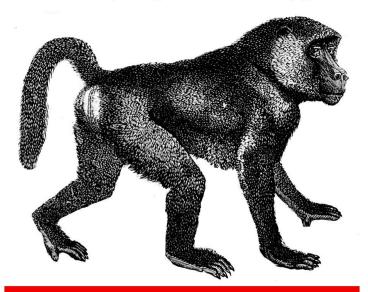
System overview

- 10s of thousands of services
- Millions of transactions per hour
- 10s of millions of updates per hour
- Multiple verticals
- Highly regulated niche
- Spiky load
- Performance vs Cost

There is a lib for that

- Code audit
- Dependencies audit
- Roadmap
- Open issues
- State of the repository
- Commit history
- Security audit
- Distribution in the internal network
- Executing on CI/CD environment
- Executing on engineer's machines

Code written by a stranger on the Internet is always good



There is a library for that

The last mile delay

- Transmission medium
- Propagation
- Hops on the network
- Storage delays
- Last mile delays

Maybe a parrot is responsible for the packet loss



Compaction

- Deduplication
- Compression
- Aggregation
- Pruning

Compression for smartasses

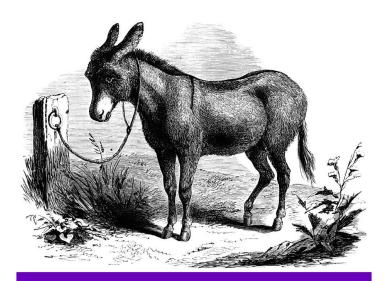


Compaction

Just use SignlR and forget about it...

WebSocket API misconceptions

- It is hard
- Let's not reinvent the wheel
- There's got to be a library for that



WebSocketAPI misconceptions

Micro front-ends

- Application layering
- Vertical segregation
- Communication design
- Interface design
- Deployment strategy
- Independent deployment/testing/development
- Development experience
- Many teams extending the same platform

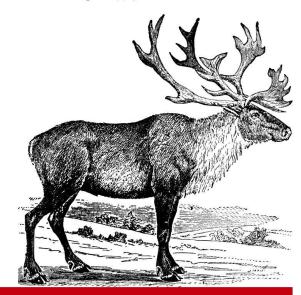


Micro front-ends

Infrastructure for frontend

- Getting NPM packages securely and safely
- CI/CD
- Release management
- Distributing content in packages
- Communication between packages
- Testing environments

How NOT to get supply chain attacks



Infrastructure for the front-end era

Refactoring

Changing code and seeing what happens

Changing stuff and seeing what happens



Refactoring other people's code

A note on quality

- Quality is everybody's job



ABD

