

Mize

Planning and MVP implementation of the Mize
data
engine



Chapters

- **WHY** bother so much about data management
- **HOW** Mize will enable better data management

WHY

bother so much

Home Energy System Example

Solar Inverter



GOODWE

Dryer



Battery



Heating

HELIO THERM

Die Wärmepumpe



Electric Car



Car
charging

wallbox



Oven



SIEMENS



Work better together

The good old days...

- Unix philosophy
 - Write programs that do one thing and do it well.
 - **Write programs to work together.**
 - Write programs to handle text streams, because that is a **universal interface**.
- Anti examples: Android, IOS

HOW

to fix the world...

Inspiration from Filesystems

- An established way of managing data (especially storing)
- Well known by users
- Problems:
 - file formats are most often application specific -> no interoperability
 - No way for two applications to modify at the same time
 - No standard way to listen for changes
 - No access from multiple devices

The Item

- Improves upon files in filesystems
- Fully managed by the Mize data engine
- File **and** folder in one
- Additive types instead of application specific file formats
 - Generated language bindings for developers
- Accessible from any device thanks to the Mize data engine
 - Custom protocol
- Changes are handled and propagated by the Mize data engine

Interoperability :

Capabilities >>> what end users think is possible

One Library - everywhere

- Any programming language
 - Every language can load and use a C-Library
 - Required to do literally anything with an OS
 - With minor modifications the Rust build system can emit such a C-Library
- Any platform
 - Separation of platform dependent and independent code
 - Cross compiling setup -> with nix:)

```
src >>> tree -L 2
.
├── core
│   ├── error.rs
│   ├── id.rs
│   ├── instance
│   ├── item.rs
│   ├── lib.rs
│   ├── memstore.rs
│   ├── proto
│   └── types
├── lib.rs
├── platform
│   ├── bare
│   ├── jvm
│   ├── os
│   └── wasm
└── test
    └── mod.rs
```

