Zcash
FROST UniFFI SDK

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FROST UniFFI SDK (PoC)

URL: https://github.com/pacu/frost-uniffi-sdk

Goals:

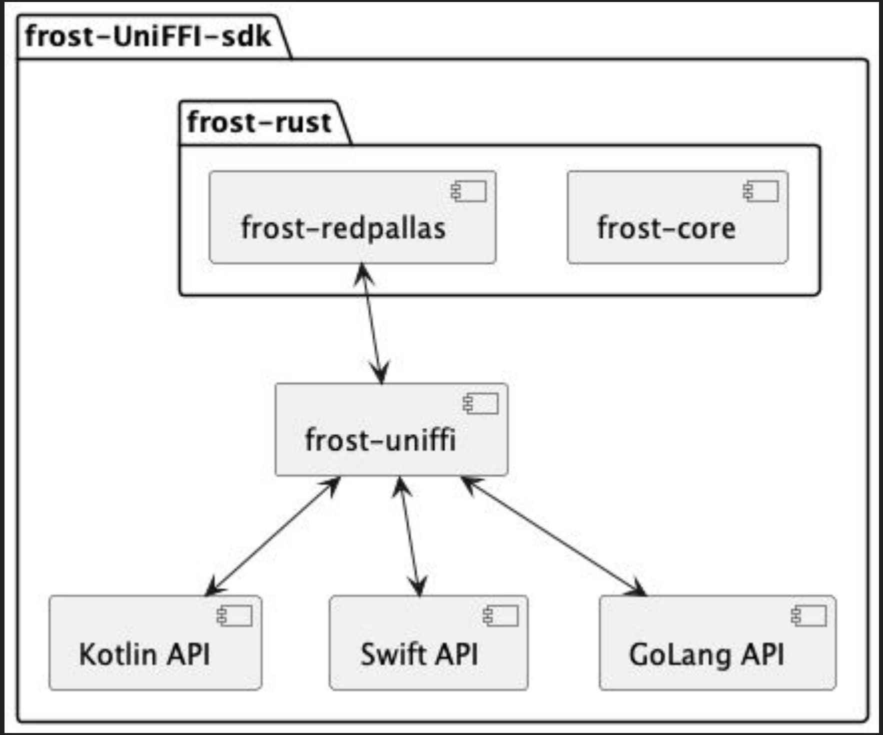
Bring Randomized FROST Rust crates to other languages without porting or rewriting

- Languages:
  - GoLang (infrastructure)
  - Kotlin (JVM and Android)
  - Swift (Apple Platforms like iOS and Mac)

Architecture

The Mozilla UniFFI framework allows having 1 different FFI per language.

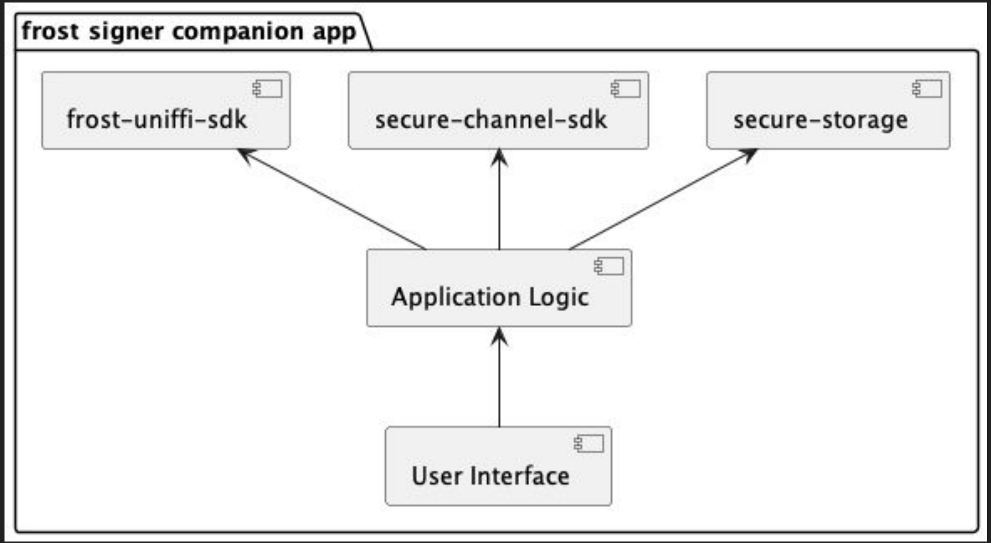
The target languages call the frost-uniffi primitives.



Use case: FROST companion application

A Mobile companion Application that helps Signing UX

- Can create
  - Trusted Setup
  - DKG
- Can participate in TSS or DKG signature
- Can backup own or restore other shares



FROST UniFFI SDK (PoC) Scope

- Support Randomized FROST Primitives on RedPallas curve
  - DKG
  - Trusted Dealer
  - Signing
  - Aggregation
  - Validation
  - Key Serialization

Contributions welcome!

- In progress
  - iOS Demo App
- TODO:
  - Adopt FROST 2.0.0
  - Support multiple Curves
  - Kotlin API
  - FROST Server Integration

Thank You!

Contributions are welcome!

GitHub Repo QR

https://github.com/pacu/frost-uniffi-sdk

Ping me!

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