

In this ART report we are going to nail down the details of the Taiga instantiation of the Anoma Research Machine (ARM). Its main aim is to give a set of reference cryptographic primitives which can be chosen to implement the ARM. An example of using Taiga, describing token swap with intents. For both Taiga and the reference example will be described in detail the used:

- statements, proved using arithmetic circuits
- hash functions
- encryption schemes
- commitment schemes
- encodings
- key generation schemes
- data structures

Once the protocol implementation has been described, it will be discussed how what zkVM architecture fits best the propose of Tagia, and benchmarks of different zkVMs will be provided.

[@vveiln](#) [@xuyang](#)