

Peer 1 (Prover)

Peer 2 (Verifier)

Create the common reference string $g = \text{hash}(c_a + c_b)$

Send Verifier the vector commitment opening c_a

Common reference string g created for Verifier

Start VDF($g, T=1$)

Send Prover the vector commitment opening c_b and cap c_1

Common reference string g created for Prover

Start VDF($g, T=1$)

Both have started VDF calculation

VDF($g^{2^{\text{upper_bound}}}, T=\text{upper_bound}$)

Stop VDF($g^{2^{\text{upper_bound}}}, T=\text{upper_bound}$)

Prover VDF completed ($T=\text{upper_bound}$ reached)

Generate VDF proof with cap c_1

Send cap c_2 to Verifier with VDF proof

Stop VDF($g^{2^n}, T=n$)

Verifier got cap c_2 from Prover, VDF stopped

Generate VDF proof with cap c_2

Verifier has both VDF proofs

Calculate difference between the two VDFs, defining latency in iterations

Send signed Proof of Latency to Prover

Send signature to Verifier

Proof of Latency created