

Peer 1 (Prover)

Peer 2 (Verifier)

Set up RSA divider, upper_bound for verifier

Start Diffie-Hellman with random primes

Key exchange

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Shared root g created

Both start VDF calculation

X for Peer 2 to sign

VDF(g, T=1)

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

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

Verifier VDF completed

Generate random prime cap, prove own VDF with it

Verifier sends VDF proof to prover with cap

Verify verifier's VDF as correct

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

Prover VDF completed

Cap off VDF with verifier's cap, generate proof of VDF

Calculate difference between the two VDFs, defining latency in iterations

Proof available to the network