# S xLumi

#### A Fast, Secure and Scalable Payment Channel with V Systems<sup>•</sup>

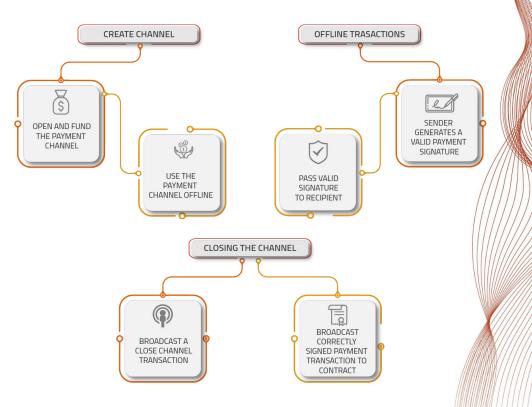


#### What is xLumi?

- A second layer solution to the blockchain scalability issue, which enables efficient micropayments between parties at a very low cost.
- It guarantees the security of the payment channel's funds using a simple set of mathematical rules that can be easily implemented on any blockchain with the necessary infrastructure.

## **How Does xLumi Work?**

- xLumi is a simple unidirectional payment channel, such that the funds can only flow in one direction.
- Each offline payment transaction happens by the payer signing a transaction and passing it to the recipient.
- Collecting payments involve the recipient broadcasting the payer's signature to the blockchain to make sure that the payment transaction was intended by the payer.





**xLumi** is a unidirectional payment channel protocol that utilizes a set of simple mathematical constraints to ensure the security of the funds in the payment channel.

- □ The amount paid to the recipient can only increase ensures only newer states are broadcast. This ensures that the recipient knows how much funds are contained within the channel, and the payer cannot cheat by signing an offline transaction, then withdrawing all the funds from the channel.
- □ In the V system, the two-way payment channel has the possibility to give both parties the ability to close the channel at any point.
- **u** xlumi's V systems reduces the number of interactions in which protocols could go wrong.
- xLumi doesn't require users store a new secret for every off-chain transaction made, which significantly lower the risk of protocols being compromised by mistakes in storing large numbers of secrets.

### **Low Economic Cost**

**xLumi** is designed to be cost-effective, which enables efficient micropayments between parties at a very low cost.

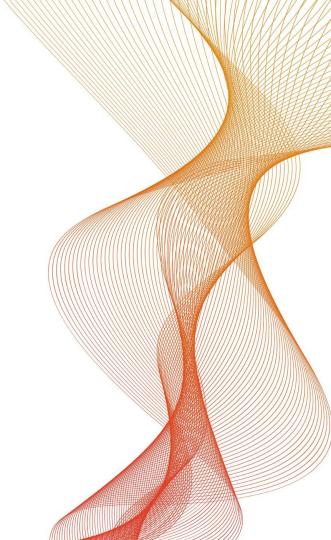
- □ As the transactions could occur offline, repeated payments can be done without transactions fees.
- □ This payment channels allow users to send small amounts of payments or make high frequency transactions without transaction fees.



#### Easy to Use

xLumi makes sending a payment on blockchain simple and easy.

- □ The expiration time for the recipient to be allowed to broadcast an update can be agreed on upon by both parties before the opening of the payment channel.
- Recipients of funds from an xLumi channel can settle transactions to the chain before the channel closes.



# **Real-World Application**

VSYS 2

- Tachyon Protocol will lead the deployment, and adoption of the xLumi payment channel
- Tachyon's decentralized VPN app has over 2.3 million users worldwide.
- Tachyon will use xLumi to integrate the Bandwidth Marketplace into their ecosystem by providing users with a platform to sell their spare bandwidth resources.



# **Driving Forward to DeFi**

- □ Supports fast and secure off-chain transactions
- Advance into the age of DeFi
- □ Solves scalability issues on public blockchains.

