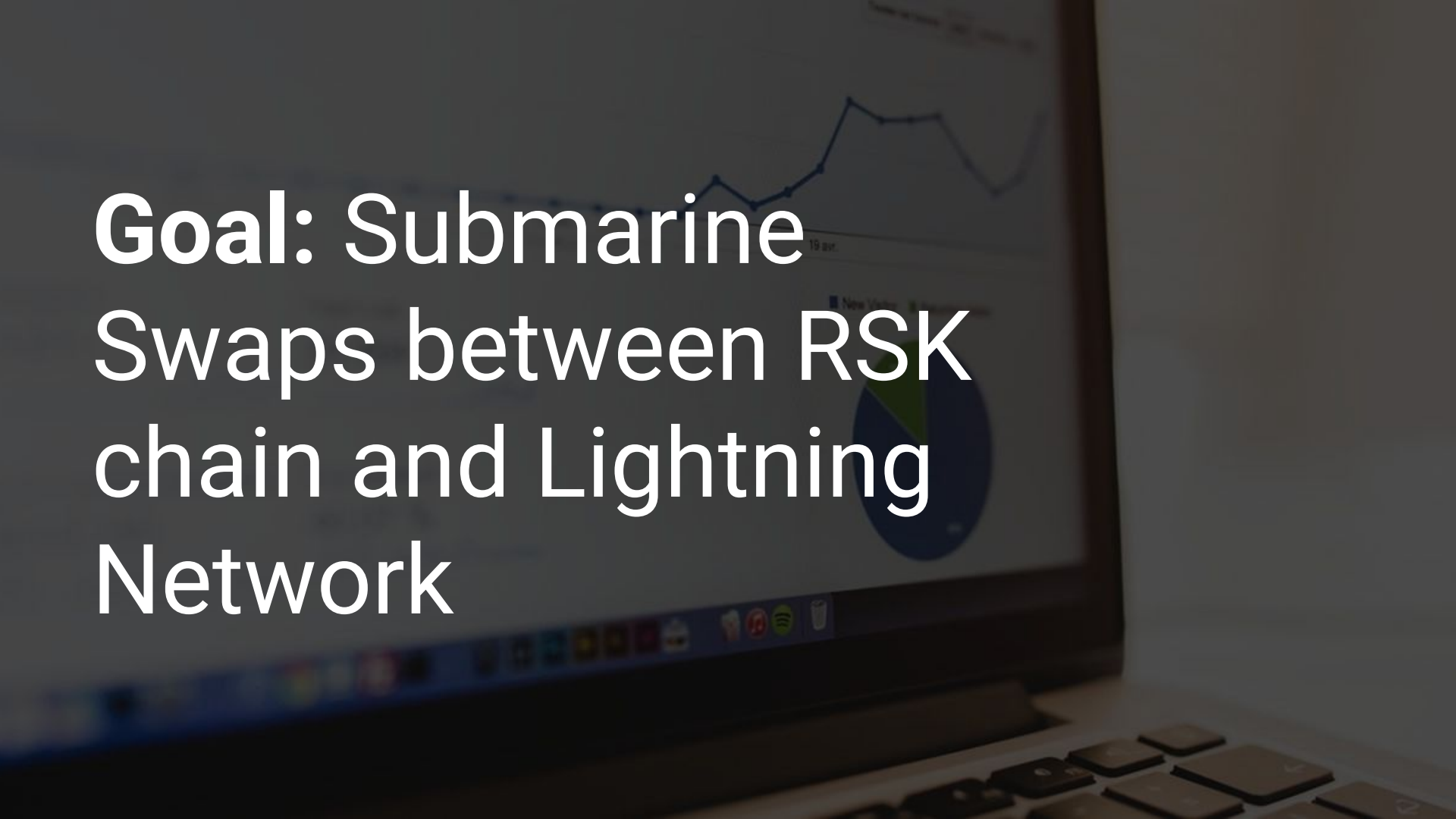


# LN - SOV Bridge

Sovrython Hackathon 2021

Pseudozach -

Mainnet SOV address: 0x0f3c187aEc8D05c01FCe70e17a5CfC4F38672488

The background image shows a close-up of a laptop screen. On the screen, there is a line graph with a blue line showing fluctuations, and a pie chart with a green slice. The text 'Goal: Submarine Swaps between RSK chain and Lightning Network' is overlaid in white. The laptop keyboard is partially visible at the bottom.

# Goal: Submarine Swaps between RSK chain and Lightning Network



# The solution

Boltz exchange already has a great open source product that works between BTC onchain/LN and ETH/ERC20 tokens.

# How it works - Submarine Swap

## Step 1

User creates a swap by providing LN invoice.

## Step 2

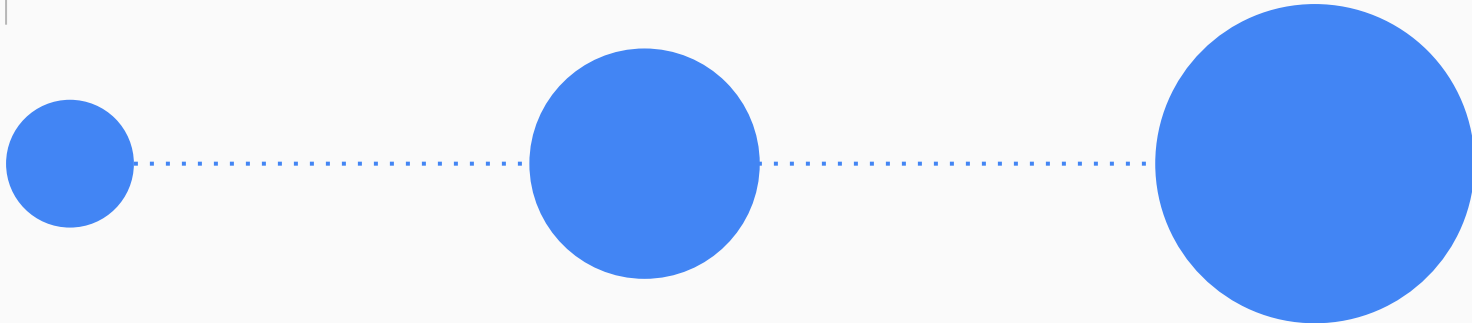
User locks tokens to the contract using the preimage of the invoice, amount, timeout block height.

Swap Operator will track this on the blockchain.

## Step 3

Swap operator will pay the invoice and receive the preimage.

Use the preimage to claim the tokens from the contract.



# Accomplished

- *Forked boltz backend to work with RSK chain.*
- *RBTC <-> BTC LN Swaps*
- *SOV <-> BTC LN Swaps*
- *Forked boltz frontend to work with RSK/SOV.*
- *Deployed all required BTC/RSK/LND nodes to testnet*
- *Testnet live at <http://139.177.203.101:3000>*

# Next Steps

- *Integrate Liquidity wallet*
- *Automate lock/claim process to 1-click.*
- *Improve frontend*
- *Deploy to mainnet*

An aerial night view of a city skyline, likely New York City, with numerous illuminated skyscrapers and buildings. The sky is dark with some clouds. The text "Demo Video" is overlaid in a large, white, sans-serif font, centered vertically and horizontally.

# Demo Video

[illegible]



# References/Links

LN - SOV Bridge:

<https://github.com/pseudozach/lnsovbridge>

<https://github.com/pseudozach/boltz-frontend>

Testnet: <http://139.177.203.101:3000>

Demo Video: <https://www.youtube.com/watch?v=SlIjtldXBIs>

Boltz:

<https://boltz.exchange>

<https://github.com/BoltzExchange/boltz-backend>

<https://docs.boltz.exchange/en/latest/>