CROSS-BORDER PAYMENTS

USING XRPL

XNET

XNET: A Solution for Cross-Border Payments Using the XRPL

Introduction

Cross-border payments have traditionally been slow, expensive, and complicated. XNET aims to revolutionize this process by leveraging the power of the XRPL (XRP Ledger) to provide a fast, cost-effective, and secure solution for international money transfers. This white paper outlines the XNET system, detailing its components, workflow, and benefits.

Overview of XNET System

The XNET system consists of three main components:

- Tokenization Service
- On-Chain Automated Market Makers (AMMs)
- Transaction Flow

Each component plays a crucial role in ensuring smooth and efficient cross-border transactions.

Tokenization Service

The Tokenization Service is the first step in the XNET process. It involves converting fiat currency into a tokenized version that can be utilized on the XRPL. The workflow is as follows:

1. User1 (Sender) initiates a transaction by depositing CHF (Swiss Franc) into their bank.
2. The deposited CHF is tokenized into Tokenized CHF (TCHF) by the Tokenization Service.

Tokens

TCHF and TEUR

The tokenization of CHF and EUR into TCHF and TEUR respectively, allows for seamless and efficient cross-border transactions within the XNET system. These tokenized currencies are essential for enabling the liquidity and transfer processes on the XRPL. In production, these tokens are pegged to their respective real-world currencies, ensuring stability and trust.

- TCHF: (Currency Code: 5443484600000000000000000000000000000000, Issuer: rsGGhyfhzf2KtJRPCmCxG8KgVnTTYeD5aL)

- TEUR: (Currency Code: 5445555200000000000000000000000000000000, Issuer: rwzRgMcAYWv9q7DPgFbMvZw9KMLa3ZXN2K)

Issuer and Distributor

The deployment of TCHF and TEUR involves two key entities: the Issuer and the Distributor.

- **Issuer**: The issuer is responsible for creating the tokenized currencies (TCHF and TEUR). However, the issuer does not distribute the tokens directly.
- **Distributor**: All tokens created by the issuer are held by the distributor. The distributor is responsible for distributing the tokens to users and managing the supply.

Benefits of This Approach

This approach of separating the issuer and distributor roles provides several advantages:

- **Increased Security**: By separating the roles, the system mitigates the risk of a single point of failure. The issuer focuses solely on creating tokens, while the distributor handles distribution and supply management.
- **Regulatory Compliance**: This structure can help in meeting regulatory requirements by providing a clear distinction between token creation and distribution responsibilities.
- **Enhanced Trust**: Users can have greater confidence in the system knowing that the tokens are managed by a specialized distributor rather than the issuer.

On-Chain Automated Market Makers (AMMs)

Once the fiat currency is tokenized, it enters the On-Chain AMMs for currency conversion. XNET utilizes two liquidity pools to facilitate the conversion from TCHF to TEUR (Tokenized Euro):

Liquidity Pool #1 (AMM)

- **Pair**: TCHF/XRP
- **Address**: rKAbUWsuyDZNDCvuWUSK9aJoM72ZSwiZaZ

Liquidity Pool #2 (AMM)

- **Pair**: TEUR/XRP
- **Address**: rGye3pVBYFWviV5DRRCtCJeSnfbqVBxRd7

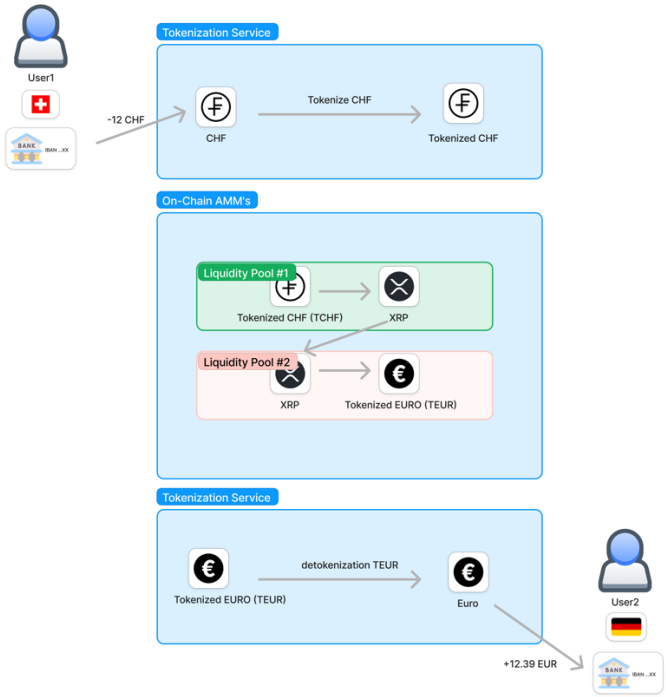
The initial conversion from TCHF to XRP facilitates the subsequent swap from XRP to TEUR, enabling the transfer to the recipient. This approach minimizes counterparty risk

by leveraging XRP's liquidity and efficiency, ensuring a seamless and secure transaction process.

Transaction Flow

The Transaction Flow component ensures that the entire process from tokenization to the final transfer is seamless and efficient. Here's how it works:

1. **Initiation**: User1 in Switzerland starts the transaction by depositing their desired amount of CHF into their account.
2. **Tokenization**: The Tokenization Service converts the deposited CHF into TCHF.
3. **First Swap**: TCHF is swapped for XRP in Liquidity Pool #1, leveraging XRP's liquidity to facilitate the transaction.
4. **Second Swap**: The XRP obtained from the first swap is then swapped for TEUR in Liquidity Pool #2.
5. **Detokenization**: The TEUR is detokenized back into EUR.
6. **Final Transfer**: User2 in Germany receives the EUR in their bank account.



Example Transaction

To illustrate the process, let's consider a cross-border payment from Switzerland to Germany:

1. User1 in Switzerland wants to send 12 CHF to User2 in Germany.
2. User1 starts the transaction and deposits 12 CHF into the account.
3. The Tokenization Service converts 12 CHF into 12 TCHF.
4. 12 TCHF is swapped for XRP in Liquidity Pool #1.
5. The equivalent amount of XRP is then swapped for TEUR in Liquidity Pool #2.
6. TEUR is detokenized into EUR.
7. User2 receives approximately 12.39 EUR in their German bank account.

Benefits of XNET

Speed

XNET leverages the XRPL, which is known for its fast transaction times. This significantly reduces the time it takes for cross-border payments to be processed.

Cost-Effectiveness

Traditional cross-border payments are often associated with high fees. XNET minimizes these costs by utilizing automated processes and the efficiency of the XRPL.

Security

The XRPL is a decentralized and secure ledger, ensuring that transactions are safe and transparent.

Scalability

XNET's use of tokenization and automated market makers allows it to handle a high volume of transactions without compromising on speed or security.

Conclusion

XNET presents a modern solution to the age-old problem of cross-border payments. By utilizing the XRPL, XNET offers a system that is fast, cost-effective, secure, and scalable. This white paper has outlined the workflow and benefits of XNET, demonstrating its potential to transform international money transfers.