WHAT IS CLAIMED IS:

1. A method for transaction settlement using guarantee tokens, the method comprising:

receiving, by a receiving device of a processing server, a transaction request from a first financial institution, the transaction request including at least an receiving party digital address, a digital token issued by the first financial institution to the receiving party digital address, a sending party digital address with which a second financial institution is associated, an asset network identification, and an asset identification;

generating, by a generation module of the processing server, a guarantee token against the digital token, the guarantee token being a tokenized guarantee of the digital token issued by the first financial institution;

generating, by the generation module of the processing server, an asset request transaction, the asset request transaction including at least the guarantee token, the receiving party digital address, the sending party digital address, and the asset identification;

transmitting, by a transmitting device of the processing server, the asset request transaction to the asset network;

receiving, by the receiving device of the processing server, an asset transaction from the asset network, the asset transaction including at least the asset, the receiving party digital address, and the sending party digital address;

generating, by the generation module of the processing server, an asset transfer transaction, the asset transfer transaction including at least the receiving party digital address, the sending party digital address, and the asset identification; and

transmitting, by the transmitting device of the processing server, the asset transaction to the receiving party digital address.

2. The method of claim 1,

wherein the transaction request from the first financial institution is received by the receiving device via a multi-token network,

wherein the multi-token network is a private permissioned network communicating and transacting across a blockchain network, and an asset network,

wherein the processing server, the first financial institution, the sending party digital address, and the receiving party digital address are permissioned members of the multi-token network,

wherein the guarantee token is a fungible asset limited to transfer within the multi-token network,

wherein the guarantee token represents a guarantee of a value represented by the digital token against a liability of the first financial institution of the processing server, and

wherein the asset request transaction is transmitted by the transmitting device to the asset network identified by the asset network identification of the transaction request.

3. The method of claim 1 or 2, wherein the processing server, the first financial institution, and the second financial institution are part of a blockchain network, and wherein the transaction request, the asset request transaction, the asset transaction, and the asset transfer transaction are recorded on a blockchain of the blockchain network.

4. The method of any one of claims 1 to 3, further comprising:

receiving, by the receiving device of the processing server, a redeem request from the second financial institution, the redeem request including the guarantee token;

generating, by the generation module of the processing server, a settlement transaction message, the settlement transaction message including at least the digital token and instructions to send a fiat currency equivalent of the digital token from the first financial institution to the second financial institution; and

transmitting, by the transmitting device of the processing server, the settlement transaction message to the first financial institution.

5. The method of claim 4, wherein the digital token is a digitized deposit token.

6. The method of any one of claims 1 to 5, wherein the processing server generates the guarantee token on a private blockchain network and wherein the

private blockchain network includes a smart contract for transferring the guarantee token from the private blockchain network to the asset network.

7. The method of any one of claims 1 to 6, wherein the receiving party digital address, the asset network identification, the sending party digital address, and the asset identification comprise a digital asset contract.

8. The method of any one of claims 1 to 7, wherein the transmitting the asset request transaction to the asset network includes transmitting the asset request transaction to a smart contract on the asset network.

9. The method of any one of claims 1 to 8, wherein the asset network is a non-fungible token (NFT) marketplace and wherein the asset is an NFT.

10. The method of any one of claims 1 to 9, wherein the receiving of the asset from the asset network and the transmitting the asset to the receiving party digital address are executed by the processing server using a smart contract.

11. The method of any one of claims 1 to 10, further comprising:

identifying, by the processing server, an asset smart contract on the asset network, the asset smart contract having one or more asset purchase requirements; and

wherein the guarantee token is generated to unlock the asset smart contract.

12. A system for transaction settlement using guarantee tokens, the method comprising:

a receiving device of a processing server receiving a transaction request from a first financial institution, the transaction request including at least an receiving party digital address, a digital token issued by the first financial institution to the receiving party digital address, a sending party digital address with which a second financial institution is associated, an asset network identification, and an asset identification;

a generation module of the processing server generating a guarantee token against the digital token, the guarantee token being a tokenized guarantee of the digital token issued by the first financial institution;

the generation module of the processing server generating an asset request transaction, the asset request transaction including at least the guarantee token, the receiving party digital address, the sending party digital address, and the asset identification;

a transmitting device of the processing server transmitting the asset request transaction to the asset network;

the receiving device of the processing server receiving an asset transaction from the asset network, the asset transaction including at least the asset, the receiving party digital address, and the sending party digital address;

the generation module of the processing server generating an asset transfer transaction, the asset transfer transaction including at least the receiving party digital address, the sending party digital address, and the asset identification; and

the transmitting device of the processing server transmitting the asset transaction to the receiving party digital address.

13. The system according to claim 12,

wherein the transaction request from the first financial institution is received by the receiving device via a multi-token network,

wherein the multi-token network is a private permissioned network communicating and transacting across a blockchain network, and an asset network,

wherein the processing server, the first financial institution, the sending party digital address, and the receiving party digital address are permissioned members of the multi-token network,

wherein the guarantee token is a fungible asset limited to transfer within the multi-token network,

wherein the guarantee token represents a guarantee of a value represented by the digital token against a liability of the first financial institution of the processing server, and

wherein the asset request transaction is transmitted by the transmitting device to the asset network identified by the asset network identification of the transaction request.

14. The system of claim 12 or 13, wherein the processing server, the first financial institution, and the second financial institution are part of a blockchain

network, and wherein the transaction request, the asset request transaction, the asset transaction, and the asset transfer transaction are recorded on a blockchain of the blockchain network.

15. The system of any one of claims 12 to 14, further comprising:

the receiving device of the processing server receiving a redeem request from the second financial institution, the redeem request including the guarantee token;

the generation module of the processing server generating a settlement transaction message, the settlement transaction message including at least the digital token and instructions to send a fiat currency equivalent of the digital token from the first financial institution to the second financial institution; and

the transmitting device of the processing server transmitting the settlement transaction message to the first financial institution.

16. The system of claim 15, wherein the digital token is a digitized deposit token.

17. The system of any one of claims 12 to 16, wherein the processing server generates the guarantee token on a private blockchain network and wherein the private blockchain network includes a smart contract for transferring the guarantee token from the private blockchain network to the asset network.

18. The system of any one of claims 12 to 17, wherein the receiving party digital address, the asset network identification, the sending party digital address, and the asset identification comprise a digital asset contract.

19. The system of any one of claims 12 to 18, wherein the transmitting the asset request transaction to the asset network includes transmitting the asset request transaction to a smart contract on the asset network.

20. The system of any one of claims 12 to 19, wherein the asset network is a non-fungible token (NFT) marketplace and wherein the asset is an NFT.

21. The system of any one of claims 12 to 20, wherein the receiving of the asset from the asset network and the transmitting the asset to the receiving party digital address are executed by the processing server using a smart contract.

22. The system of any one of claims 12 to 21, further comprising:

the processing server identifying an asset smart contract on the asset network, the asset smart contract having one or more asset purchase requirements; and

wherein the guarantee token is generated to unlock the asset smart contract.

23. A method for transaction settlement using guarantee tokens and payment status tokens, the method comprising:

receiving, by a receiving device of a processing server, a transaction request from a first financial institution, the transaction request including at least an receiving party digital address, a digital token issued by the first financial institution to the receiving party digital address, a sending party digital address, an asset network identification, and an asset identification;

generating, by a generation module of the processing server, a guarantee token against the digital token, the guarantee token being a tokenized guarantee of the digital token issued by the first financial institution;

generating, by the generation module of the processing server, a payment status token, the payment status token being a tokenized payment authorization message of payment for an asset associated with the asset identification;

generating, by the generation module of the processing server, an asset request transaction, the asset request transaction including at least the payment status token, the receiving party digital address, the sending party digital address, and the asset identification;

transmitting, by a transmitting device of the processing server, the asset request transaction to the asset network;

transmitting, by the transmitting device of the processing server, the guarantee token to a second financial institution associated with the sending party digital address;

receiving, by the receiving device of the processing server, an asset transaction from the asset network, the asset transaction including at least the asset, the receiving party digital address, and the sending party digital address;

generating, by the generation module of the processing server, an asset transfer transaction, the asset transfer transaction including at least the receiving party digital address, the sending party digital address, and the asset identification; and

transmitting, by the transmitting device of the processing server, the asset transaction to the receiving party digital address.

24. The method of claim 23,

wherein the transaction request from the first financial institution is received by the receiving device via a multi-token network,

wherein the multi-token network is a private permissioned network communicating and transacting across a blockchain network, and an asset network,

wherein the processing server, the first financial institution, the sending party digital address, and the receiving party digital address are permissioned members of the multi-token network,

wherein the guarantee token is a fungible asset limited to transfer within the multi-token network,

wherein the guarantee token represents a guarantee of a value represented by the digital token against a liability of the first financial institution of the processing server, and

wherein the asset request transaction is transmitted by the transmitting device to the asset network identified by the asset network identification of the transaction request.

25. The method of claim 24, wherein the asset transaction further includes the payment status token.

26. The method of claim 24 or 25, wherein the processing server, the first financial institution, and the second financial institution are part of a blockchain network, and wherein the transaction request, the asset request transaction, the asset transaction, and the asset transfer transaction are recorded on a blockchain of the blockchain network.

27. The method of any one of claims 24 to 26, wherein the processing server generates the payment status token on a private blockchain network and wherein the

private blockchain network includes a smart contract for transferring the payment status token from the private blockchain network to the asset network.

28. The method of any one of claims 24 to 27, wherein the transmitting the asset request transaction to the asset network includes transmitting the asset request transaction to a smart contract on the asset network and the payment status token unlocks the smart contract on the asset network.

29. The method of any one of claims 24 to 28, wherein the payment status token includes asset transaction metadata, the asset transaction metadata including one or more of: a transaction reference, a transaction payment confirmation, the asset identification, an indication of transaction payment failure, and an indication of transaction payment delay.

30. The method of any one of claims 24 to 29, wherein the payment status token is a non-fungible ERC-721 token.

31. A system for transaction settlement using guarantee tokens and payment status tokens, the method comprising:

a receiving device of a processing server receiving a transaction request from a first financial institution, the transaction request including at least an receiving party digital address, a digital token issued by the first financial institution to the receiving party digital address, a sending party digital address, an asset network identification, and an asset identification;

a generation module of the processing server generating a guarantee token against the digital token, the guarantee token being a tokenized guarantee of the digital token issued by the first financial institution;

the generation module of the processing server generating a payment status token, the payment status token being a tokenized payment authorization message of payment for an asset associated with the asset identification;

the generation module of the processing server generating an asset request transaction, the asset request transaction including at least the payment status token, the receiving party digital address, the sending party digital address, and the asset identification;

a transmitting device of the processing server transmitting the asset request transaction to the asset network;

the transmitting device of the processing server transmitting the guarantee token to a second financial institution associated with the sending party digital address;

the receiving device of the processing server receiving an asset transaction from the asset network, the asset transaction including at least the asset, the receiving party digital address, and the sending party digital address;

the generation module of the processing server generating an asset transfer transaction, the asset transfer transaction including at least the receiving party digital address, the sending party digital address, and the asset identification; and

the transmitting device of the processing server transmitting the asset transaction to the receiving party digital address.

32. The system according to claim 31,

wherein the transaction request from the first financial institution is received by the receiving device via a multi-token network,

wherein the multi-token network is a private permissioned network communicating and transacting across a blockchain network, and an asset network,

wherein the processing server, the first financial institution, the sending party digital address, and the receiving party digital address are permissioned members of the multi-token network,

wherein the guarantee token is a fungible asset limited to transfer within the multi-token network,

wherein the guarantee token represents a guarantee of a value represented by the digital token against a liability of the first financial institution of the processing server, and

wherein the asset request transaction is transmitted by the transmitting device to the asset network identified by the asset network identification of the transaction request

33. The system of claims 31 or 32, wherein the asset transaction further includes the payment status token.

34. The system of any one of claims 31 to 33, wherein the processing server, the first financial institution, and the second financial institution are part of a blockchain network, and wherein the transaction request, the asset request transaction, the asset transaction, and the asset transfer transaction are recorded on a blockchain of the blockchain network.

35. The system of any one of claims 31 to 34, wherein the processing server generates the payment status token on a private blockchain network and wherein the private blockchain network includes a smart contract for transferring the payment status token from the private blockchain network to the asset network.

36. The system of any one of claims 31 to 35, wherein the transmitting the asset request transaction to the asset network includes transmitting the asset request transaction to a smart contract on the asset network and the payment status token unlocks the smart contract on the asset network.

37. The system of any one of claims 31 to 36, wherein the payment status token includes asset transaction metadata, the asset transaction metadata including one or more of: a transaction reference, a transaction payment confirmation, the asset identification, an indication of transaction payment failure, and an indication of transaction payment delay.

38. The system of any one of claims 31 to 37, wherein the payment status token is a non-fungible ERC-721 token.