

BLOCKCHAIN-BASED USER ELEMENT AUTHORIZATION METHODS AND APPARATUSES

ABSTRACT

Blockchain-based user element authentication methods and apparatuses are
5 provided. The method is applied to a node device in a blockchain, including: receiving
a smart contract invocation transaction, where the smart contract invocation
transaction includes an encrypted to-be-authenticated user element that is provided by
a user client; in response to the smart contract invocation transaction, invoking
encryption conversion logic in the smart contract, decrypting the encrypted
10 to-be-authenticated user element in a trusted computing environment, and performing
secondary encryption processing, so that the user element authentication authority
decrypts the to-be-authenticated user element, and performs user element
authentication; and obtaining an authentication result submitted by the user element
authentication authority, and storing the authentication result in the blockchain, so that
15 an authentication result user connected to the blockchain obtains the authentication
result from the blockchain, and determines, based on the authentication result,
authenticity of a user identity provided by the user client.

FIG. 3

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