

CLAIMS

1. A method for performing an identify authentication operation, implemented by a terminal device comprising a preset standard interface configured to communicate with a service application of a dedicated type, the method comprising:

receiving, by the terminal device via the preset standard interface, an identity authentication request sent by a server corresponding to the service application of the dedicated type (S101), wherein the identity authentication request is sent by the server to the terminal device after the server receives a service request of the service application of the dedicated type;

verifying, by the terminal device, a signature in the identity authentication request according to a public key of the service application of the dedicated type;

in response to verifying the signature, retrieving service authentication information of an account corresponding to the identity authentication request from locally pre-stored service authentication information; and

transmitting, by the terminal device, a verification response message that comprises the retrieved service authentication information to the server via the preset standard interface.

2. The method according to claim 1, wherein the terminal device locally pre-stores service authentication information by performing operations comprising:

receiving, via the preset standard interface, a binding registration request for an account that is sent by the service application of the dedicated type;

verifying a signature in the binding registration request according to the public key of the service application of the dedicated type;

in response to verifying the signature, retrieving service authentication information included in the binding registration request;

locally storing, the service authentication information and identity identification information of the account;

generating a registration response message according to identifier information of the terminal device; and

returning the registration response message to the service application of the dedicated type via the preset standard interface.

3. The method according to claim 2, wherein generating a registration response message according to identifier information of the terminal device comprises:

retrieving unique identifier information and device model information of the terminal device;

assembling the unique identifier information and the device model information according to a data format specified by the service application of the dedicated type;

signing the assembled information using a local private key; and

generating the registration response message.

4. The method according to claim 2, wherein after locally storing the service authentication information and identity identification information of the account, the method further comprises:

receiving, via the preset standard interface, a service authentication information update request for an account, wherein the service authentication information update request is sent by the service application of the dedicated type;

verifying a signature in the service authentication information update request according to the public key of the service application of the dedicated type;

in response to verifying the signature, determining whether identity identification information corresponding to locally stored service authentication information is consistent with identity identification information carried in the service authentication information update request message;

in response to determining that identity identification information corresponding to locally stored service authentication information is consistent with identity identification information carried in the service authentication information update request message, retrieving service authentication information included in the service authentication information update request message;

determining whether version information of the retrieved service authentication information is higher than version information of the current locally stored corresponding service authentication information, comprising determining whether service authentication information currently stored in the terminal device needs to be updated; and

in response to determining that whether version information of the acquired retrieved service authentication information is higher than version information of the current locally stored

corresponding service authentication information, replacing the currently stored corresponding service authentication information with the acquired service authentication information.

5. The method according to claim 1, wherein after transmitting, by the terminal device, a verification response message that comprises the acquired service authentication information to the server via the preset standard interface, the method further comprises:

receiving, by the terminal device via the preset standard interface, an acknowledgment request that is sent by the server corresponding to the service application of the dedicated type;

retrieving, by the terminal device, acknowledgment manner type information comprised in the acknowledgment request; and

completing, by the terminal device, a corresponding acknowledgment operation according to the acknowledgment manner type information.

6. The method according to claim 1, wherein messages sent by other service applications are not received by the terminal device via the preset standard interface.

7. The method according to claim 1, wherein transmitting, by the terminal device, a verification response message that comprises the acquired service authentication information to the server via the preset standard interface comprises:

encrypting the service authentication information;

saving the encrypted service authentication information as a response data packet; and

returning the response data packet to the server for decryption.

8. The method according to any one of claims 1 to 7, wherein the terminal device comprises a wearable device.

9. The method according to any one of claims 1 to 8, wherein the service application comprises a payment type service application, and the dedicated type comprises a payment.

10. A method for performing an identify authentication operation, implemented by a server corresponding to a service application of a dedicated type, wherein the server communicates with

a terminal device via a preset standard interface comprised in the terminal device, the method comprising:

receiving, by the server, a service request of the service application of the dedicated type;

sending, by the server, an identity authentication request to the terminal device via the preset standard interface comprised in the terminal device;

receiving, by the server when an identity authentication request succeeds, a verification response message that is returned by the terminal device via the preset standard interface and includes service authentication information; and

processing, by the server, the service request according to the service authentication message.

11. The method according to claim 10, wherein before receiving, by the server, a service request of the service application of the dedicated type, the method further comprises:

sending, by the server, a binding registration request for an account to the terminal device via the preset standard interface comprised in the terminal device, wherein the binding registration request carries service authentication information of the account;

receiving, by the server when registration binding succeeds, a registration response message that is returned by the terminal device via the preset standard interface; and

acknowledging, by the server, that the terminal device is successfully bound to the account, wherein the registration response message carries identifier information of the terminal device.

12. The method according to claim 11, wherein after acknowledging, by the server, that the terminal device is successfully bound to the account, the method further comprises:

sending, by the server when the service authentication information of the account needs to be updated, a service authentication information update request for the account to the terminal device via the preset standard interface comprised in the terminal device;

wherein the service authentication information update request comprises the service authentication information needing to be updated of the account.

13. The method according to claim 10, wherein after processing, by the server, the service request according to the service authentication message, the method further comprises:

sending, by the server after processing of the service request is completed, an acknowledgment request carrying acknowledgment manner type information to the terminal device via the preset standard interface comprised in the terminal device, so that the terminal device completes a corresponding acknowledgment operation according to the acknowledgment manner type information.

14. A terminal device, specifically comprising:

a preset standard interface configured to communicate with a service application of a dedicated type;

multiple modules configured to perform the method according to any one of claims 1 to 9.

15. A server, corresponding to a service application of a dedicated type, and specifically comprising multiple modules configured to perform the method according to any one of claims 10 to 13.