different data transfer protocols. Accordingly, there is a need for a system that allows an account issuer to initiate a provisioning request on behalf of the user.

[0004] Embodiments of the invention address these and other problems, individually and collectively.

SUMMARY

[0005] Embodiments of the invention are directed to systems, apparatuses, and methods related to initiating the provisioning of financial accounts on mobile devices by an issuer and without user interaction. Provisioning a financial account on a mobile device includes secure communication of financial account information into a secure element or other secure data storage element of the mobile device. The financial account information or credentials may be accessed by authorized applets or mobile payment applications on the mobile device to initiate and complete transactions with access devices, server computers, and any other components or systems in a transaction processing system.

[0006] Embodiments of the present invention allow an issuer to initiate account provisioning on a mobile device without requiring interaction with or input from an accountholder (i.e. user). For example, the issuer may initiate the process by sending a provisioning information request message to a mobile device with a secure element (i.e. secure memory). The operating system of the mobile device may recognize the provisioning request message and gather the requisite provisioning information without requiring user input. The provisioning information may include, for example, information associated with the secure element of the mobile device. The mobile device may then send a provisioning request message to a provisioning system (i.e. provisioning service provider computer). In some exemplary embodiments, the mobile device may send the provisioning request message to the issuer, which may, in turn, send the provisioning request message to the provisioning system. The provisioning request message may include the requisite provisioning information to allow the provisioning system to provision the financial account on the secure element of the mobile device.

[0007] In some embodiments, the issuer may include an authorization code in the provisioning information request message. The authorization code may be forwarded to the

provisioning system as part of the provisioning request message. The provisioning system may validate the authorization code to ensure the mobile device is authorized by the issuer for provisioning of the account.

[0008] According to a first aspect of the present invention, there is provided a method comprising: receiving, by a mobile communication device, an information request message from an issuer server computer thereby initiating provisioning of a payment account on the mobile communication device without a user interacting with the mobile communication device, wherein the issuer server computer is associated with an issuer that issued the payment account to the user; automatically determining, by the mobile communication device, provisioning information associated with a secure memory in response to the information request message and without input of the user operating the mobile communication device; generating, by the mobile communication device, a provisioning request message including the provisioning information; sending, by the mobile communication device, the provisioning request message including the provisioning information to a provisioning system or the issuer server computer; receiving, by the mobile communication device, a provisioning response message including provisioning data from the provisioning system, wherein the provisioning data is generated using the provisioning information associated with the secure memory; and storing, by the mobile communication device, the provisioning data in the secure memory, wherein the provisioning data associates the mobile communication device with the payment account.

[0009] According to a second aspect of the present invention, there is provided a mobile communication device comprising: a secure memory; a processor, and a non-transitory computer readable medium coupled to the processor, the computer readable medium comprising code, that when executed by the processor, causes the processor to: receive an information request message from an issuer server computer thereby initiating provisioning of a payment account on the mobile communication device without a user interacting with the mobile communication device, wherein the issuer server computer is associated with an issuer that issued the payment account to the user; automatically determine provisioning information associated with the secure memory in response to the information request message and without input of the user operating the mobile communication device; generate a provisioning request message including the provisioning information; send the provisioning request message including the provisioning information to a provisioning system or the issuer server computer; receive a provisioning

response message including provisioning data from the provisioning system, wherein the provisioning data is generated using the provisioning information associated with the secure memory; and store the provisioning data in the secure memory, wherein the provisioning data associates the mobile communication device with the payment account.

[0010] Yet another embodiment of the invention is directed to an issuer computer server computer comprising a processor and a non-transitory computer readable medium coupled to the processor. The computer readable medium comprises code, that when executed by the processor, causes the processor to send an information request message to a mobile communication device. The information request message requests provisioning information associated with a secure memory of the mobile communication device. The code, when executed by the processor, further causes the processor to receive a response message including the provisioning information from the mobile communication device. The provisioning information is automatically gathered by the mobile communication device in response to the information request message and without input of a user operating the mobile communication device. The code, when executed by the processor, further causes the processor to send a provisioning request message to a provisioning system such that provisioning data can be sent to the mobile communication device for associating the mobile communication device with a payment account. The provisioning request message includes the provisioning information, and one or more of an account identifier and a mobile device identifier associated with the mobile communication device. In certain embodiments, the code, when executed by the processor, causes the processor to generate an authorization code indicating that the provisioning request message associated with the authorization code is authorized and authenticated by the issuer server computer, and include the authorization code in the provisioning request message.

[0011] Other embodiments include a mobile communication device comprising a processor, a server computer comprising a processor and computer readable media configured to complete the methods described above. Further, other embodiments may include systems, server computers, and methods for completing the functionality disclosed herein.

[0012] These and other embodiments of the invention are described in further detail below.

CLAIMS

1. A method comprising:

receiving, by a mobile communication device, an information request message from an issuer server computer thereby initiating provisioning of a payment account on the mobile communication device without a user interacting with the mobile communication device, wherein the issuer server computer is associated with an issuer that issued the payment account to the user;

automatically determining, by the mobile communication device, provisioning information associated with a secure memory in response to the information request message and without input of the user operating the mobile communication device;

generating, by the mobile communication device, a provisioning request message including the provisioning information;

sending, by the mobile communication device, the provisioning request message including the provisioning information to a provisioning system or the issuer server computer;

receiving, by the mobile communication device, a provisioning response message including provisioning data from the provisioning system, wherein the provisioning data is generated using the provisioning information associated with the secure memory; and

storing, by the mobile communication device, the provisioning data in the secure memory, wherein the provisioning data associates the mobile communication device with the payment account.

2. The method of claim 1, wherein the provisioning information associated with the secure memory includes one or more of secure domain information, network operator information, user information, trusted service manager information and encryption key information.

3. The method of claim 1, wherein the information request message includes one or more of an authorization code, an account identifier and a mobile device identifier.

4. The method of claim 3, wherein the provisioning request message includes one or more of the authorization code, the account identifier and the mobile device identifier.

5. The method of claim 1, further comprising:

encrypting the provisioning request message prior to sending the provisioning request message to the provisioning system.

6. The method of claim 1 further comprising:

identifying the information request message as a provisioning information request message based on an identifier included in the information request message, and without interacting with the user.

7. The method of claim 1, wherein the provisioning data includes a primary account number or a payment token.

8. A mobile communication device comprising:

a secure memory;

a processor, and

a non-transitory computer readable medium coupled to the processor, the computer readable medium comprising code, that when executed by the processor, causes the processor to:

receive an information request message from an issuer server computer thereby initiating provisioning of a payment account on the mobile communication device without a user interacting with the mobile communication device, wherein the issuer server computer is associated with an issuer that issued the payment account to the user;

automatically determine provisioning information associated with the secure memory in response to the information request message and without input of the user operating the mobile communication device;

generate a provisioning request message including the provisioning information; send the provisioning request message including the provisioning information to a provisioning system or the issuer server computer;

receive a provisioning response message including provisioning data from the provisioning system, wherein the provisioning data is generated using the provisioning information associated with the secure memory; and

store the provisioning data in the secure memory, wherein the provisioning data associates the mobile communication device with the payment account.

9. The mobile communication device of claim 8, wherein the provisioning information associated with the secure memory includes one or more of secure domain information, network operator information, user information, trusted service manager information and encryption key information.

10. The mobile communication device of claim 8, wherein the information request message includes one or more of an authorization code, an account identifier and a mobile device identifier.

11. The mobile communication device of claim 10, wherein the provisioning request message includes one or more of the authorization code, the account identifier and the mobile device identifier.

12. The mobile communication device of claim 8, wherein the code, when executed by the processor, further causes the processor to:

encrypt the provisioning request message prior to sending the provisioning request message to the provisioning system or the issuer server computer.

13. The mobile communication device of claim 8, wherein the code, when executed by the processor, further causes the processor to:

identify the information request message as a provisioning information request message based on an identifier included in the information request message without interacting with the user.

14. The mobile communication device of claim 8, wherein the provisioning data includes a primary account number or a payment token.