CLAIMS

What is claimed is:

1. A method of facilitating a transaction between a mobile device and a processor, comprising:

receiving, by the processor, a transaction request comprising a payment token and an EMV payment application uniform resource identifier ("URI") from the mobile device, the mobile device initiating the transaction,

the mobile device comprising a plurality of EMV payment applications corresponding to each transaction account linked to the mobile device, the plurality of EMV payment applications to select a respective remote EMV payment application;

receiving, in the transaction request, the EMV payment application URI comprising a string of characters identifying a storage location of the remote EMV payment application;

invoking, by the processor in electronic communication with a payment application server, a remote EMV payment application based on the EMV payment application URI, the EMV payment application URI obtained from the mobile device, by sending the payment token and the EMV payment application URI to the payment application server, wherein the payment application server invokes the remote EMV payment application located at the EMV payment application URI;

wherein in response to being invoked, the remote EMV payment application is configured to establish a cryptographically protected secure channel with a merchant system kernel to process the transaction request, and wherein in response to processing the transaction request, the remote EMV payment application is configured to transmit a transaction authorization request comprising EMV transaction data directly to an issuer system, the EMV transaction data comprising a cryptogram for validation by the issuer system;

transmitting, by the processor, a transaction data request to the mobile device, the transaction data request comprising a request for a biometric input via the mobile device in response to a determination by the remote EMV payment application that additional information is required to authorize the transaction request;

obtaining, by the processor, a transaction data response from the mobile device; and

receiving, by the processor, a transaction authorization notice from the issuer system, wherein the transaction authorization notice is based on the transaction authorization request generated by the remote EMV payment application.

2. The method of claim 1, wherein the transaction request is generated by a merchant application in response to the mobile device initiating a transaction with the merchant application.

3. The method of claim 1, wherein the transaction request is generated by a merchant point of sale ("PoS") in response to a payment instrument interfacing with the merchant PoS.

4. The method of claim 3, wherein the payment instrument comprises a local EMV payment application and the merchant PoS comprises a merchant PoS kernel, and wherein the local EMV payment application is configured to interact with the merchant PoS kernel to initiate the transaction.

5. The method of claim 1, further comprising transmitting, by the processor, a transaction data request in response to the remote EMV payment application determining that additional data is needed to authorize the transaction request.

6. The method of claim 1, further comprising transmitting, by the processor in electronic communication with a payment network, the transaction authorization request comprising the payment token, wherein in response to receiving the transaction authorization request the payment network is configured to at least one of authorize or settle the transaction.

7. The method of claim 1, wherein the remote EMV payment application is configured to process the transaction request by generating a payment cryptogram to be transmitted to the issuer system to authorize the transaction request.

8. A system comprising:

a processor, a tangible, non-transitory memory configured to communicate with the processor, the tangible, non-transitory memory having instructions stored thereon that, in response to execution by the processor, cause the processor to perform operations comprising:

receiving, by the processor, a transaction request comprising a payment token and an EMV payment application uniform resource identifier ("URI") from a mobile device, the mobile device initiating the transaction, the mobile device comprising a plurality of EMV payment applications corresponding to each transaction account linked to the mobile device, the plurality of EMV payment applications to select a respective remote EMV payment application;

receiving, in the transaction request, the EMV payment application URI, a string of characters identifying a storage location of the remote EMV payment application;

invoking, by the processor in electronic communication with a payment application server, a remote EMV payment application based on the EMV payment application URI, the EMV payment application URI obtained from the mobile device, by sending the payment token and the EMV payment application URI to the payment application server, wherein the payment application server invokes the remote EMV payment application located at the EMV payment application URI;

wherein in response to being invoked, the remote EMV payment application is configured to establish a cryptographically protected secure channel with a merchant system kernel to process the transaction request, and

wherein in response to processing the transaction request the remote EMV payment application is configured to transmit a transaction authorization request comprising EMV transaction data directly to an issuer system, the EMV transaction data comprising a cryptogram for validation by the issuer system;

transmitting, by the processor, a transaction data request to the mobile device, the transaction data request comprising a request for a biometric input via the mobile device in response to a determination by the remote EMV payment application that additional information is required to authorize the transaction request;

obtaining, by the processor, a transaction data response from the mobile device; and

receiving, by the processor, a transaction authorization notice from the issuer system, wherein the transaction authorization notice is based on the transaction authorization request generated by the remote EMV payment application.

9. The system of claim 8, wherein the transaction request is generated by a merchant application in response to a mobile device initiating a transaction with the merchant application.

10. The system of claim 8, wherein the transaction request is generated by a merchant point of sale ("PoS") in response to a payment instrument interfacing with the merchant PoS.

11. The system of claim 10, wherein the payment instrument comprises a local EMV payment application and the merchant PoS comprises a merchant PoS kernel, and wherein the local EMV payment application is configured to interact with the merchant PoS kernel to initiate the transaction.

12. The system of claim 8, further comprising transmitting, by the processor, a transaction data request in response to the remote EMV payment application determining that additional data is needed to authorize the transaction request.

13. The system of claim 8, further comprising transmitting, by the processor in electronic communication with a payment network, the transaction authorization request comprising the payment token, wherein in response to receiving the transaction

authorization request the payment network is configured to at least one of authorize or settle the transaction.

14. The system of claim 8, wherein the remote EMV payment application is configured to process the transaction request by generating a payment cryptogram to be transmitted to the issuer system to authorize the transaction request.

15. A non-transitory computer-readable medium embodying a program executable by a processor, the program, when executed, causing the processor to at least:

receive, by the processor, a transaction request comprising a payment token and an EMV payment application uniform resource identifier ("URI") from a mobile device, the mobile device initiating the transaction, the mobile device further comprising a plurality of EMV payment applications corresponding to each transaction account linked to the mobile device, the plurality of EMV payment applications to select a respective remote EMV payment application;

receive, in the transaction request, the EMV payment application URI a string of characters identifying a storage location of the remote EMV payment application;

invoke, by the processor in electronic communication with a payment application server, a remote EMV payment application based on the EMV payment application URI, the EMV payment application URI obtained from the mobile device, by sending the payment token and the EMV payment application URI to the payment application server, wherein the payment application server invokes the remote EMV payment application located at the EMV payment application URI;

wherein in response to being invoked, the remote EMV payment application is configured to establish a cryptographically protected secure channel with a merchant system kernel to process the transaction request, and

wherein in response to processing the transaction request the remote EMV payment application is configured to transmit a transaction authorization request comprising EMV transaction data directly to an issuer system, the EMV transaction data comprising a cryptogram for validation by the issuer system;

transmit, by the processor, a transaction data request to the mobile device, the transaction data request comprising a request for a biometric input via the mobile device in response to a determination by the remote EMV payment application that additional information is required to authorize the transaction request;

obtain, by the processor, a transaction data response from the mobile device; and

receive, by the processor, a transaction authorization notice from the issuer system, wherein the transaction authorization notice is based on the transaction authorization request generated by the remote EMV payment application.

16. The non-transitory computer-readable medium of claim 15, wherein the transaction request is generated by a merchant application in response to the mobile device initiating a transaction with the merchant application.

17. The non-transitory computer-readable medium of claim 15, wherein the transaction request is generated by a merchant point of sale ("PoS") in response to a payment instrument interfacing with the merchant PoS.

18. The non-transitory computer-readable medium of claim 17, wherein the payment instrument comprises a local EMV payment application and the merchant PoS comprises a merchant PoS kernel, and wherein the local EMV payment application is configured to interact with the merchant PoS kernel to initiate the transaction.

19. The non-transitory computer-readable medium of claim 15, wherein in response to authorizing the transaction, the issuer system is configured to settle the transaction.