CLAIMS

~~What is claimed is:~~

~~1. A method, comprising:~~

~~receiving, by a server system, a connectivity information request before performing a payment transaction via a payment network;~~

~~generating, by the server system, a connectivity check message comprising a plurality of connectivity status flags associated with one or more payment entities in the payment network;~~

~~sending, by the server system, the connectivity check message to the one or more payment entities in a predefined sequence of a payment transaction flow in the payment network;~~

~~facilitating, by the server system, setting up the plurality of connectivity status flags based on a successful communication of the connectivity check message between the one or more payment entities in the predefined sequence, wherein a payment entity of the one or more payment entities sets at least one connectivity status flag associated with the payment entity to a success state based on the successful communication handled by the payment entity;~~

~~determining, by the server system, if each of the plurality of connectivity status flags is set with the success state; and~~

~~upon determining the success state of each of the plurality of connectivity status flags, generating, by the server system, a successful connectivity information for performing the payment transaction.~~

~~2. The method as claimed in claim 1, further comprising:~~

~~upon receiving the connectivity information request, generating, by the server system, a payment transaction request, the payment transaction request comprising at least a payment card information of a user and a payment amount for the payment transaction; and~~

~~storing, by the server system, the payment transaction request.~~

3. The method as claimed in claim 2, wherein generating the successful connectivity information comprises:

provisioning, by the server system, a transaction option for the user to perform the payment transaction;

upon receiving a selection input on the transaction option, sending, by the server system, the payment transaction request to a payment entity associated with the payment card via the one or more payment entities in the predefined sequence; and

facilitating, by the server system, authentication of the payment transaction via the payment entity associated with the payment card.

4. The method as claimed in claim 3, further comprising:

upon successful authentication of the payment transaction, facilitating, by the server system, the payment transaction.

5. The method as claimed in claim 1, wherein determining comprises:

detecting, by the server system, at least one connectivity status flag in a failure state; and

generating, by the server system, a failure connectivity information for performing the payment transaction.

6. The method as claimed in claim 5, wherein generating the connectivity check message comprising the plurality of connectivity status flags comprises presetting each of the plurality of connectivity status flags to the failure state.

7. The method as claimed in claim 5, wherein a status flag for each of the failure state and the success state is represented by a distinct binary value.

8. The method as claimed in claim 1, wherein generating the connectivity check message comprises:

provisioning, by the server system, a connectivity status flag for each of a sending terminal and a receiving terminal of a payment entity of the one or more payment entities, wherein

the payment entity is configured to

set the connectivity status flag for the receiving terminal to the success state upon successful receipt of the connectivity check message, and

set the connectivity status flag for the sending terminal to the success state upon successful sending of the connectivity check message.

9. The method as claimed in claim 1, wherein generating the connectivity check message further comprises:

provisioning, by the server system, a connectivity status flag for each payment entity of the one or more payment entities, wherein the payment entity is configured to set the connectivity status flag upon successful receiving and successful sending of the connectivity check message.

10. A server system, comprising:

a memory comprising stored instructions; and

at least one processor configured to execute the stored instructions to cause the server system to perform at least

receiving a connectivity information request before performing a payment transaction via a payment network,

generating a connectivity check message comprising a plurality of connectivity status flags associated with one or more payment entities in the payment network,

sending the connectivity check message to the one or more payment entities in a predefined sequence of a payment transaction flow in the payment network,

facilitating setting up the plurality of connectivity status flags based on a successful communication of the connectivity check message between the one or more payment entities in the predefined sequence, wherein a payment entity of the one or more payment entities sets at least one connectivity status flag associated with the payment entity to a success state based on the successful communication handled by the payment entity,

determining if each of the plurality of connectivity status flags is set with the success state, and

upon determining the success state of each of the plurality of connectivity status flags,

generating a successful connectivity information for performing the payment transaction.

11. The server system as claimed in claim 10, wherein the server system is further caused to perform:

upon receiving a connectivity information request, generating a payment transaction request, the payment transaction request comprising at least a payment card information of a user and a payment amount for the payment transaction; and

storing the payment transaction request.

12. The server system as claimed in claim 11, wherein for generating the successful connectivity information the server system is caused to perform:

provisioning a transaction option for the user to perform the payment transaction;

upon receiving a selection input on the transaction option, sending the payment transaction request to a payment entity associated with the payment card via the one or more payment entities in the predefined sequence; and

facilitating authentication of the payment transaction by the payment entity associated with the payment card.

13. The server system as claimed in claim 12, wherein the server system is further caused to perform:

upon successful authentication of the payment transaction, facilitating the payment transaction.

14. The server system as claimed in claim 10, wherein for determining the server system is caused to perform:

detecting at least one connectivity status flag in a failure state; and

generating a failure connectivity information for performing the payment transaction.

15. The server system as claimed in claim 10, wherein for generating the connectivity check message the server system is caused to perform:

provisioning a connectivity status flag for each of a sending terminal and a receiving terminal of a payment entity of the one or more payment entities, wherein the payment entity is configured to:

set the connectivity status flag for the receiving terminal to the success state upon successful receipt of the connectivity check message; and

set the connectivity status flag for the sending terminal to the success state upon successful sending of the connectivity check message.

16. The server system as claimed in claim 10, wherein for determining the server system is further caused to perform:

provisioning a connectivity status flag for each payment entity of the one or more payment entities, wherein the payment entity is configured to set the connectivity status flag upon successful receiving and successful sending of the connectivity check message based on the predefined sequence.

17. The server system as claimed in claim 10, wherein the server system is caused to perform a preset of each connectivity status flag of the plurality of connectivity status flag to a failure state in the connectivity check message.

18. A method, comprising:

receiving, by a server system, a connectivity information request before performing a payment transaction via a payment network;

generating, by the server system, a connectivity check message comprising a plurality of connectivity status flags associated with one or more payment entities in the payment network, wherein

at least one connectivity status flag is associated with a receiving terminal of each payment entity of the one or more payment entities; and

at least one connectivity status flag is associated with a sending terminal of each payment entity of the one or more payment entities;

sending, by the server system, the connectivity check message to the one or more payment entities in a predefined sequence of a payment transaction flow in the

payment network;

facilitating, by the server system, setting up the plurality of connectivity status flags based on a successful communication of the connectivity check message between the one or more payment entities in the predefined sequence, wherein a payment entity of the one or more payment entities is configured to

set the at least one connectivity status flag associated with the receiving terminal to a success state upon successful receipt of the connectivity check message, and

set the at least one connectivity status flag associated with the sending terminal to the success state upon successful sending of the connectivity check message;

determining, by the server system, if each of the plurality of connectivity status flags is set with the success state; and

upon determining the success state of each of the plurality of connectivity status flags, generating, by the server system, a successful connectivity information for performing the payment transaction.

19. The method as claimed in claim 18, further comprising:

upon receiving the connectivity information request, generating, by the server system, a payment transaction request, the payment transaction request comprising at least a payment card information of a user and a payment amount for the payment transaction; and

storing, by the server system, the payment transaction request.

20. The method as claimed in claim 18, wherein generating the successful connectivity information comprises:

provisioning, by the server system, a transaction option for the user to perform the payment transaction;

upon receiving a selection input on the transaction option, sending, by the server system, the payment transaction request to a payment entity associated with the payment card via the one or more payment entities in the predefined sequence; and

facilitating, by the server system, authentication of the payment transaction by the payment entity associated with the payment card.

1. A computer-implemented method of checking network connectivity of an acquirer server and a plurality of payment entity servers in the payment network, the method comprising the steps of:

receiving, by an acquirer server, a connectivity information request from a merchant terminal, wherein the connectivity information request comprises payment cardholder information;

generating, by the acquirer server, a payment transaction request based on the connectivity information request;

storing, by the acquirer server, the payment transaction request;

generating, by the acquirer server, a connectivity check message, wherein the connectivity check message includes a plurality of status flags;

communicating, by the acquirer server and a plurality of the payment entity servers, the connectivity check message in a predefined payment transaction flow sequence in the payment network;

determining, by the acquirer server and each of the plurality of the payment entity servers, an ability to successfully communicate the connectivity check message, and setting, by the acquirer server and each of the plurality of the payment entity servers, the status flags for the acquirer server and each of the plurality of the payment entity servers based on the determinations;

receiving, by the acquirer server, the connectivity check message;

checking, by the acquirer server, each of the status flags in the connectivity check message;

sending, by the acquirer server, successful connectivity information to the merchant terminal; and,

sending, by the acquirer server, the payment transaction request to the payment server.

2. The method as claimed in claim 1, wherein the generating the connectivity check message includes presetting each of the status flags to a failure state.

3. The method as claimed in claim 1, wherein the determining, by the acquirer server and each of the plurality of the payment entity servers, the ability to successfully communicate the connectivity check message comprises:

checking communication terminals of each of the acquirer server and the plurality of the payment entity servers to evaluate connectivity there between.