

CLAIMS:

1. A method comprising:
 - updating, by a server computer, a routing table to generate an updated routing table, wherein the updated routing table comprises a plurality of payment token issuer identifiers, wherein each payment token issuer identifier is a substitute for a real issuer identifier for an issuer and is static for the issuer;
 - sending, by the server computer, the updated routing table to a transaction processing entity;
 - receiving, by the server computer from the transaction processing entity, an authorization request message comprising a payment token, wherein the payment token comprises a payment token issuer identifier that replaces and obfuscates the real issuer identifier of the issuer, wherein all payment tokens generated for accounts issued by the issuer include a same payment token issuer identifier;
 - identifying, by the server computer, the real issuer identifier of the issuer using the routing table;
 - identifying, by the server computer, the issuer identified by the real issuer identifier of the issuer;
 - determining, by the server computer, a real account identifier associated with the payment token;
 - generating, by the server computer, a modified authorization request message comprising the real account identifier; and
 - transmitting, by the server computer, the modified authorization request message to the issuer identified by the real issuer identifier for approval.
2. The method of claim 1, wherein the authorization request message is received by the server computer from a merchant computer.
3. The method of claim 1, wherein determining the real account identifier comprises searching a database for the real account identifier using the payment token.
4. The method of claim 1, further comprising:
 - receiving, by the server computer, an authorization response message from the issuer;

generating, by the server computer, a modified authorization response message comprising the payment token; and

transmitting the modified authorization response message to a merchant computer.

5. The method of claim 1, wherein the authorization request message further comprises a token requestor identifier and wherein the method further comprises:

validating, by the server computer, that the token requestor identifier is associated with the payment token.

6. The method of claim 1, wherein the authorization request message further comprises a token presentment mode and wherein the method further comprises:

validating, by the server computer, that the payment token is associated with the token presentment mode.

7. The method of claim 1, wherein the modified authorization request message further comprises a token assurance level code and wherein the issuer uses the token assurance level code to determine whether to authorize the transaction.

8. The method of claim 1, wherein before receiving the authorization request message, the payment token is generated and provided to the server computer by the issuer.

9. The method of claim 7, wherein the token assurance level code indicates a level of confidence that the payment token was requested by an account holder of an underlying payment account associated with the real account identifier.

10. A server computer comprising a processor and a computer readable medium comprising code, executable by the processor, for implementing a method comprising:

updating, by a server computer, a routing table to generate an updated routing table, wherein the updated routing table comprises a plurality of payment token issuer identifiers, wherein each payment token issuer identifier is a substitute for a real issuer identifier for an issuer and is static for the issuer;

sending, by the server computer, the updated routing table to a transaction processing entity;

receiving, by the server computer from the transaction processing entity, an authorization request message comprising a payment token, wherein the payment token comprises a payment token issuer identifier that replaces and obfuscates the real issuer identifier of the issuer, wherein all payment tokens generated for accounts issued by the issuer include a same payment token issuer identifier;

identifying, by the server computer, the real issuer identifier of the issuer using the routing table;

identifying, by the server computer, the issuer identified by the real issuer identifier of the issuer;

determining a real account identifier associated with the payment token;

generating a modified authorization request message comprising the real account identifier; and

transmitting the modified authorization request message to the issuer identified by the real issuer identifier for approval.

11. The server computer of claim 10, wherein the authorization request message is received by the server computer from a merchant computer.

12. The server computer of claim 10, wherein determining the real account identifier comprises searching a database for the real account identifier using the payment token.

13. The server computer of claim 10, the method further comprising:
receiving an authorization response message from the issuer;
generating a modified authorization response message comprising the payment token; and

transmitting the modified authorization response message to a merchant computer.

14. The server computer of claim 10, wherein the authorization request message further comprises a token requestor identifier and wherein the method further comprises:

validating that the token requestor identifier is associated with the payment token.

15. The server computer of claim 10, wherein the authorization request message further comprises a token presentment mode and wherein the method further comprises:

validating, by the server computer, that the payment token is associated with the token presentment mode.

16. The server computer of claim 10, wherein the modified authorization request message further comprises a token assurance level code and wherein the issuer uses the token assurance level code to determine whether to authorize the transaction.

17. The server computer of claim 10, wherein before receiving the authorization request message, the payment token is generated and provided to the server computer by the issuer.

18. The server computer of claim 16, wherein the token assurance level code indicates a level of confidence that the payment token was requested by an account holder of an underlying payment account associated with the real account identifier.