Claims

1. A computer implemented method of implementing a payment service for one or more clients for transactions associated with a distributed ledger, the method comprising:

updating a machine readable resource associated with the payment service, the machine readable resource being provided at or accessible from a predictable or known location associated with the payment service, the machine readable resource comprising:

at least one identifier associated with a host computing resource responsible for implementing the payment service for each client among the one or more clients, each client being associated with an alias, the alias being specific to the client;

an entry associated with at least one capability supported by the payment service, each capability being associated with a protocol or instructions for implementing the respective capability for the one of more clients associated with the payment service; and

one or more instructions and/or a specification for accessing or obtaining a public address associated with the alias, the public address used for facilitating transactions associated with the alias;

wherein the step of updating comprises adding at least one further capability that is supported by the payment service, wherein the at least one further capability includes:

validation of a payer entity requesting for a payment destination of an alias, wherein a given client among the one or more clients is associated with the alias; and/or

asynchronous processing of a request from a payer entity, the request being associated with a payment destination of an alias, wherein a given client among the one or more clients is associated with the alias.

2. The method as claimed in claim 1, further comprising receiving, from a payer entity, a request associated with a first alias, the request pertaining to a payment destination of a payee client among the one or more clients associated with the payment service, the payee client being associated with the first alias;

wherein the payer entity is associated with a payer payment service and is assigned a second alias associated with the payer payment service, the second alias being included in the request from the payer entity.

3. The method as claimed in claim 2, wherein the payer payment service is different from the payment service of the payee client.

4. The method as claimed in claim 2, wherein the payer payment service is the same as the payment service of the payee client.

5. The method as claimed in claims 3 or 4 wherein the step of obtaining the public key associated with the payer entity further comprises:

accessing a machine readable resource from a location associated with the payment service of the payer entity;

sending a HTTP GET request based on a public key infrastructure (PKI) request template in the machine readable resource, and based on the alias of the payer entity; and

obtaining the public key associated with the alias in response.

6. The method as claimed in any one of claims 1 to 5, wherein one or more instructions and/or specification in the machine readable resource associated with the payment service comprises:

obtaining a public key validity request template from the machine readable resource for a PKI endpoint identifier;

including the alias in the template to generate a complete public key validity request; and

sending a HTTP GET request based on the completed public key validity request to verify that the public key in the request is valid for the alias in the request.

7. A computing device or system, comprising:

at least one a processor; and

memory including executable instructions that, as a result of execution by the at least one processor, causes the computing device or system to perform the computer-implemented method of any preceding claims.

8. A non-transitory computer-readable storage medium having stored thereon executable instructions that, as a result of being executed by a processor of a system or

computing device, cause the system or computing device to perform the computer-implemented method of any one of claims 1 to 6.

5