CLAIMS

Therefore, the following is claimed:

1. A system, comprising:

at least one computing device; and

a logical network configuration manager executable in the at least one computing device, wherein upon execution, the logical network configuration manager ~~comprising~~causes the at least one computing device to at least:

~~logic that~~ receives, via a logical network gateway operated by a computing service provider, ~~a~~ at least one programmatic service call from a client device associated with a customer of the computing service provider to connect to a logical network operated by the computing service provider;

create, responsive to receipt of the at least one programmatic service call from the client device, a plurality of accountings of usage, individual ones of the plurality of accountings of usage associated with respective ones of a plurality of customer accounts;

create, responsive to receipt of the at least one programmatic service call from the client device, a programmatic configuration of the logical network comprising the logical network gateway and the plurality of customer accounts;

~~logic that~~ creates, responsive to receipt of the at least one programmatic service call from the client device, a logical network tunnel between the client device and a plurality of virtual computers attached to the logical network according to the programmatic configuration, wherein the virtual computers are associated with network addresses specified by the customer and wherein the computing service provider operates a plurality of logical networks for ~~a~~ the plurality of customer accounts associated with the computing service provider; and

~~logic that~~ sends confirmation data associated with creation of the logical network tunnel to the client device.

2. The system of claim 1, wherein the logical network gateway further comprises a plurality of logical network gateways arranged in a distributed computing configuration.

3. The system of claim 1, wherein the plurality of customer accounts associated with the logical network gateway are used to further establish a connection with the logical network gateway from a plurality of network addresses.

4. The system of claim 1, wherein the logical network gateway facilitates communication between the client device and at least one logical network.

5. The system of claim 1, wherein the plurality of customer accounts associated with the logical network gateway are stored in at least one computing device within the logical network.

6. The system of claim 1, further comprising a logical network user manager executable in the at least one computing device, wherein upon execution, the logical network user manager ~~comprising~~ causes the at least one computing device to:

~~logic that~~ creates the plurality of customer accounts upon receiving at least one programmatic service call;

~~logic that~~ sends, in response to the at least one programmatic service call, confirmation data corresponding to the creation of the plurality of customer accounts;

~~logic that~~ associates the plurality of customer accounts with the logical network gateway upon receiving the at least one programmatic service call; and

~~logic that~~ sends, in response to the at least one programmatic service call, confirmation data corresponding to the association of the plurality of customer accounts with the logical network gateway.

7. The system of claim 1, wherein the logical network further comprises a plurality of permissions corresponding to individual ones of the plurality of customer accounts associated with the logical network gateway.

8. The system of claim 7, wherein at least one of the plurality of ~~the~~ permissions further comprises limiting network access of the plurality of customer accounts from a plurality of network address destinations.

9. The system of claim 1, wherein the logical network further comprises a configuration for ~~an~~ the plurality of accounting of usages of the logical network gateway by the plurality of customer accounts associated with the logical network gateway.

10. A method, comprising ~~the steps of~~:

creating, by a computing service provider via at least one computing device, a logical network for a customer within an environment provided by the computing service provider, wherein the logical network includes one or more virtual computers associated with a plurality of network addresses specified by the customer;

creating, by the at least one computing device, a plurality of accountings of usage responsive to receipt of at least one programmatic service call from a client device, individual ones of the plurality of accountings of usage associated with respective ones of a plurality of customer accounts;

creating, by the at least one computing device, a programmatic configuration of the logical network comprising a logical network gateway and the plurality of customer accounts responsive to receipt of the at least one programmatic service call from the client device;

creating, ~~in~~ by the at least one computing device, a logical network tunnel between ~~a~~ the client device and the logical network in response to receipt of ~~a~~ the at least one programmatic service call from the client device such that the client device appears as being present in the logical network; and

transmitting, by the at least one computing device, confirmation data associated with the creation of the logical network tunnel to the client device.

11. The method of claim 10, wherein the logical network gateway further comprises a plurality of logical network gateways arranged in a distributed computing configuration.

12. The method of claim 10, wherein the logical network further comprises at least one computing device within the logical network.

13. The method of claim 10, wherein the plurality of customer accounts further comprise data defining membership in at least one client group associated with the logical network gateway.

14. The method of claim 13, wherein the plurality of customer accounts and the at least one client group are stored on at least one computing device within the logical network.

15. The method of claim 10, ~~wherein the~~ further comprising a plurality of permissions corresponding to individual ones of the plurality of customer accounts, at least one of the plurality of permissions further comprises ~~permissions~~ granting to the plurality of customer accounts network access to a plurality of network address destinations.

16. The method of claim 10, ~~wherein the~~ further comprising a plurality of permissions corresponding to individual ones of the plurality of customer accounts, at least one of the plurality of permissions further comprise~~ing~~ limiting network access of the plurality of customer accounts from a plurality of network address destinations.