

What is claimed is Claims:

1. A method of providing a service on a network, the method comprising:
 - receiving a transmission control protocol (TCP) synchronize (SYN) packet from a client directed to an internet protocol (IP) address and port number derived from at least a one-time datum associated with the client;
 - confirming that the TCP SYN packet is addressed to an authorized IP address and port number;
 - sending a TCP synchronize-acknowledgement (SYN-ACK) packet to the client;
 - receiving a TCP acknowledge (ACK) from the client;
 - receiving a data packet from the client, the data packet comprising a client ID and the one-time datum;
 - generating a calculated one-time datum based at least on the client ID;
 - verifying that the one-time datum corresponds to the calculated one-time datum; and
 - establishing a TCP/IP connection with the client in response to the verifying.
2. The method of claim 1, further comprising not storing any record of the receiving the TCP SYN packet from the client.
3. The method of claim 1, further comprising not establishing a SYN-RECEIVED state for a connection with the client.
4. The method of claim 1, further comprising not storing any record of the sending the TCP SYN-ACK packet to the client.
5. The method of claim 1, further comprising not generating a data structure for data representing half-open connections with clients.
6. The method of claim 1, further comprising registering a plurality of clients to provide each of the plurality of clients with a password unique to each client.
7. The method of claim 6, wherein the registering further comprises providing each of the plurality of clients with a user ID.
8. The method of claim 1, wherein the one-time datum is derived from a time

and a hash function applied to at least a password for the client.

9. The method of claim 1, wherein the IP address and port number are derived as a function of a predefined range of IP and port numbers and the one-time datum.

10. The method of claim 1, wherein the confirming comprises confirming that the IP address and port number are among a set of periodically changing IP addresses and port number pairs, each IP address and port number pair specific to a single client.

11. The method of claim 10, wherein each IP address and port number in the set of periodically changing IP addresses and port numbers changes at least every 30 seconds.

12. The method of claim 1, wherein the generating comprises:

obtaining a password for the client based on the client ID;

obtaining a time associated with the TCP SYN packet;

calculating the calculated one-time datum as a function of at least the time associated with the TCP SYN packet and the password for the client.

13. A system for providing a service on a network, the system comprising:

at least one server comprising computer hardware configured to receive a transmission control protocol (TCP) synchronize (SYN) packet from a client directed to an internet protocol (IP) address and port number derived from at least a one-time datum associated with the client;

at least one hardware processor configured to confirm that the TCP SYN packet is addressed to an authorized IP address and port number;

at least one server comprising computer hardware configured to send a TCP synchronize-acknowledgement (SYN-ACK) packet to the client;

at least one server comprising computer hardware configured to receive a TCP acknowledge (ACK) from the client;

at least one server comprising computer hardware configured to receive a data packet from the client, the data packet comprising a client ID and the one-time datum;

at least one hardware processor configured to generate a calculated one-time datum based at least on the client ID;

| at least one hardware processor configured to verify that the one-time datum corresponds to the calculated one-time datum; and

| a server comprising computer hardware configured to establish a TCP/IP connection with the client.

14. The system of claim 13, wherein the system does not store any record of receiving the TCP SYN packet from the client.

15. The system of claim 13, wherein the system lacks a memory storing a SYN-RECEIVED state for a connection with the client.

16. The system of claim 13, wherein the system does not store any record of sending the TCP SYN-ACK packet to the client.

17. The system of claim 13, wherein the system lacks a data structure for data representing half-open connections with clients.

18. The system of claim 13, further comprising a server configured to register a plurality of clients and to provide each of the plurality of clients with a password unique to each client.

19. The system of claim 18, wherein the server configured to register is further configured to provide each of the plurality of clients with a user ID.

20. The system of claim 13, wherein the one-time datum is derived from a time and a hash function applied to at least a password for the client.

21. The system of claim 13, wherein the IP address and port number are derived as a function of a predefined range of IP and port numbers and the one-time datum.

| 22. The system of claim 13, wherein the at least one hardware processor configured to confirm is further configured to confirm that the IP address and port number are among a set of periodically changing IP addresses and port number pairs, each IP address and port number pair specific to a single client.

23. The system of claim 22, wherein each IP address and port number in the set of periodically changing IP addresses and port numbers changes at least every 30 seconds.

| 24. The system of claim 13, wherein the at least one hardware processor configured to generate is further configured to:

obtain a password for the client based on the client ID;

obtain a time associated with the TCP SYN packet;

calculate the calculated one-time datum as a function of at least the time associated with the TCP SYN packet and the password for the client.