CLAIMS

1. A method of transmitting data packets from a client device to a cloud, the data packets being comprised in a communication, the cloud comprising a plurality of media nodes and a plurality of gateway nodes, wherein:

the client device transmits a call request to a signaling server, the call request containing contact information regarding a party to be called;

the signaling server develops routes for a communication directed to the party to be called, a first route comprising a first gateway node and a second route comprising a second gateway node, neither the first gateway node, the second gateway node; nor any other media node having information describing either the first route or the second route in total;

the signaling server transmits routing instruction packets to the client device, the first gateway node and the second gateway node, respectively; and

in response to a routing instruction packet, the client device transmits a first data packet in the communication from the client device to the first gateway node and a second data packet in the communication from the client device to the second gateway node.

2. The method of Claim 1 comprising transmitting the first data packet from the client device to the first gateway node over a first physical medium and transmitting the second data packet and from the client device to the second gateway node over a second physical medium.

3. The method of Claim 2 wherein the first physical medium comprises a cellular telephone link and the second physical medium comprises a WiFi channel.

4. The method of Claim 2 comprising providing the first data packet with a first IP source address and providing the second data packet with a second IP source address.

5. The method of Claim 1 comprising providing the first data packet with a first IP source address and providing the second data packet with a second IP source address.

6. A method of transmitting data packets from a client device to a cloud, the data packets being comprised in a communication, , the cloud comprising a plurality of media nodes and a plurality of gateway nodes, the method comprising:

transmitting a first data packet from the client device to a first gateway node through at least one router;

providing the first data packet with a first IP source address and a first MAC source address;

transmitting a second data packet from the client device to a second gateway node through at least one router; and

providing the second data packet with a second IP source address and a second MAC source address.

7. The method of Claim 6 comprising transmitting the first data packet from the client device to the first gateway node over a first physical medium and transmitting a second data packet and from the client device to the second gateway node over a second physical medium.

8. The method of Claim 6 wherein the first physical medium comprises a cellular telephone link and the second physical medium comprises a WiFi channel.

9. A method of transmitting data packets from a client device to a cloud through at least one router, the data packets being comprised in a communication, the cloud comprising a plurality of media nodes and a plurality of gateway nodes, the method comprising:

providing a first data packet with a first IP source address and a first MAC source address; and

providing a second data packet with a second IP source address and a second MAC source address.

10. The method of Claim 1 wherein before the signaling server transmits routing instruction packets to the client device, the first gateway node and the second gateway node, respectively, the signaling server contacts a name server with the contact information regarding a party to be called.

11. The method of Claim 10 wherein the contact information regarding the party to be called comprises a confidential identification of the party to be called and wherein the name server converts the confidential identification into an SDNP address of the party to be called, the signaling server using the SDNP address of the party to be called in developing the routes for the communication from the client device to the party to be called.

12. The method of Claim 10 wherein the contact information regarding the party to be called comprises a phone number and wherein the name server converts the phone number into an address of a gateway node closest to the location of the party to be called, the

signaling server using the address of a gateway node closest to the location of the of the party to be called in developing the routes for the communication from the client device to the party to be called.

13. The method of Claim 10 where the client device passes information to the name server whenever the device connects to the network.

14. The method of Claim 1 wherein the routing instruction packet that the signaling server sends to the client device contains a first routing instruction to send the first data packet to the first gateway node and a second routing instruction to send the second data packet to the second gateway node.

15. The method of Claim 14 wherein each of the first gateway node and the second gateway node has a first address for communication with the client device and a second address for communication within the cloud.

16. The method of Claim 5 wherein the client device transmits the first and second data packets to the first and second gateway nodes, respectively, through a router, the method further comprising providing the first data packet with a first MAC source address and providing the second data packet with a second MAC source address.

17. The method of Claim 1 comprising providing a plurality of signaling servers, wherein the signaling servers divide the task of routing the packets from the client device to the party to be called, and wherein no single signaling server has information describing the entire route of a packet.

18. The method of Claim 1 further comprising concealing the content of at least one of the first data packet and the second data packet using a combination of concealment methods, the concealment methods comprising encryption, scrambling, junk data insertions, splitting and/or mixing and being based on a state.

19. The method of Claim 18 wherein the state comprises a time, a node number, a network identity, or a GPS location.

20. The method of Claim 2 wherein the first physical medium comprises a cellular telephone link modulated using a first carrier frequency and the second physical medium comprises a cellular telephone link modulated using a second carrier frequency.

21. The method of Claim 2 wherein the first physical medium comprises a WiFi channel modulated using a first carrier frequency and the second physical medium comprises a WiFi channel modulated using a second carrier frequency.

22. The method of Claim 7 wherein the first physical medium comprises a cellular telephone link modulated using a first carrier frequency and the second physical medium comprises a cellular telephone link modulated using a second carrier frequency.

23. The method of Claim 7 wherein the first physical medium comprises a WiFi channel modulated using a first carrier frequency and the second physical medium comprises a WiFi channel modulated using a second carrier frequency.

24. The method of Claim 6 further comprising concealing the content of at least one of the first data packet and the second data packet using a combination of concealment methods, the concealment methods comprising encryption, scrambling, junk data insertions, splitting and/or mixing and being based on a state.

25. The method of Claim 24 wherein the state comprises a time, a node number, a network identity, or a GPS location.