

CLAIMS

1. A computer-implemented method for Internet Protocol (IP) address acquisition, the method comprising:

receiving, by one or more processors, a request message from a terminal device, the request message requesting a service;

transmitting, by the one or more processors, computer code to the terminal device;

receiving, by the one or more processors, a communication connection request from the terminal device, the communication connection request being sent from the terminal device in response to running the computer code on the terminal device;

in response to receiving the communication connection request, establishing, by the one or more processors, a communication connection to the terminal device; and

determining, by the one or more processors, a first IP address associated with the terminal device based on one or more communications transmitted through the communication connection, wherein determining the first IP address comprises:

receiving, by the one or more processors, a data packet from the terminal device through the communication connection, the data packet being sent based on the computer code,

determining, by the one or more processors, a source IP address based on the data packet,

sending, by the one or more processors, a response data packet to the terminal device through the communication connection, the response data packet including the source IP address, and

determining, by the one or more processors, the first IP address based on a terminal IP address received from the terminal device, the terminal IP address being determined based on the source IP address.

2. The computer-implemented method of claim 1, wherein the first IP address is the terminal IP address.

3. The computer-implemented method of claim 1, wherein the request message is of Hypertext Transfer Protocol (HTTP), the computer code comprises JavaScript code, the communication connection comprises a Web Real-Time Communication (WebRTC)

connection, and at least one of the data packet and the response data packet is of User Datagram Protocol (UDP).

4. The computer-implemented method of claim 1, further comprising:
determining, by the one or more processors, a second IP address associated with the terminal device based on the request message; and
performing one or more risk control processes based on the first IP address and the second IP address.

5. The computer-implemented method of claim 4, wherein the one or more risk control processes comprises determining that the first IP address differs from the second IP address, and in response, assigning an alarm to the terminal device to monitor subsequent communications with the terminal device.

6. The computer-implemented method of claim 1, wherein the request message is of a first protocol, and the one or more communications transmitted through the communication connection are of a second protocol, the second protocol being different from the first protocol.

7. A non-transitory, computer-readable medium storing one or more instructions executable by a computer system to cause one or more processors to perform operations comprising:

receiving a request message from a terminal device, the request message requesting a service;

transmitting computer code to the terminal device;

receiving a communication connection request from the terminal device, the communication connection request being sent from the terminal device in response to running the computer code on the terminal device;

in response to receiving the communication connection request, establishing a communication connection to the terminal device; and

determining a first IP address associated with the terminal device based on one or more communications transmitted through the communication connection, wherein determining the first IP address comprises:

receiving a data packet from the terminal device through the communication

connection, the data packet being sent based on the computer code;
determining a source IP address based on the data packet;
sending a response data packet to the terminal device through the communication connection, the response data packet including the source IP address;
and
determining the first IP address based on a terminal IP address received from the terminal device, the terminal IP address being determined based on the source IP address.

8. The non-transitory, computer-readable medium of claim 7, wherein the first IP address is the terminal IP address.

9. The non-transitory, computer-readable medium of claim 7, wherein the request message is of Hypertext Transfer Protocol (HTTP), the computer code comprises JavaScript code, the communication connection comprises a Web Real-Time Communication (WebRTC) connection, and at least one of the data packet and the response data packet is of User Datagram Protocol (UDP).

10. The non-transitory, computer-readable medium of claim 7, further comprising one or more instructions to:

determine, by the one or more processors, a second IP address associated with the terminal device based on the request message; and

perform one or more risk control processes based on the first IP address and the second IP address.

11. The non-transitory, computer-readable medium of claim 10, wherein the one or more risk control processes comprises determining that the first IP address differs from the second IP address, and in response, assigning an alarm to the terminal device to monitor subsequent communications with the terminal device.

12. The non-transitory, computer-readable medium of claim 7, wherein the request message is of a first protocol, and the one or more communications transmitted through the communication connection are of a second protocol, the second protocol being different from

the first protocol.

13. A computer-implemented system, comprising:

one or more computers; and

one or more computer memory devices interoperably coupled with the one or more computers and having tangible, non-transitory, machine-readable media storing one or more instructions that, when executed by the one or more computers, perform one or more operations comprising:

receiving a request message from a terminal device, the request message requesting a service;

transmitting computer code to the terminal device;

receiving a communication connection request from the terminal device, the communication connection request being sent from the terminal device in response to running the computer code on the terminal device;

in response to receiving the communication connection request, establishing a communication connection to the terminal device; and

determining a first IP address associated with the terminal device based on one or more communications transmitted through the communication connection, wherein determining the first IP address comprises:

receiving, by the one or more processors, a data packet from the terminal device through the communication connection, the data packet being sent based on the computer code;

determining, by the one or more processors, a source IP address based on the data packet;

sending, by the one or more processors, a response data packet to the terminal device through the communication connection, the response data packet including the source IP address; and

determining, by the one or more processors, the first IP address based on a terminal IP address received from the terminal device, the terminal IP address being determined based on the source IP address.

14. The computer-implemented system of claim 13, wherein the first IP address is the terminal IP address.

15. The computer-implemented system of claim 13, wherein the request message is of Hypertext Transfer Protocol (HTTP), the computer code comprises JavaScript code, the communication connection comprises a Web Real-Time Communication (WebRTC) connection, and at least one of the data packet and the response data packet is of User Datagram Protocol (UDP).

16. The computer-implemented system of claim 13, further comprising one or more operations to:

determine, by the one or more processors, a second IP address associated with the terminal device based on the request message; and

perform one or more risk control processes based on the first IP address and the second IP address.

17. The computer-implemented system of claim 16, wherein the one or more risk control processes comprises determining that the first IP address differs from the second IP address, and in response, assigning an alarm to the terminal device to monitor subsequent communications with the terminal device.