

What is claimed is:

1. An identity authentication method, comprising:
 - receiving request information transmitted by an online terminal device for determining neighbor network devices and, determining at least one neighbor network device of the online terminal device according to the request information;
 - identifying one or more credible neighbor network devices of the online terminal device from the at least one neighbor network device and one or more weighted neighbor network devices of the online terminal device from the at least one neighbor network device; and
 - computing a credibility score of the online terminal device according to a number of the one or more credible neighbor network devices and a number of the one or more weighted neighbor network devices, generating authentication notification information according to the credibility score, the authentication notification information indicating whether the online terminal device passes identity authentication, and transmitting the authentication notification information to the online terminal device, wherein the number of the one or more credible neighbor network devices is a count of the credible neighbor network devices, and the number of the one or more weighted neighbor network devices is a count of the weighted neighbor network devices.
2. The method of claim 1, wherein receiving the request information transmitted by the online terminal device and determining the at least one neighbor network device of the online terminal device according to the request information comprises:
 - receiving routing detection request information transmitted by the online terminal device for determining neighbor network devices;
 - acquiring historic path records according to the routing detection request information and matching a current connection path of the online terminal device with historic paths in the historic path records to obtain a matching result; and
 - if the matching result exceeds a preset value, determining a device corresponding to the matching result to be the at least one neighbor network device of the online terminal device.
3. The method of claim 1, wherein identifying the one or more credible neighbor network devices of the online terminal device from the at least one neighbor network device comprises calculating a number of occurrence that historic login accounts are matched with a neighbor network device and identifying the neighbor network device as a credible neighbor network device of the online terminal device when the number of occurrence exceeds a preset occurrence time threshold.

4. The method of claim 1, wherein identifying the one or more weighted neighbor network devices of the online terminal device from the at least one neighbor network device comprises, when an account history shows that login times of a user on a neighbor network device exceed a preset login time threshold, determining the neighbor network device to be one of the one or more weighted neighbor network devices of the online terminal device.
5. The method of claim 1, wherein computing the credibility score of the online terminal device according to the number of the one or more credible neighbor network devices and the number of the one or more weighted neighbor network devices comprises computing the credibility score to be a sum of the number of the credible neighbor network devices and the number of the weighted neighbor network devices.
6. The method of claim 1, further comprising:
determining, from the at least one neighbor network device, the number of the one or more credible neighbor network devices and the number of the one or more weighted neighbor network devices.
7. A method for identity authentication, comprising:
transmitting request information for determining at least one neighbor network device to a server;
receiving authentication notification information transmitted by the server, the authentication notification information indicating whether the online terminal device passes identity authentication and the authentication notification information being information generated by the server according to a credibility score of the online terminal device computed according to a number of credible neighbor network devices corresponding to the online terminal device and a number of weighted neighbor network devices corresponding to the online terminal device, wherein the server determines the number of credible neighbor network devices and the number of weighted neighbor network devices from the at least one neighbor network device, and wherein the number of the credible neighbor network devices is a count of the credible neighbor network devices, and the number of the weighted neighbor network devices is a count of the weighted neighbor network devices; and
displaying the authentication notification information.
8. The method of claim 7, wherein transmitting the request information comprises transmitting routing detection request information for determining the at least one neighbor network device to the server, enabling the server to determine the at least one neighbor network device of the online terminal device according to the routing detection request information.

9. The method of claim 7, wherein transmitting the request information comprises:
broadcasting an address resolution protocol (ARP) request message;
receiving an ARP reply message transmitted by at least one replying device in the same broadcast domain as the online terminal device, the ARP reply message carrying a hardware Medium Access Control (MAC) address of the replying device; and
transmitting the request information carrying the MAC address to the server, enabling the server to determine a device corresponding to the received MAC address to be one of the at least one neighbor network device of the online terminal device.
10. The method of claim 7, wherein transmitting the request information comprises:
searching for an adjacent wireless local network (WLAN) to obtain a service set identifier (SSID) of the WLAN; and
transmitting the request information carrying the SSID to the server, enabling the server to determine the WLAN having the SSID to be one of the at least one neighbor network device of the online terminal device.
11. The method of claim 7, wherein transmitting the request information comprises:
if a current network of the online terminal device is a Global System for Mobile Communications (GSM) network, acquiring base station information of a base station adjacent to a current connection point of the online terminal device; and
transmitting the request information carrying the base station information to the server, enabling the server to determine the base station corresponding to the base station information to be one of the at least one neighbor network device of the online terminal device.
12. An identity authentication apparatus, comprising:
a receiving unit configured to receive request information transmitted by an online terminal device for determining neighbor network devices and, determine at least one neighbor network device of the online terminal device according to the request information;
an identification unit configured to identify one or more credible neighbor network devices of the online terminal device from the at least one neighbor network device and one or more weighted neighbor network devices of the online terminal device from the at least one neighbor network device; and
an authentication unit configured to compute a credibility score of the online terminal device according to a number of the one or more credible neighbor network devices and a number of the one or more weighted neighbor network devices, to generate authentication notification

information according to the credibility score, the authentication notification information indicating whether the online terminal device passes identity authentication, and to transmit the authentication notification information to the online terminal device, wherein the number of the one or more credible neighbor network devices is a count of the credible neighbor network devices, and the number of the one or more weighted neighbor network devices is a count of the weighted neighbor network devices.

13. The apparatus of claim 12, wherein the receiving unit is further configured to:
receive routing detection request information transmitted by the online terminal device for determining at least one neighbor network device;

acquire historic path records according to the routing detection request information and match a current connection path of the online terminal device with historic paths in the historic path records to obtain a matching result; and

when the matching result exceeds a preset value, determine at least one device corresponding to the matching result to be the at least one neighbor network device of the online terminal device.

14. The apparatus of claim 12, wherein the identification unit is further configured to calculate a number of occurrence that historic login accounts are matched with a neighbor network device and identify the neighbor network device as one of the one or more credible neighbor network devices of the online terminal device when the number of occurrence exceeds a preset occurrence time threshold.

15. The apparatus of claim 12, wherein the identification unit is further configured to, when an account history shows that login times of a user on a neighbor network device exceed a preset login time threshold, determine the neighbor network device to be one of the one or more weighted neighbor network devices of the online terminal device.

16. The apparatus of claim 12, wherein the credibility score is a sum of the number of the one or more credible neighbor network devices and the number of the one or more weighted neighbor network devices; and

wherein the authentication unit is further configured to:

when the credibility score exceeds a preset credibility threshold, generate the authentication notification information to indicate that the online terminal device has passed the identity authentication; and

when the credibility score does not exceed the preset credibility threshold, generate the authentication notification information to indicate that the online terminal device has not passed the identity authentication.

17. A server, comprising:

a processor; and

a non-transitory computer-readable storage medium storing instructions that, when executed by the processor, cause the processor to:

receive request information transmitted by an online terminal device to determine at least one neighbor network device of the online terminal device according to the request information;

identify one or more credible neighbor network devices of the online terminal device from the at least one neighbor network device and identify one or more weighted neighbor network devices of the online terminal device from the at least one neighbor network device; and

compute a credibility score of the online terminal device according to a number of the one or more credible neighbor network devices and a number of the one or more weighted neighbor network devices, generate authentication notification information according to the credibility score, the authentication notification information indicating whether the online terminal device passes identity authentication, and transmit the authentication notification information to the online terminal device, wherein the number of the one or more credible neighbor network devices is a count of the credible neighbor network devices, and the number of the one or more weighted neighbor network devices is a count of the weighted neighbor network devices.

18. The server of claim 17, wherein the instructions that, when executed by the processor, cause the processor to identify one or more credible neighbor network devices of the online terminal device from the at least one neighbor network device and identify one or more weighted neighbor network devices of the online terminal device from the at least one neighbor network device comprises instructions that, when executed by the processor, cause the processor to:

calculate a number of occurrence that historic login accounts are matched with a neighbor network device and identify the neighbor network device as a credible neighbor network device of the online terminal device when the number of occurrence exceeds a preset occurrence time threshold.

19. The server of claim 17, wherein the instructions that, when executed by the processor, cause the processor to compute a credibility score of the online terminal device according to a number of the one or more credible neighbor network devices and a number of the weighted

neighbor network devices comprises instructions that, when executed by the processor, cause the processor to:

compute the credibility score to be a sum of the number of the one or more credible neighbor network devices and the number of the weighted neighbor network devices.

20. An identity authentication method, comprising:

receiving request information transmitted by an online terminal device for determining at least one neighbor network device of the online terminal device according to the request information;

determining the at least one neighbor network device of the online terminal device according to the request information;

determining a number of one or more credible neighbor network devices of the online terminal device from the at least one neighbor network device, wherein the number of the one or more credible neighbor network devices is a count of the credible neighbor network devices; and

determining whether the online terminal device passes identity authentication based on the number of credible neighbor network devices.

21. An identity authentication method, comprising:

receiving request information transmitted by an online terminal device for determining at least one neighbor network device of the online terminal device according to the request information;

determining the at least one neighbor network device of the online terminal device according to the request information;

determining a number of one or more weighted neighbor network devices of the online terminal device from the at least one neighbor network device, wherein the number of the one or more weighted neighbor network devices is a count of the weighted neighbor network devices; and

determining whether the online terminal device passes identity authentication based on the number of credible neighbor network devices.

22. A non-transitory computer-readable storage medium having stored therein instructions that are executable by one or more processors of a server to cause the server to perform an identity authentication method comprising:

receiving request information transmitted by an online terminal device for determining neighbor network devices and, determining at least one neighbor network device of the online terminal device according to the request information;

identifying one or more credible neighbor network devices of the online terminal device from the at least one neighbor network device and one or more weighted neighbor network devices of the online terminal device from the at least one neighbor network device; and

computing a credibility score of the online terminal device according to a number of the one or more credible neighbor network devices and a number of the one or more weighted neighbor network devices, generating authentication notification information according to the credibility score, the authentication notification information indicating whether the online terminal device passes identity authentication, and transmitting the authentication notification information to the online terminal device, wherein the number of the one or more credible neighbor network devices is a count of the credible neighbor network devices, and the number of the one or more weighted neighbor network devices is a count of the weighted neighbor network devices.

23. The non-transitory computer readable medium of claim 22, wherein the instructions are executable by the one or more processors of the server to cause the server to further perform:

receiving routing detection request information transmitted by the online terminal device for determining neighbor network devices;

acquiring historic path records according to the routing detection request information and matching a current connection path of the online terminal device with historic paths in the historic path records to obtain a matching result; and

if the matching result exceeds a preset value, determining a device corresponding to the matching result to be the at least one neighbor network device of the online terminal device.

24. The non-transitory computer readable medium of claim 22, wherein the instructions are executable by the one or more processors of the server to cause the server to further perform:

calculating a number of occurrence that historic login accounts are matched with a neighbor network device and identifying the neighbor network device as a credible neighbor network device of the online terminal device when the number of occurrence exceeds a preset occurrence time threshold.

25. The non-transitory computer readable medium of claim 22, wherein the instructions are executable by the one or more processors of the server to cause the server to further perform:

when an account history shows that login times of a user on a neighbor network device exceed a preset login time threshold, determining the neighbor network device to be one of the one or more weighted neighbor network devices of the online terminal device.

26. The non-transitory computer readable medium of claim 22, wherein the instructions are

executable by the one or more processors of the server to cause the server to further perform:
computing the credibility score to be a sum of the number of the one or more credible neighbor network devices and the number of the one or more weighted neighbor network devices.

27. A non-transitory computer-readable storage medium having stored therein instructions that are executable by one or more processors of an online terminal device to cause the online terminal device to perform an identity authentication method comprising:

transmitting request information for determining at least one neighbor network device to a server;

receiving authentication notification information transmitted by the server, the authentication notification information indicating whether the online terminal device passes identity authentication and the authentication notification information being information generated by the server according to a credibility score of the online terminal device computed according to a number of one or more credible neighbor network devices corresponding to the online terminal device and a number of weighted neighbor network devices corresponding to the online terminal device, wherein the number of the one or more credible neighbor network devices is a count of the credible neighbor network devices, and the number of the one or more weighted neighbor network devices is a count of the weighted neighbor network devices; and

displaying the authentication notification information.

28. The non-transitory computer readable medium of claim 27, wherein the instructions are executable by the one or more processors of the online terminal device to cause the online terminal device to further perform:

transmitting routing detection request information for determining the at least one neighbor network device to the server, enabling the server to determine the at least one neighbor network device of the online terminal device according to the routing detection request information.

29. The non-transitory computer readable medium of claim 27, wherein the instructions are executable by the one or more processors of the online terminal device to cause the online terminal device to further perform:

broadcasting an address resolution protocol (ARP) request message;

receiving an ARP reply message transmitted by at least one replying device in the same broadcast domain as the online terminal device, the ARP reply message carrying a hardware Medium Access Control (MAC) address of the replying device; and

transmitting the request information carrying the MAC address to the server, enabling the server to determine a device corresponding to the received MAC address to be one of the at least

one neighbor network device of the online terminal device.

30. The non-transitory computer readable medium of claim 27, wherein the instructions are executable by the one or more processors of the online terminal device to cause the online terminal device to further perform:

- searching for an adjacent wireless local network (WLAN) to obtain a service set identifier (SSID) of the WLAN; and

- transmitting the request information carrying the SSID to the server, enabling the server to determine the WLAN having the SSID to be one of the at least one neighbor network device of the online terminal device.

31. The non-transitory computer readable medium of claim 27, wherein the instructions are executable by the one or more processors of the online terminal device to cause the online terminal device to further perform:

- if a current network of the online terminal device is a Global System for Mobile Communications (GSM) network, acquiring base station information of a base station adjacent to a current connection point of the online terminal device; and

- transmitting the request information carrying the base station information to the server, enabling the server to determine the base station corresponding to the base station information to be one of the at least one neighbor network device of the online terminal device.