CLAIMS

What is claimed is:

1. A method for accessing a local network, the method comprising:

receiving, by a local gateway, a user plane establishment request, wherein the user plane establishment request comprises information about a user plane bearer to be established for a user equipment (UE) between the local gateway to and a gateway of a core network, wherein the UE accesses the core network via a base station, and the local gateway is a local gateway corresponding to the UE;

establishing, by the local gateway, for the UE according to the user plane establishment request, a user plane bearer that is between the base station and the gateway of the core network and that comprises the local gateway used as an intermediate node;

determining, by the local gateway, whether received data used by the UE to access a network is used to access the local network according to a destination IP address of the data used by the UE to access the network; and

if the data used by the UE to access the network is used to access the local network, routing, by the local gateway, to the local network, the data used by the UE to access the network.

2. The method according to claim 1, further comprising:

if the data used by the UE to access the network is not used to access the local network, forwarding, by the local gateway, to the gateway of the core network, the data used by the UE to access the network.

3. The method according to claim 1, wherein after the step of establishing, by the local gateway, for the UE according to the user plane establishment request, the user plane bearer between the base station and the gateway of the core network and that comprises the local gateway used as an intermediate node, and before the routing, by the local gateway, to the local network, the data used by the UE to access the network, further comprising:

receiving, by the local gateway, a routing instruction, wherein the routing instruction comprises a subnet identifier and a UE identifier, wherein the UE identifier uniquely identifies the UE, and the subnet identifier uniquely identifies a subnet; and

wherein the routing, by the local gateway to the local network, the data used by the UE to access the network comprises:

routing, by the local gateway, according to the routing instruction to the subnet identified by the subnet identifier in the routing instruction, the data used by the UE to access the network.

4. The method according to claim 1, wherein the local gateway stores a list of IP addresses of network devices in the local network.

5. A local gateway, comprising:

a receiver configured to receive a user plane establishment request, wherein the user plane establishment request comprises information about a user plane bearer to be established for a user equipment (UE) between the local gateway and a gateway of a core network, wherein the UE accesses the core network via a base station, and the local gateway is a local gateway corresponding to the UE;

a transmitter;

a memory storing instructions; and

one or more processors in communication with the receiver, the transmitter, and the memory, wherein the one or more processors execute the instructions to:

establish, for the UE according to the user plane establishment request, a user plane bearer between the base station and the gateway of the core network and that comprises the local gateway used as an intermediate node;

determine whether received data used by the UE to access a network is used to access the local network according to a destination IP address of the data used by the UE to access the network; and

if the data used by the UE to access the network is used to access the local network, instruct the transmitter to route, to the local network, the data used by the UE to access the network.

6. The local gateway according to claim 5, wherein the processor further executes the instructions to:

if the data used by the UE to access a network is not used to access the local network, instruct the transmitter to forward, to the gateway of the core network, the data used by the UE to access the network.

7. The local gateway according to claim 5, wherein after establishing, for the UE according to the user plane establishment request, the user plane bearer, the processor further executes the instructions to:

instruct the receiver to receive a routing instruction, wherein the routing instruction comprises a subnet identifier and a UE identifier, wherein the UE identifier uniquely identifies the UE, and the subnet identifier uniquely identifies a subnet; and

wherein routing, to the local network, the data used by the UE to access the network comprises:

routing, according to the routing instruction to the subnet identified by the subnet identifier in the routing instruction, the data used by the UE to access the network.

8. The local gateway according to claim 5, wherein the local gateway stores a list of IP addresses of network devices in the local network.