

CLAIMS

1. An information interaction method, comprising:

publishing a remote procedure call, RPC, message to a message queuing telemetry transport, MQTT, broker based on an MQTT protocol; and

5 in response to detecting that a response message with respect to the RPC message exists on the MQTT broker, obtaining the response message, wherein the response message is published to the MQTT broker by a called device indicated in the RPC message, the response message is acquired by the called device processing the RPC message after detecting the RPC message at the MQTT broker, and the response
10 message is published to the MQTT broker by the called device based on the MQTT protocol.

2. The method of claim 1, further comprising:

adding a message identifier of the RPC message at a first designated position in the
15 RPC message; and

wherein publishing the RPC message to the MQTT broker comprises:

publishing the RPC message with the message identifier added to the MQTT
broker.

20 3. The method of claim 2, further comprising:

in response to detecting that a new message exists in a second predetermined message path of the MQTT broker, and the new message has the message identifier of the RPC message, determining that the detected new message is the response message with respect to the RPC message.

4. The method of claim 1 or 2, wherein

publishing the RPC message to the MQTT broker comprises:

publishing the RPC message to a first predetermined message path of the
5 MQTT broker; and

obtaining the response message in response to detecting that the response message
with respect to the RPC message exists on the MQTT broker comprises:

in response to detecting that the response message with respect to the RPC
message exists in a second predetermined message path of the MQTT broker, obtaining
10 the response message.

5. The method of claim 4, wherein the first predetermined message path of the
MQTT broker and/or the second predetermined message path of the MQTT broker
comprises identification information of a device published the RPC message.
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6. The method of any one of claims 1-5, wherein

the RPC message instructs the called device to execute a remote control command,
and the response message indicates an execution result acquired by the called device
executing the remote control command; or

20 the RPC message instructs the called device to perform vision task processing, and
the response message indicates a processing result acquired by the called device
performing the vision task processing.

7. An information interaction method, comprising:

in response to that a called device detects a preset remote procedure call, RPC, message existing on a message queuing telemetry transport, MQTT, broker, obtaining the preset RPC message, wherein the preset RPC message comprises information indicating the called device, and the preset RPC message is published by an RPC
5 initiating device to the MQTT broker based on an MQTT protocol;

acquiring a response message with respect to the preset RPC message by processing the preset RPC message; and

publishing the response message to the MQTT broker based on the MQTT protocol.

10 8. The method of claim 7, further comprising:

in response to that the called device detects a new message existing in a first predetermined message path of the MQTT broker, determining that the detected new message is the preset RPC message; and/or

wherein publishing the response message to the MQTT broker comprises:

15 publishing the response message to a second predetermined message path of the MQTT broker.

9. The method of claim 7, wherein the preset RPC message comprises a message identifier of the preset RPC message;

20 the method further comprises:

adding the message identifier of the preset RPC message at a second designated position of the response message; and

wherein publishing the response message to the MQTT broker comprises:

publishing the response message with the message identifier added to the

MQTT broker.

10. The method of claim 7, wherein

5 a first predetermined message path of the MQTT broker and/or a second predetermined message path of the MQTT broker comprises identification information of an RPC initiating device published the preset RPC message; and/or

the preset RPC message instructs the called device to execute a remote control command or perform vision task processing.

10 11. An information interaction method, comprising:

receiving a remote procedure call, RPC, message published by an RPC initiating device based on a message queuing telemetry transport, MQTT, protocol;

sending the RPC message to a called device indicated in the RPC message;

15 receiving a response message with respect to the RPC message published by the called device based on the MQTT protocol, wherein the response message is acquired by the called device after the called device detects the RPC message at an MQTT broker and processes the RPC message; and

sending the response message to the RPC initiating device.

20 12. The method of claim 11, wherein

receiving the RPC message published by the RPC initiating device comprises:

receiving the RPC message published by the RPC initiating device to a first predetermined message path; and

receiving the response message with respect to the RPC message published by the

called device comprises:

receiving the response message published by the called device to a second predetermined message path.

5 13. The method of claim 12, wherein the first predetermined message path and/or the second predetermined message path comprises identification information of a device published the RPC message.

10 14. An information interaction apparatus, comprising:
an RPC message publishing module configured to publish a remote procedure call, RPC, message to a message queuing telemetry transport, MQTT broker based on an MQTT protocol; and

15 a response message obtaining module configured to obtain a response message with respect to the RPC message in response to detecting that the response message exists on the MQTT broker, wherein the response message is published to the MQTT broker by a called device indicated in the RPC message, the response message is acquired by the called device processing the RPC message after detecting the RPC message at the MQTT broker, and the response message is published to the MQTT broker by the called device based on the MQTT protocol.

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15. An information interaction apparatus, comprising:
an RPC message obtaining module configured to obtain a preset remote procedure call, RPC, message in response to detecting the preset RPC message existing on a message queuing telemetry transport, MQTT, broker, wherein the preset RPC message

comprises information indicating the called device, and the preset RPC message is published by an RPC initiating device to the MQTT broker based on an MQTT protocol;

a processing module configured to acquire a response message with respect to the preset RPC message by processing the preset RPC message; and

5 a response message publishing module configured to publish the response message to the MQTT broker based on the MQTT protocol.

16. An information interaction apparatus, comprising:

an RPC message receiving module configured to receive a remote procedure call,
10 RPC, message published by an RPC initiating device based on a message queuing telemetry transport, MQTT, protocol;

an RPC message sending module configured to send the RPC message to a called device indicated in the RPC message;

a response message receiving module configured to receive a response message
15 with respect to the RPC message published by the called device based on the MQTT protocol, wherein the response message is acquired by the called device after the called device detects the RPC message at an MQTT broker and processes the RPC message;
and

a response message sending module configured to send the response message to
20 the RPC initiating device.

17. An information interaction system, comprising:

an RPC initiating device connected to a message queuing telemetry transport, MQTT, broker through a first network and configured to

publish a remote procedure call, RPC, message to the MQTT broker based on an MQTT protocol, and

in response to detecting that a response message with respect to the RPC message exists on the MQTT broker, obtain the response message;

5 a called device connected to the MQTT broker through a second network, and configured to

in response to detecting a preset RPC message existing on the MQTT broker, obtain the preset RPC message, wherein the preset RPC message comprises information indicating the called device,

10 acquire a response message with respect to the preset RPC message by processing the preset RPC message, and

publish the response message to the MQTT broker based on the MQTT protocol; and

the MQTT broker connected to the RPC initiating device through the first network,
15 connected to the called device through the second network, and configured to

receive the RPC message published by the RPC initiating device,

send the RPC message to the called device indicated in the RPC message,

receive the response message published by the called device, and

send the response message to the RPC initiating device.

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18. A computer-readable storage medium storing a computer program, wherein the computer program is configured to execute the information interaction method according to any one of claims 1-6, 7-10 or 11-13.

19. An information interaction device, comprising:
a processor, and
a memory for storing instructions executable by the processor;
wherein, the processor is configured to invoke the instructions stored in the
5 memory to implement the information interaction method according to any one of
claims 1-6, 7-10 or 11-13.