CLAIMS

1. A window processing system comprising a client and a cloud server communicatively coupled to the client, wherein

the client is configured to send, based on a window processing instruction submitted by a user for a cloud application in a cloud desktop, a window processing request for the cloud application to the cloud server;

the cloud server is configured to capture a currently active window screenshot of the cloud application based on the received window processing request, and return the window screenshot to the client as a virtual window; and

the client is configured to statically present the received virtual window according to a pre-created window processing style layout, in response to the window processing instruction.

2. The system according to claim 1, wherein the cloud server is further configured to set identification information for the virtual window to establish a mapping between the identification information and the virtual window, and return the mapping to the client.

3. The system according to claim 2, wherein the client is further configured to send a window operation screen rendering request to the cloud server according to a window operation screen rendering instruction submitted by the user for a target virtual window, wherein the window operation screen rendering request carries identification information of the target virtual window; and

the cloud server is further configured to receive the window operation screen rendering request, determine, based on the identification information, a target cloud application that corresponds to the target virtual window, render a to-be-rendered screen content corresponding to the target cloud application, and transmit a rendered window operation screen to the client.

4. The system according to claim 1, wherein the client is further configured to send, based on a window processing instruction submitted by the user for a cloud application in the cloud desktop, a window processing request for the cloud application to the cloud server, wherein the window processing request carries a quantity of foreground application window and/or background application window and identification information of each window;

the cloud server is further configured to receive the window processing request, capture an operational window screenshot of the foreground application window and/or the background application window based on the window processing request, and return the operational window screenshot to the client as a virtual window.

5. The system according to claim 1 or 4, wherein the client is further configured to receive the virtual window in response to the window processing instruction, adjust a position and/or a size of the virtual window according to the pre-created window processing style layout, and present the virtual window according to the adjustment.

6. The system according to claim 2, wherein the client is further configured to send a window activation request to the cloud server according to an activation instruction submitted by the user for a target virtual window, wherein the window activation request carries identification information of the target virtual window.

7. The system according to claim 6, wherein the cloud server is further configured to receive the window activation request, determine, based on the identification information, a target cloud application corresponding to the target virtual window, obtain a to-be-output video stream corresponding to the target cloud application, and transmit the to-be-output video stream to the client;

the client is further configured to receive the to-be-output video stream, and display the to-be-output video stream in foreground as a real window screen of the target cloud application.

8. The system according to claim 3, wherein the cloud server is further configured to encode the window operation screen to generate encoded data and transmit the generated encoded data to the client.

9. The system according to claim 7, wherein the cloud server is further configured to encode the to-be-output video stream to generate encoded data and transmit the generated encoded data to the client.

10. The system according to claim 8 or 9, wherein the client is further configured to receive and decode the encoded data to obtain the window operation screen and present the window operation screen in foreground.

11. The system according to claim 7, wherein the to-be-output video stream comprises screen data and/or audio data corresponding to a currently active window of the target cloud application;

the cloud server is further configured to encode the screen data with a screen encoding function, and/or encode the audio data with an audio encoding function.

12. The system according to claim 1, wherein the client is further configured to send a window switching request to the cloud server based on a window switching instruction submitted by the user;

the cloud server is further configured to receive the window switching request, capture a

window operation screen of a foreground application window, obtain a to-be-output video stream corresponding to a to-be-switched target virtual window in a background application window, and transmit the to-be-output video stream to the client;

the client is further configured to receive the to-be-output video stream, and display the to-be-output video stream in foreground as a real window screen of the target cloud application.

13. The system according to claim 1, wherein the client is further configured to send, based on a multi-window processing instruction submitted by the user for at least two cloud applications in the cloud desktop, a multi-window processing request for the at least two cloud applications to the cloud server;

the cloud server is configured to capture at least two currently active window screenshots of the at least two cloud applications based on the received multi-window processing request, and return the at least two window screenshots to the client as virtual windows;

the client is configured to present the received virtual windows according to a pre-created multi-window processing style layout in response to the window processing instruction.

14. The system according to claim 1, wherein the client is further configured to send, based on a window processing instruction submitted by the user for a single cloud application in the cloud desktop, a window processing request for the single cloud application to the cloud server;

the cloud server is configured to capture a currently active window screenshot of the single cloud application based on the received window processing request, and return the window screenshot to the client as a virtual window;

the client is configured to present the received virtual window according to a preset single window processing style layout in response to the window processing instruction.

15. A window processing method applied to a cloud server, comprising:

receiving a window processing request submitted by a client for a cloud application in a cloud desktop;

capturing a currently active window screenshot of the cloud application based on the window processing request; and

returning the respective window screenshot to the client as a virtual window for static presentation on the client.

16. The method according to claim 15, further comprising:

setting identification information for the virtual window to establish a mapping between the identification information and the virtual window, and returning the mapping to the client.

17. The method according to claim 16, wherein capturing the currently active window screenshot of the cloud application based on the window processing request comprises:

capturing a window screenshot of a foreground application window and/or a background application window based on the window processing request, and returning the respective window screenshot to the client as a virtual window.

18. The method according to claim 16, further comprising:

receiving a window activation request submitted by the client for a target virtual window;

determining a target cloud application corresponding to the target virtual window, based on identification information of the target virtual window carried in the window activation request; and

obtaining a to-be-output video stream corresponding to the target cloud application, and transmitting the to-be-output video stream to the client.

19. The method according to claim 18, wherein transmitting the to-be-output video stream to the client comprises:

encoding the to-be-output video stream, and transmitting the generated encoded data to the client.

20. The method according to claim 19, wherein the to-be-output video stream comprises screen data and/or audio data corresponding to a currently active window of the target cloud application;

accordingly, transmitting the to-be-output video stream to the client comprises:

encoding the screen data with a screen encoding function, and/or encoding the audio data with an audio encoding function.

21. The method according to claim 15, wherein receiving the window processing request submitted by the client for the cloud application in the cloud desktop comprises:

receiving a multi-window processing request submitted by the client for at least two cloud applications in the cloud desktop;

accordingly, capturing the currently active window screenshot of the cloud application based on the window processing request comprises:

capturing at least two currently active window screenshots of the at least two cloud applications based on the multi-window processing request.

22. The method according to claim 15, wherein receiving the window processing request submitted by the client for the cloud application in the cloud desktop comprises:

receiving a window processing request submitted by the client for a single cloud application in the cloud desktop;

accordingly, capturing the currently active window screenshot of the cloud application based on the window processing request comprises:

capturing a currently active window screenshot of the single cloud application based on the window processing request.

23. A window processing apparatus applied to a cloud server, comprising:

a receiving module configured to receive a window processing request submitted by a client for a cloud application in a cloud desktop;

a capturing module configured to capturing a currently active window screenshot of the cloud application based on the window processing request; and

a returning module configured to return the respective window screenshot to the client as a virtual window for static presentation on the client.

24. A window processing method applied to a client, comprising:

sending, based on a window processing instruction submitted by a user for a cloud application in a cloud desktop, a window processing request for the cloud application to a cloud server;

receiving a currently active window screenshot of the cloud application captured by the cloud server based on the window processing request; and

taking the respective window screenshot as a virtual window, and statically presenting the virtual window according to a pre-created window processing style layout, in response to the window processing instruction.

25. The method according to claim 24, further comprising:

sending a window activation request to the cloud server according to an activation instruction submitted by the user for a target virtual window, wherein the window activation request carries identification information of the target virtual window.

26. The method according to claim 25, further comprising:

receiving a to-be-output video stream returned by the cloud server, wherein the to-be-output video stream corresponds to a target cloud application that corresponds to the target virtual window, which is determined based on the identification information; and

displaying the to-be-output video stream in foreground as a real window screen of the target cloud application.

27. The method according to claim 26, further comprising:

receiving encoded data returned by the cloud server, wherein the encoded data is generated by encoding the to-be-output video stream by the cloud server; and

decoding the encoded data to obtain the window operation screen and present the window

operation screen in foreground.

28. The method according to claim 24, wherein sending, based on the window processing instruction submitted by the user for the cloud application in the cloud desktop, the window processing request for the cloud application to the cloud server comprises:

sending, based on a multi-window processing instruction submitted by the user for at least two cloud applications in the cloud desktop, a multi-window processing request for the at least two cloud applications to the cloud server;

accordingly, receiving the currently active window screenshot of the cloud application captured by the cloud server based on the window processing request comprises:

receiving at least two currently active window screenshots of the at least two cloud applications captured by the cloud server based on the multi-window processing request.

29. The method according to claim 24, wherein sending, based on the window processing instruction submitted by the user for the cloud application in the cloud desktop, the window processing request for the cloud application to the cloud server comprises:

sending, based on a window processing instruction submitted by the user for a single cloud application in the cloud desktop, a window processing request for the single cloud application to the cloud server;

accordingly, receiving the currently active window screenshot of the cloud application captured by the cloud server based on the window processing request comprises:

receiving a currently active window screenshot of the single cloud application captured by the cloud server based on the window processing request.

30. A window processing apparatus applied to a client, comprising:

a sending module configured to send, based on a window processing instruction submitted by a user for a cloud application in a cloud desktop, a window processing request for the cloud application to a cloud server;

a receiving module configured to receive a currently active window screenshot of the cloud application captured by the cloud server based on the window processing request; and

a presenting module configured to take the respective window screenshot as a virtual window, and statically present the virtual window according to a pre-created window processing style layout, in response to the window processing instruction.

31. A computing device comprising a memory and a processor, wherein

the memory is configured to store computer-executable instructions, and the processor is configured to execute the computer-executable instructions to implement the steps of the method according to any one of claims 15 to 22 or 24 to 29.

32. A computer readable storage medium storing computer instructions which, when executed by a processor, implement the steps of the method according to any one of claims 15 to 22 or 24 to 29.