

PUBLIC CLOUD TECHNOLOGY–BASED SERVER SYSTEM AND ACCESS METHOD THEREOF

ABSTRACT

5 This application discloses a public cloud technology–based server system and an access
method thereof, pertaining to the field of cloud service technologies. The server system includes a
server and an external device inserted into the server. A virtual machine manager in the server is
configured to provide a virtual external device and a virtual memory for a virtual machine in the
server. The virtual external device is obtained by device emulation based on the external device.
The virtual memory is obtained by device emulation based on a memory configured for the
10 external device. A virtual device driver of the virtual external device is configured to send, when
the virtual external device accesses a target GPA of the virtual memory, an access request carrying
the target GPA to the external device. The external device is configured to: obtain, based on the
access request, a target host physical address corresponding to the target guest physical address;
obtain target data recorded at the target host physical address; and send the target data to the virtual
15 device driver. This application effectively improves the address translation performance of the
server system.

Fig. 5