DATA TRANSMISSION METHOD, APPARATUS, AND SYSTEM

ABSTRACT

Embodiments of the present invention provide a data transmission method, apparatus, and system, applied to an SDN network, so as to implement configuration of a path for TCP data transmission, and set a size of a transmit window according to parameters of the path. The method includes: receiving, by a controller, a TCP transmission resource allocation request from an application server; determining a first transmission path and a second transmission path according to the TCP transmission resource allocation request, where the first transmission path is used by a sending device to transmit data to a receiving device, and the second transmission path is used by the receiving device to transmit a TCP acknowledgment to the sending device; and sending a TCP transmission resource allocation response message to the application server, where the TCP transmission resource allocation response message includes bandwidth information of the first transmission path and a TCP round-trip transmission delay. A transmit window is calculated according to bandwidth information of a first transmission path and a TCP round-trip transmission delay, so that data is transmitted with a maximum throughput, and halved oscillation of a sliding window caused by network detection is avoided.

FIGURE 4