

PORT SWITCH SERVICE

ABSTRACT

Provided is a port switch service (Port Switch Service, PSS), including a server cluster and a client cluster, wherein a master node in the current cluster is elected from the server cluster through a quorum algorithm and is guaranteed to be unique within a specified period in a lease form; the client cluster contains various client nodes needing to use the PSS, and each client node can establish connection with the master node as needed; and each of the client node is identified in the server cluster through the unique node ID. The port switch service is a message routing service integrating distributed coordination functions such as fault detection, service electing, service discovery, and distributed lock. By sacrificing reliability under the extreme condition, the port switch service realizes very high performance, capacity and concurrency capability in the premise of ensuring strong consistency, high availability and scalability.

FIG. 3