

藉由Freeze-TCP 機制降低換手時失序之封包傳送量(Reduce Out-of-sequence
Packets During Handoff by Freeze-TCP)

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摘要

Hierarchical Mobile IP, Fast Mobile IP, Mobility Management System, and other IP mobility mechanisms have been proposed to reduce the handoff period. Although these mechanisms try to solve the IP connectivity problem as fast as possible, for a TCP session these mechanisms still have packet loss and out-of-sequence problems. In this paper, the Freeze-TCP mechanism is invoked within these handoff mechanisms. Using the Zero Window feature of TCP to achieve short-term pause in TCP transmission, the architecture of network and the software stack of network devices are not changed. The proposed mechanism shortens the packet loss period and the out-of-sequence period. As a result, applying the proposed method in any IP mobility mechanism can have much improvement over the original one.

關鍵字：Freeze-TCP, Packet Lost, Mobile IPv6, Hierarchical Mobile IPv6, Fast Handovers, Mobility