

**CLAIMS**

1. A method for managing network traffic between a source node and a target node, comprising:

5 establishing a connection record for managing multipath transport layer connections between the source node and the target node, the connection record responsive to establishment of a plurality of network connections for transmitting data between the source node and the target node;

intercepting data based on the connection record;

identifying the plurality of network connections associated with the intercepted data;

10 receiving external information relating to the plurality of network connections;

scheduling the intercepted data based on the connection record, wherein the scheduling comprises selecting network connection or network connections out of the plurality of network connections to schedule the data, wherein the selecting is based on the external information;

15 wherein scheduling the data through the selected network connection or network connections enable managing the multipath transport connections between the source node and the target node.

2. The method according to claim 1, wherein the scheduling comprises redirecting to at least a second network connection based on the received external information.

20 3. The method according to claim 1, wherein the scheduling comprises switching network paths based on the received external information.

4. The method according to claim 2 or 3, wherein the scheduling is performed when maintaining the connection record.

25 5. The method according to any one of the preceding claims, wherein the scheduling comprises accelerating the intercepted data via the selected network connection or network connections.

6. The method according to any one of the preceding claims, wherein the selecting the network connection or network connections comprises one or more of: (i) response time

from various network paths; (ii) network signals; (iii) congestion level; (iv) estimated available bandwidth; (v) priority setting for packet delivery; (vi) transport layer session information.

7. The method according to claim 1, wherein the receiving external information comprises  
5 determining a measure relating to the plurality of network connections based on estimated bandwidth and/or average round trip time measured from the plurality of network connections.

8. The method according to claim 1, wherein the receiving external information comprises receiving information that one of the plurality of network connections is terminated.

10 9. The method according to claim 1, further comprising generating multipath transport layer connections identifiers for encoding intercepted data for transmission.

10. The method according to any one of the preceding claims, further comprising establishing a plurality of additional connection records in relation to a plurality of additional source nodes.

15 11. An apparatus for managing network traffic, comprising:

a data processor;

a connection manager configured to:

20 establish a connection record for managing multipath transport layer connections between a source node and a target node, the connection record responsive to establishment of a plurality of network connections for transmitting data between the source node and the target node;

intercept data based on the connection record;

identify the plurality of network connections associated with the intercepted data;

a path manager configured to:

25 receive external information relating to the plurality of network connections;

schedule the intercepted data based on the connection record, wherein the scheduling comprises selecting network connection or network connections out of the plurality of

network connections to schedule the data, wherein the selecting is based on the external information;

wherein scheduling the data through the selected network connection or network connections enable managing the multipath transport connections between the source  
5 node and the target node.

12. The apparatus according to claim 11, wherein the path manager performs the scheduling of the intercepted data by redirecting to at least a second network connection based on the received external information.

13. The apparatus according to claim 11, wherein the path manager performs the scheduling  
10 of the intercepted data by switching network paths based on the received external information.

14. The apparatus according to claim 12 or 13, wherein the path manager performs the scheduling when maintaining the connection record.

15. The apparatus according to any one of the preceding claims, wherein path manager  
15 performs the scheduling by accelerating the intercepted data via the selected network connection or network connections.

16. The apparatus according to any claims 11 to 15, wherein the path manager selects at least one network connection comprising one or more of: (i) response time from various network paths; (ii) network signals; (iii) congestion level; (iv) estimated available  
20 bandwidth; (v) priority setting for packet delivery; (vi) transport layer session information.

17. The apparatus according to claim 11, wherein the path manager receives the external information by determining a measure relating to the plurality of network connections based on estimated bandwidth and/or average round trip time measured from the plurality of network connections.

25 18. The apparatus according to claim 11, wherein the path manager receives the external information comprising receiving information that one of the plurality of network connections is terminated.

19. The apparatus according to claim 11, wherein the connection manager generates multipath transport layer connections identifiers for encoding intercepted data for transmission.

20. The apparatus according to any one of the claims 11 to 19, wherein the connection  
5 manager establishes a plurality of additional connection records in relation to a plurality of additional source nodes.

21. A computer program product, comprising a plurality of data processor executable instructions that when executed by a data processor in a system causes the system to perform the method as detailed in claims 1 to 10.