

WHAT IS CLAIMED IS:

1. A method comprising:

by a first processing device configured to map a local network address and port pair on a first network to a service on a remote second network:

opening a first socket to a first destination on a remote second network and opening a second socket to a second destination on the remote second network;

balancing direction of incoming traffic to the local network address and port pair between the first destination using the first socket and the second destination using the second socket; and

routing incoming traffic to the local network address and port pair to the second destination using the second socket in response to a determination that the first destination is in a fail state; and

by a second processing device:

accessing a portion of a memory space shared with the first processing device, copying at least one of a packet header or an entire packet from the portion of the memory space, and facilitating transmission of the at least one of the packet header or the entire packet to an analytics engine while the first processing device routes the entire packet.

2. The method of claim 1, comprising:

by a third processing device:

mapping a second local network address and port pair on a third network to the service on the remote second network.

3. The method of claim 1, in which the load balancing occurs in at least one of a round robin or a least connected manner.

4. The method of claim 1, comprising:

by a routing device:

mapping an address and port pair to the first network and mapping a second address and port pair to the second network, in which the routing device is configured such that a third processing device is configured to perform routing to the first network from the destination and a fourth processing device is configured to perform routing to the second network from the destination.

5. The method of claim 4, in which the first processing device is configured to compress blocks of data routed to the service according to a dictionary scheme, the routing device is configured to decompress the blocks of data according to the dictionary scheme for transmission to the service.
6. The method of claim 4, in which the first processing device the first routing device define a software defined network that spans a plurality of remote data centers.
7. The method of claim 1, in which mapping enables services from the first network and second network through a software defined network.
8. The method of claim 1 in which the first processing device enables the given devices on the first network to subscribe to services offered to a software defined network.
9. The method of claim 1, in which the service includes a trading customer and the first network includes a network on which an electronic financial exchange resides.