WE CLAIM:

1. A system for an independent binding of virtual networks overlay using a physical network topology comprising:

a plurality of network elements associated with a corresponding plurality of peers, wherein the plurality of network elements is configured to create a virtual network and enable a corresponding application to bind the virtual network to a physical network;

a network agent configured to establish communication channel between a set of at least two network elements from the plurality of network elements,

wherein a network element from the set of at least two network elements is configured to:

perform a client server protocol request to a client server to obtain one or morephysical network characteristics;

identify status of the one or more physical network characteristics;

relay one or more data packets to another network element from the set of at least two network elements when the status comprises port restricted path, restricted path or symmetric path;

send a registration request to a central repository via a signaling protocol when the status comprises the restricted path;

send a resource allocation request to the network agent for another network element from the set of at least two network elements upon receiving acknowledgement of the registration request;

obtain a physical address mapped between the set of at least two network elements by the network agent upon obtaining a response of the resource allocation request from the network agent;

encapsulate the one or more packets in user datagram protocol (UDP), by utilizing the physical address, as a payload; and

relay one or more data packets, by using the physical network, to another network element from the set of at least two network elements, wherein each of

the set of at least two network elements strip and relay the payload to the correspondingapplication for communication to be established.

2. The system of claim 1, wherein the set of at least two network elements are configured to perform a client server protocol request to a client server to obtain one or more physical network characteristics, wherein the one or more physical network characteristics comprises public IP/port address, types of network address translator (NATs) or port address translator (PATs).

3. The system of claim 1, wherein the plurality of network elements is configured to register with the central repository via a signaling protocol, wherein the signaling protocol comprises REST, web sockets, SIP or XMPP.

4. The system of claim 3, wherein the central repository is configured to track registration of the plurality of network elements for discovery and connectivity.

5. The system of claim 1, wherein the applications corresponding to the plurality of network elements are communicating with each other using the physical network.

6. The system of claim 1, wherein the network element of the set of at least two network elements is configured to relay one or more data packets to another network element from the set of at least two network elements when the status comprises an unrestricted path.

7. The system of claim 1, wherein the network element is configured to obtain a binding address for relaying the one or more data packets associated with another network element, wherein the binding address enables security to authorize the set of at least two network elements for communicating via a channel.

8. The system of claim 1, wherein each of the plurality of network elements in conjunction with the central repository is configured to establish a set of rules, wherein the set of rules is associated with selection of the set of at least two network elements from the plurality of network elements for establishing communication between the set of at least two network elements.

9. The system of claim 1, wherein each of the plurality of network elements is configured to inform the network agent about a change in the physical address of a network element from the plurality of network elements when the physical network of a corresponding network

element is changed.

10. The system of claim 9, wherein the network agent is configured to make changes in state machine corresponding to the change in physical network to allow for an updated physical address to be used for the communication and purge the previous mapping.

11. A method comprising:

providing a plurality of network elements associated with a corresponding plurality of peers;

creating, by the plurality of network elements, a virtual network and enable corresponding applications to bind the virtual network to a physical network;

establishing, by a network agent, communication channel between a set of at least two network elements from the plurality of network elements,

performing, by a network element from the set of at least two network elements, a client server protocol request to a client server to obtain one or more physical network characteristics;

identifying, by the network element from the set of at least two network elements, status of the one or more physical network characteristics;

relaying, by the network element from the set of at least two network elements, one or more data packets to another network element from the set of at least two network elements in the physical network when the status comprises port restricted path, restricted path or symmetric path;

sending a registration request to a central repository via a signaling protocol when the status comprises the restricted path;

sending a resource allocation request to the network agent for another network element from the set of at least two network elements upon receiving acknowledgement of the registration request;

obtaining a physical address mapped between the set of at least two network elements by the network agent upon obtaining a response of the resource allocation

request from the network agent;

encapsulating the one or more packets in user datagram protocol (UDP), by utilizing the physical address, as a payload; and

relaying one or more data packets, by using the physical network, to another network element from the set at least two network elements, wherein each of the set of at least two network elements strip and relay the payload to the corresponding application forcommunication to be established.

12. The method of claim 11, wherein replaying the one or more data packets comprises obtaining a binding address for relaying the one or more data packets associated with another network element, wherein the binding address enables security to authorize the set of at least two network elements for communicating via a channel.

13. The method of claim 11, comprising establishing a set of rules of engagement of the set of at least two network elements for establishing communication by each of the plurality of network elements in conjunction with the central repository.