WHAT IS CLAIMED IS:

1. A method comprising:

receiving, by a programmable network platform executed by a computing device, an Internet protocol (IP) address of a customer network of a plurality of customer networks connected to a cloud exchange administered by the programmable network platform;

configuring, by the programmable network platform, a time synchronization server connected to the cloud exchange with a Virtualized Local Area Network (VLAN) associated with the IP address of the customer network, the time synchronization server comprising a plurality of instances that provide a time synchronization service; and

configuring, by the programmable network platform, the time synchronization server with a Virtual Routing and Forwarding (VRF) or network namespace for the VLAN, wherein the VRF or a network namespace includes a route to send time synchronization traffic between the customer network and a particular instance of the plurality of instances that provide the time synchronization service.

2. The method of claim 1, wherein the time synchronization service comprises a network time protocol (NTP) service.

3. The method of claim 1, wherein the time synchronization service comprises a precision time protocol (PTP) service.

4. The method of claim 1, wherein the particular instance of the plurality of instances that provide the time synchronization service comprises a process executed by the time synchronization server.

5. The method of claim 1, wherein the process executed by the time synchronization server comprises a daemon.

6. The method of claim 1, wherein the customer network comprises a first customer network of the plurality of customer networks, ~~and~~ wherein the particular instance comprises a first instance that provides the time synchronization service,

wherein the VLAN comprises a first VLAN associated with an IP address of the first customer network, and wherein the VRF or the network namespace comprises a first VRF or a first network namespace for the first VLAN, the method further comprising:

receiving, by the programmable network platform, an IP address of a second customer network of the plurality of customer networks connected to the cloud exchange, wherein the IP address of the first customer network and the IP address of the second customer network overlap;

configuring, by the programmable network platform, the time synchronization server with a second VLAN associated with the IP address of the second customer network; and

configuring, by the programmable network platform, the time synchronization server with a second VRF or a second network namespace for the second VLAN, wherein the second VRF or the second network namespace for the second VLAN includes a route to send time synchronization traffic between the second customer network and a second instance of the plurality of instances that provide the time synchronization service.

~~6~~7. The method of claim 1, wherein the IP address comprises a first IP address of the customer network, wherein the VRF or network namespace comprises a first VRF or a first network namespace, wherein the time synchronization server comprises a first time synchronization server, wherein the plurality of instances comprises a first plurality of instances that provide the time synchronization service, the method further comprising:

receiving, by the programmable network platform, a second IP address of the customer network, wherein the first IP address of the customer network is used to configure the first time synchronization server and the second IP address of the customer network is used to configure a second time synchronization server for the customer network, wherein the VLAN is associated with the first IP address and the second IP address;

configuring, by the programmable network platform, the second time synchronization server with the VLAN associated with the first IP address of the customer network and the second IP address of the customer network, the second time

synchronization server comprising a second plurality of instances that provide the time synchronization service; and

configuring, by the programmable network platform, the second time synchronization server with a second VRF or a second network namespace for the VLAN, wherein the second VRF or the second network namespace includes a route to send, if the first time synchronization server fails, time synchronization traffic between the customer network and a particular instance of the second plurality of instances that provide the time synchronization service.

~~7~~8. A computing device comprising:

one or more computer processors; and

a memory comprising instructions that when executed by the one or more computer processors cause the one or more computer processors to:

receive an Internet protocol (IP) address of a customer network of a plurality of customer networks connected to a cloud exchange;

configure a time synchronization server connected to the cloud exchange with a Virtualized Local Area Network (VLAN) associated with the IP address of the customer network, the time synchronization server comprising a plurality of instances that provide a time synchronization service; and

configure the time synchronization server with a Virtual Routing and Forwarding (VRF) or a network namespace for the VLAN, wherein the VRF or the network namespace includes a route to send time synchronization traffic between the customer network and a particular instance of the plurality of instances that provide the time synchronization service.

~~8.~~

9. The computing device of claim ~~7~~8, wherein the time synchronization service comprises a network time protocol (NTP) service.

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~~9.~~ The computing device of claim ~~7~~8, wherein the time synchronization service comprises a precision time protocol (PTP) service.

~~10.~~

11. The computing device of claim ~~7~~8, wherein the particular instance of the plurality of instances that provide the time synchronization service comprises a process executed by the time synchronization server.

~~11~~12. The computing device of claim ~~7~~8, wherein the customer network comprises a first customer network of the plurality of customer networks, wherein the ~~IP address comprises a first IP address of the first customer network, wherein the~~ VLAN comprises a first VLAN associated with an IP address of the first ~~IP address~~customer newtork, wherein the VRF or the network namespace comprises a first VRF or a first network namespace for the first VLAN, and wherein the particular instance comprises a first instance that provides the time synchronization service, the instructions further causing the one or more computer processors to:

receive ~~a second~~an IP address of a second customer network of the plurality of customer networks connected to the cloud exchange, wherein the ~~first~~ IP address of the first customer network and the ~~second~~ IP address of the second customer network overlap;

configure the time synchronization server with a second VLAN associated with the second IP address of the second customer network; and

configure the time synchronization server with a second VRF or a second network namespace for the second VLAN, wherein the second VRF or the second network namespace includes a route to send time synchronization traffic between the second customer network and a second instance of the plurality of instances that provide the time synchronization service.

~~12~~13. The computing device of claim ~~7~~8, wherein the IP address comprises a first IP address of the customer network, wherein the VRF or the network namespace comprises a first VRF or a first network namespace, wherein the time synchronization server comprises a first time synchronization server, wherein the plurality of instances comprises a first plurality of instances that provide the time synchronization service, the instructions further causing the one or more computer processors to:

receive a second IP address of the customer network, wherein the first IP address is used to configure the first time synchronization server and the second IP address is

used to configure a second time synchronization server for the customer network, wherein the VLAN is associated with the first IP address and the second IP address;

configure the second time synchronization server with the VLAN associated with the first IP address and the second IP address of the customer network, the second time synchronization server comprising a second plurality of instances that provide the time synchronization service; and

configure the second time synchronization server with a second VRF or a second network namespace for the VLAN, wherein the second VRF or the second network namespace includes a route to send, if the first time synchronization server fails, time synchronization traffic between the customer network and a particular instance of the second plurality of instances that provide the time synchronization service.

~~13~~14. An interconnection system comprising:

a plurality of customer networks connected to a cloud exchange; and

a time synchronization server connected to the cloud exchange, the time synchronization server comprising:

a plurality of instances that provide a time synchronization service;

a Virtualized Local Area Network (VLAN) associated with an Internet protocol (IP) address of a particular customer network of the plurality of customer networks; and

a Virtual Routing and Forwarding (VRF) or a network namespace for the VLAN, wherein the VRF or the network namespace includes a route to send time synchronization traffic between the particular customer network and a particular instance of the plurality of instances that provide the time synchronization service.

~~14.~~

15. The interconnection system of claim ~~13~~14, wherein the time synchronization service comprises a network time protocol (NTP) service.

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~~15.~~ The interconnection system of claim ~~13~~14, wherein the time synchronization service comprises a precision time protocol (PTP) service.

~~16.~~

17. The interconnection system of claim ~~13~~14, wherein the particular instance of the plurality of instances that provide the time synchronization service comprises a process executed by the time synchronization server.

~~17~~18. The interconnection system of claim ~~13~~14, wherein the particular customer network comprises a first customer network of the plurality of customer networks, wherein the particular instance comprises a first instance that provides the time synchronization service, wherein the VLAN comprises a first VLAN associated with an IP address of the first customer network, wherein the VRF or the namespace comprises a first VRF or a first namespace for the first VLAN, and wherein the time synchronization server further comprises:

a second VLAN associated with an IP address of a second customer network of the plurality of customer networks connected to the cloud exchange, wherein the IP address of the first customer network and the IP address of the second customer network overlap; and

a second VRF or a second network namespace for the second VLAN, wherein the second VRF or the second network namespace for the second VLAN includes a route to send time synchronization traffic between the second customer network and a second instance of the plurality of instances that provide the time synchronization service.

~~18~~19. The interconnection system of claim ~~13~~14, wherein the IP address comprises a first IP address of the particular customer network, wherein the time synchronization server comprises a first time synchronization server, wherein the plurality of instances comprises a first plurality of instances that provide the time synchronization service, the interconnection system further comprising:

a second time synchronization server comprising a second plurality of instances that provide the time synchronization service, wherein the second time synchronization server comprises:

the VLAN, wherein the VLAN is associated with the first IP address of the particular customer network and a second IP address of the particular customer network; and

a second VRF or a second network namespace for the VLAN, wherein the second VRF or the second network namespace includes a route to send time synchronization traffic between the particular customer network and a particular instance of the second plurality of instances that provide the time synchronization service.

~~19~~20. The interconnection system of claim ~~13~~14, further comprising:

a programmable network platform configured to:

receive the IP address of the particular customer network;

configure the time synchronization server with the VLAN associated with the IP address of the particular customer network; and

configure the time synchronization server with the VRF or network namespace for the VLAN.