

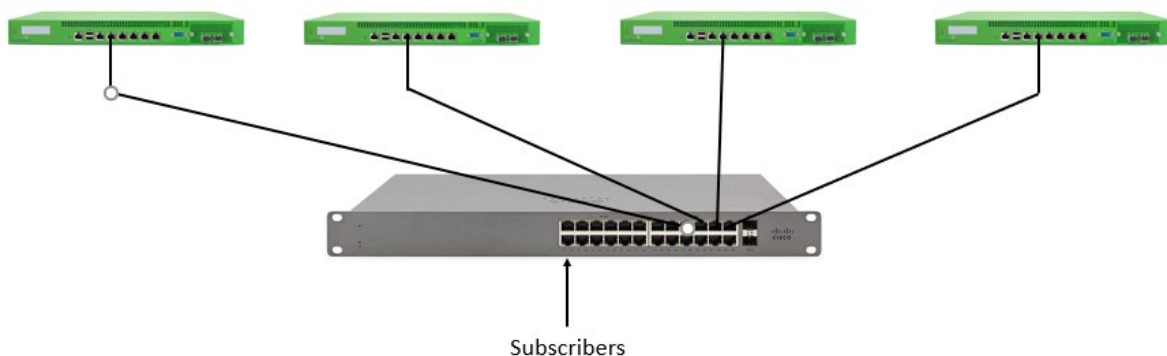
How to Configure High Availability Clustering

Function:

Present information and configuration of Nomadix' s High Availability Clustering feature to allow multiple Edge Gateways to simultaneously service a single layer 2 network segment, increasing the number of users or bandwidth supported while providing high availability capabilities.

Pre-requisites:

- High Availability Clustering and all other modules purchased for each gateway
- Switch fabric on the Subscriber/LAN side of the Gateway Cluster will need to support LACP with Source MAC (Hospitality) or VLAN (Managed WiFi) load balancing functionality. A switch that supports a short LACP timeout is preferred.
- DHCP pools that do not overlap and WAN IP addresses that do not conflict are configured on the gateways. Any thing not IP related, like port locations, must match.
- Each Gateway is connected to a separate LAGG port on the switch connecting to the subscriber traffic



Configuration:

Navigate to Configuration -> Ethernet Ports/WAN. Set the Eth port to be used as Subscriber to AGG mode and add it to the desired LAGG

Note: Only one port on each Nomadix unit can be setup as a CLS LAGG port

Ethernet Ports & WAN Interface Configuration and Status

Current Interface Settings for port Eth3

Label:

Role:

Aggregator:

Then set the LAGG port to CLS (Cluster mode).

Ethernet Ports & WAN Interface Configuration and Status

Current Interface Settings for port LAGG0

Label:

Role:

Aggregated Ports

Eth3	ACTIVE
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After configuration the port roles will be displayed in the Ethernet Ports/WAN page with Eth port set to LAGG and the chosen LAGG set to CLS.

Ethernet Ports & WAN Interface Configuration and Status

Current Interface Settings

Name Label	*Role	Cfg Mode	IP Address	Mask	Gateway	Link	Inet Access IPv4	Inet Access IPv6	Up / Down Link Speed (Kbps)
WAN	WAN	DHCP	192.168.120.15	255.255.255.0	192.168.120.1	Up	Available	n/a	1000000 / 1000000
Eth1	OOS	n/a	n/a	n/a	n/a	Up	n/a	n/a	n/a
Eth2	OOS	n/a	n/a	n/a	n/a	Down	n/a	n/a	n/a
Eth3	AGG	n/a	n/a	n/a	n/a	Up	n/a	n/a	n/a
Eth4	OOS	n/a	n/a	n/a	n/a	Down	n/a	n/a	n/a
Eth5	OOS	n/a	n/a	n/a	n/a	Down	n/a	n/a	n/a
SFP0	OOS	n/a	n/a	n/a	n/a	Down	n/a	n/a	n/a
SFP1	OOS	n/a	n/a	n/a	n/a	Down	n/a	n/a	n/a
LAGG0	CLS	n/a	n/a	n/a	n/a	Up	n/a	n/a	n/a
LAGG1	OOS	n/a	n/a	n/a	n/a	Down	n/a	n/a	n/a

Next High Availability Clustering is configured. Navigate to Configuration -> High Availability.

Note: This is a Licensed Module and you need to make sure your License includes this feature.

If this is not listed, try retrieving the license key. Should the key not change please check for purchase of the module. Enable the feature and enter the Cluster ID and Cluster comm port. The ID and comm port are the same for all gateways in the Cluster. Image is a four gateway Cluster.

High Availability Clustering

Clustering Enabled

Cluster ID:

Cluster comm port:

The following features are not compatible with high availability clustering:
Fail Over
Link Aggregation

Cluster Node List
172.17.0.61
172.17.0.71
172.17.0.81

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By selecting the “Show cluster subscribers” checkbox on the Subscriber Administration -> Current page, the subscriber table will show all subscribers in the cluster. AAA State will be Cluster and gateway IP will appear in the Cluster Node column if the entries are connected to a gateway other than the one currently being viewed.

Current Subscribers

Page loaded at: Tue Jan 25 16:21:20 2022 (NSE time)

Subscriber Idle Timeout:

Note: doesn't apply to Radius subscribers. Factory default: 1200 s

Subscriber Entries Used: 40 of 8000 licensed. Authorization Profiles: 15998 of 150000

Show cluster subscribers

[Display options >>>](#)

Showing 1 to 13 of 40 entries

MAC	IP	Port	AAA State	NAT IP(S)	Cluster Node
<input type="text" value="Filter"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
00:C7:00:00:00:02	199.0.0.2	0	Cluster	(none yet)	172.17.0.61
00:C7:00:00:00:03	199.0.0.3	0	Valid	WAN: 172.17.0.51	
00:C7:00:00:00:04	199.0.0.4	0	Cluster	(none yet)	172.17.0.81
00:C7:00:00:00:05	199.0.0.5	0	Cluster	(none yet)	172.17.0.71
00:C7:00:00:00:06	199.0.0.6	0	Cluster	(none yet)	172.17.0.61
00:C7:00:00:00:07	199.0.0.7	0	Valid	WAN: 172.17.0.51	
00:C7:00:00:00:08	199.0.0.8	0	Cluster	(none yet)	172.17.0.81