Using and testing NIC teaming

Appliance pre-configuration:

Connect two physical network cables to the appliance for example: NIC1 and NIC3 (eth0 and eth2) In order to be sure that both NIC are working as expected you can configure to have dynamic IP address from DHCP server.

Note: For some of the products (API Gateway) by default Network Team Management is not visible in the console menu.

In order to make it visible user has to navigate to the /etc/platform.conf and enable it: NETWORK_TEAMING=1 (By default is 0)

More information about the platform.conf configuration can be find here: AP platform.conf variables You don't need to restart the appliance in order Network Team Management menu to appears in the console.

Following documentation AP 6.7.1 Configuration Guide pages 15/16 Network Team Management configuration is setup by console menu -> Network settings -> Set IP version -> Network teaming.

(press T)

Create New Network Teaming configuration (press C) and select NIC1 and NIC3 (eth0 eth2) After network restart you will have a bond network card:

admin@axp:~> ifconfig

bond1 Link encap:Ethernet HWaddr 00:21:9B:A3:84:61
inet addr:10.130.22.222 Bcast:10.130.23.255 Mask:255.255.248.0
inet6 addr: 2620:ad:8000:8210:221:9bff:fea3:8461/64 Scope:Global
inet6 addr: fe80::221:9bff:fea3:8461/64 Scope:Link
UP BROADCAST RUNNING MASTER MULTICAST MTU:1500 Metric:1
RX packets:367 errors:0 dropped:257 overruns:0 frame:0
TX packets:128 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:0
RX bytes:34713 (33.8 Kb) TX bytes:16115 (15.7 Kb)

Connect to the appliance using SSH and execute command like: Is Remove the physical network cable from NIC1 Verify that user still has access to the appliance and can execute commands.

Remove the physical network cable from NIC3

Verify that user still has access to the appliance and can execute commands.

Remove two physical network cables from NIC1 and NIC3 (You will not have any more connection and be able to execute any command)

Return back the two physical network cables to NIC1 and NIC3

Verify that new putty console open a new session and user is able to connect to the appliance.

If you are too fast with the procedure the "dead putty console" should start working again.

Additional testing:

Repeat the procedure for one of the NIC1 or NIC3 and verify that you have connection to the appliance and Network Team Management works as expected.

Remove Network Teaming configuration (press R)

Verify that appliance and network configuration are removed appliance is back in the default state. (Default state - not configured even IP)

Edit Network Teaming configuration (press E)

Verify that if user changes some of the settings, after SAVE all changes are present.

Verify that if user select static IP and configure both eth0 and eth2 with static IP, appliance will be accessible. Verify that there will be one bond static IP.