

# Port Channeling

Published: 2016-06-10

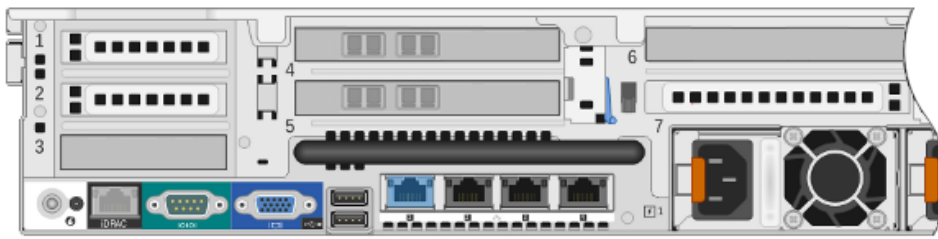
This guide illustrates several common configurations on the rack-mounted ExtraHop® appliance using the EDA 9100 as an example. Some of the configurations require you to turn on port channeling.

When you use port channeling, be aware that having a single flow spread across multiple physical interfaces on the EDA 9100 can negatively impact performance. For the best results, turn on symmetric hashing on the switch. This ensures that a single flow (both rx/tx) will go to a single port on the EDA 9100.

## EDA 9100 overview

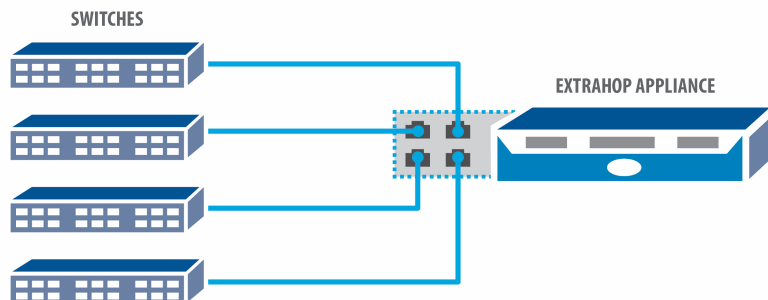
The EDA 9100 has four 10GbE ports for a total of 40Gbps throughput. You can either span traffic or use a tap from the 40G port or 4 x 10G ports.

The following diagram shows the back panel of the EDA 9100. Slots 4 and 5 represent the NICs receiving data.



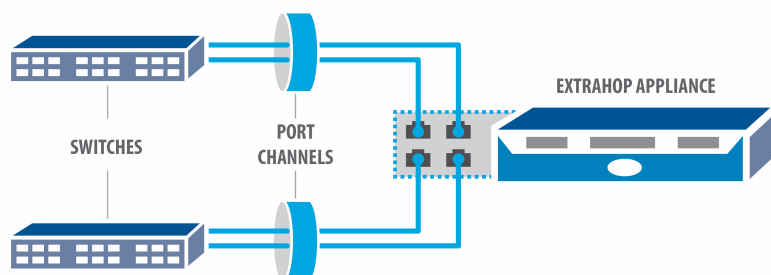
## Four data sources (port channeling not required)

The following diagram shows four sources of traffic going to the four ports on the ExtraHop appliance.



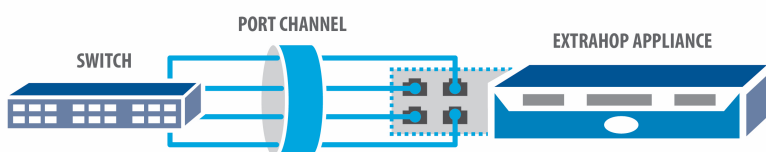
## Two data sources with two channels (port channeling required)

The following diagram shows two sources of traffic fed through two port channels going to the four ports on the ExtraHop appliance.



### One data source with one channel (port channeling required)

The following diagram shows one source of traffic fed through one port channel going to the four ports on the ExtraHop appliance.



### One data source with two channels (port channeling required)

The following diagram shows one source of traffic fed through two port channels going to the four ports on the ExtraHop appliance. Port channel #1 is sent to the two ports on the NIC in slot 4 and port channel #2 is sent to the remaining two ports on the NIC in slot 5. This configuration does not require symmetric hashing.

