

# Vision Edge OS Network Visibility Software for Open Switches

Network packet broker software stack for open switches

## Problem: Ensuring Network Performance And Security Without Compromise

Software defined data centers are in constant flux with upgrades to add capacity and scale up. The disaggregation, or abstraction, of the software stack from networking hardware has accelerated SDDCs ability to cope with the growth of business needs. However, this also allow creates new challenges in keeping up with performance and security considerations.

## Solution: Efficient Software That Runs On Open Switches To Gain Network Visilbity Across The Sddc

Vision Edge OS is Ixia's software stack that runs on open switches and turns them into capable network packet brokers. The network visibility software is the same that runs on Ixia's Vision ONE, Vision Edge and Vision 7300 platforms.

Now enterprises, telcos and cloud service providers have the flexibility to expand their network visibility with open switches. Organizations can use production switches as NPBs, allowing them to leverage economies of scale and control costs, enabling the efficiency of a SDDC.

## Use Cases

- Support for getting visibility into any Clos network or single tier architecture
- Top of rack at single site for per-rack traffic aggregation
- Leaf-spine interconnects for cross L2 boundary traffic

## Highlights

- Vision Edge OS brings flexibility and choice of a software stack for open switches
- Instantly turn your production switches into a capable, Vision network packet broker
- Real-time visibility into network data in a software defined data center (SDDC)
- Easy to get started: download and deploy in your ONIE enabled switches
- Supports multi-speed network segments: 10G, 25G, 40G, 50G, 100G in one platform
- Excellent user experience with intuitive web-based user interface
- Supports Ixia NetStack features:
  - Aggregation, load balancing and replication
  - Patented (3) stages of filtering to find packets of interest - filter on ingress, egress and dynamically

## How Does Vision Edge OS Work?






Vision Edge OS is downloadable software that is installed on certified switch(es) with ONIE support. Once installed, the switch will load into the packet broker operating system. The switch can be managed by browsing to its IP or DNS from a supported web broker.

## Certified Switch List

Following switches support running Vision Edge OS.

Manufacturer	Switch Model
Edgecore Networks	<ul style="list-style-type: none"> <li>• AS7712-32X</li> <li>• AS5812-54X</li> </ul>

## Product Capabilities

Netstack Capabilities	
The Ixia gold-standard baseline filtering functionality for network packet brokers	
 <p><b>Three Stages of Filtering</b> – filter at ingress ports, in the middle and at egress ports for the maximum flexibility in designing complex Boolean logic without the need of using extra ports for loopback.</p>	 <p><b>Dynamic Filter Compiler</b> –patented technology makes configuration simple and eliminates human errors in typing ACL-like rules to find traffic of interest</p>
 <p><b>Aggregation</b> – consolidate incoming traffic to optimize port usage and simplify filter logic. Support 1:1, Many:1 and many:many traffic streams when combined with replication</p>	 <p><b>Replication</b> – at the ingress port as well as at the dynamic filter. Replication at the ingress allows the application of multiple dynamic filters to the same traffic stream. Replication at the dynamic filtering allows multiple tools to be connected to a given dynamic filter so the same traffic is sent to multiple tools. You don't have to setup complex logic or loop back.</p>
 <p><b>Load-balancing</b> – sophisticatedly distributes traffic across tools ports for monitoring to maximize up-time and ensure that no critical data is lost</p>	

## Ordering Information

Vision Edge OS	
Software Part Number	Description
LIC-NPBSW-1PX	Ixia Vision Edge OS, Perpetual software license. Includes network packet broker software for open switches, supports Edgecore 7712-32X, 5812-54X switch. Licensed for (1) 10G/1G port operation. Minimum order qty of 24 required. (993-1010)

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