# Expanding Network Visibility to OpenFlow Environments

Ixia's ControlTower Provides Visibility Using Software Defined Networks (SDN)

Data center networks are growing along every conceivable dimension—bandwidth, size, and complexity. Add to this complexity the introduction of virtual networking technologies such as software defined networks (SDN), and SDN implementations such as OpenFlow. You can see how monitoring network traffic in a way that avoids any blind spots is an increasing issue.

Cost-effective network visibility is critical to operating a secure and high performance data center. You need analytics tools that access any segment of the network quickly and easily. Network managers need to optimize application performance and boost security resilience in every part of their data center. Tapping into SDN implementations such as OpenFlow helps provide greater network visibility.

Data Centers can benefit from flexibility and powerful visibility by deploying OpenFlow SDN switches as part of their Visibility Architecture. This unique capability will now allow customers to maximize flexibility and return on investment as networks grow and change.
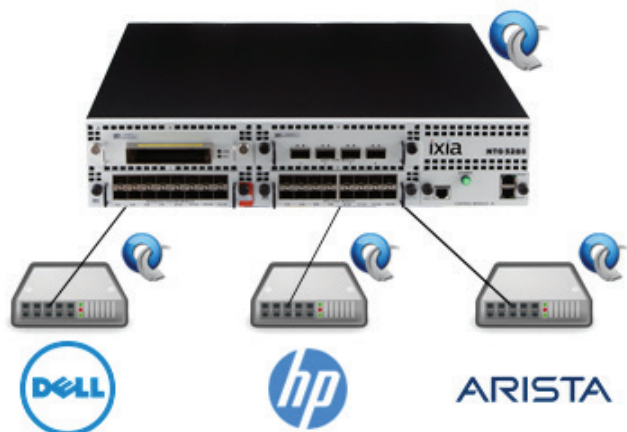
Ixia was first in the testing of OpenFlow technologies with our IxNetwork product several years ago, and we have been very active in development of the OpenFlow standard. This makes Ixia ideal to implement a monitoring solution that taps into the power and versitility of OpenFlow networking

KEY FEATURES

- Powerful, advanced ControlTower visibility features applied across more of your network
- No OpenFlow expertise needed to manage switches
- RESTful API for integration with automation
- Apply Dynamic Filters, Packet Deduplication, ATIP (Application and Threat Intelligence Processor), TimeStamping, Packet Trimming, and Traffic Shaping to traffic
- Future proofs visibility architecture by incorporating ongoing developments in speed, density, and capacity
- Easily partition switches between OpenFlow ports normal production traffic
- Easily provision more visibility ports dynamically as your network expands or changes
- Leverages Ixia's OpenFlow expertise

Ixia's NTO ControlTower

Ixia's NTO ControlTower is a best-in-breed network visibility platform for application performance and network security applications. ControlTower takes a giant leap forward by allowing qualified OpenFlow switches to become members of a ControlTower cluster, incorporating them under one powerful and simple management console, extending powerful network visibility capabilities throughout the data center.

Extending ControlTower to support standards-based OpenFlow switches provides customers with flexibility to deploy network resources how they wish without sacrificing the benefits of a Visibility Architecture:

- It's flexible because each OpenFlow switch port can be partitioned and provisioned dynamically as your network grows.
- It's powerful because you still get the benefit of best-in-breed NTO advanced hardware and software optimizing network visibility through a single pane of glass.

You don't need to be an OpenFlow expert, just hook up your OpenFlow switches and we take care of the complicated management. You get all the benefits of our straightforward GUI and advanced features for the entire cluster.
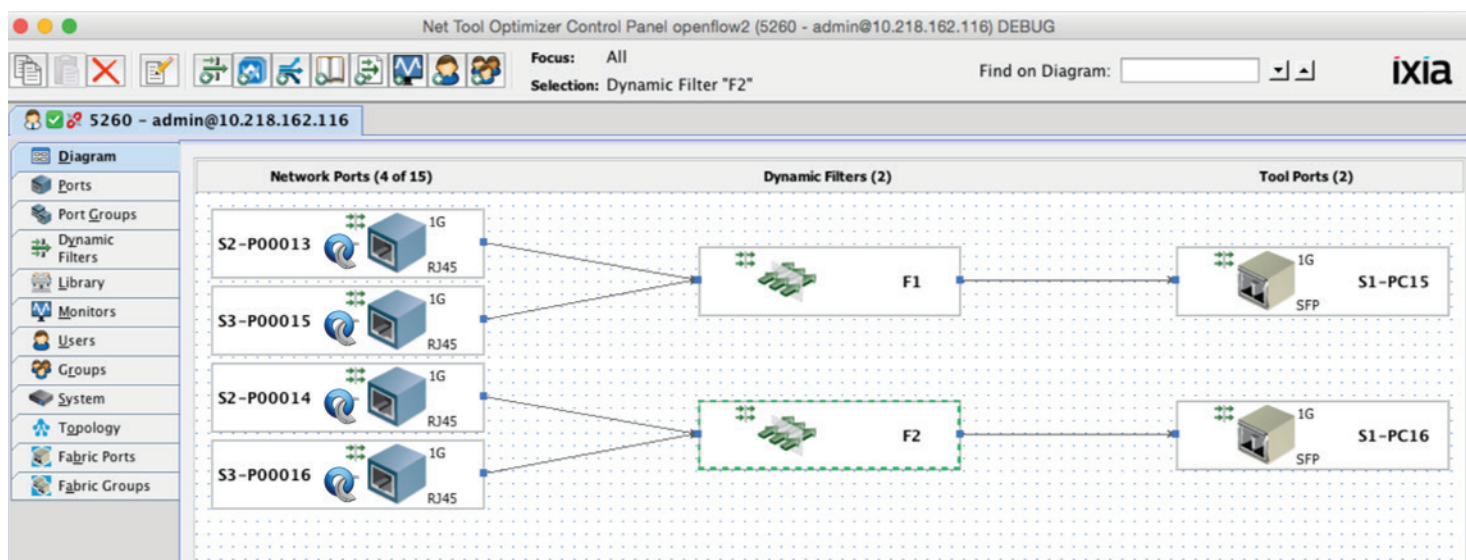
ControlTower Virtual Visibility Benefits

ControlTower with OpenFlow provides networks with benefits such as:

- Up to 192 network ports via OpenFlow SDN switches in a single ControlTower, single pane of glass

- Flexibility to share switching hardware and rack space between production and visibility networks. Easily partition OpenFlow switches to use some ports for Network Visibility and others ports for normal production traffic

- Flexibily and dynamically connect analysis tools to any point in your network, and filter and optimize traffic directed at tools

- Protect tool investment and extend tool lifespan with an end-to-end monitoring system designed to scale with your network

- Qualified with HP, Dell, and Arista OpenFlow switches

- Controlled with proven NTO Supervisor using familiar and intuitive NTO GUI, with the same advanced features that you depend on

With the original launch of ControlTower, Ixia leveraged SDN concepts to achieve powerful distributed monitoring for data centers and campus networks. Now ControlTower can actually tap into the same OpenFlow technology.

ControlTower's OpenFlow capabilities will help customers reach all the corners of their data center, and provide a new flexibility to deploy network resources how they wish with all benefits of an end-to-end Network Visibility Architecture.

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