

# Big Monitoring Fabric: Next-Gen NPB Features for a Fraction of the Cost

The exponential growth seen in data center size, bandwidth and traffic, as well as the need to ensure that networks are compliant and secure against intrusions and other threats have been testing the limits of the traditional network monitoring and visibility designs. Traditional box-by-box approach based on proprietary Network Packet Brokers (NPBs) has proven to be cost prohibitive and operationally complex for organization-wide monitoring.

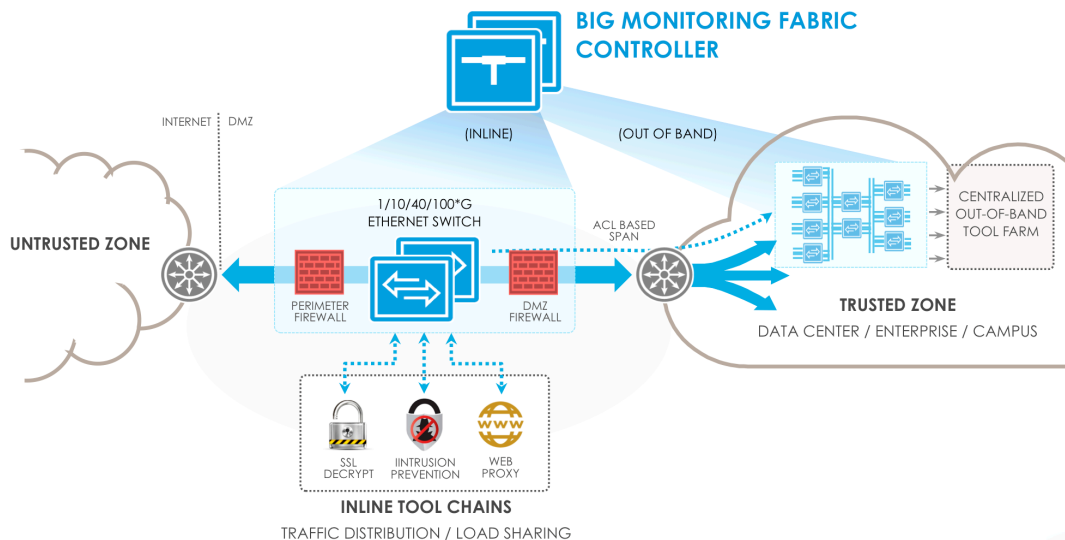
Big Switch Networks is transforming networking to meet these new needs with SDN-centric solutions. For monitoring, the company has delivered a next generation NPB, providing all needed functionality with an ultra-low cost, simple, pervasive monitoring solution – Big Monitoring Fabric (BMF).

## Simple, Scalable, Economical

Big Monitoring Fabric enables pervasive security and monitoring of network traffic for an organization and selectively delivers it to multiple security, monitoring, performance measurement and compliance tools—both **Inline and Out-of-Band**. BMF is a modern 1G/10G/40/100G network visibility fabric that leverages high-performance, open Ethernet switches to provide pervasive security monitoring and visibility of an organization’s network traffic. Using an SDN-centric architecture, BMF enables scale-out fabric for data center-wide monitoring, single pane of glass for operational simplicity, and multi-tenancy for multiple IT teams (NetOps, DevOps, SecOps) to simultaneously perform network monitoring using tenant-specific inline or out-of-band tools and policies.

With Big Monitoring Fabric’s scale-out architecture, simplified operations and bare metal switch economics, it is rapidly becoming an attractive replacement for NPBs, creating a few popular use cases:

- Enable Pervasive Security (monitor inline and out-of-band - global visibility with dynamic mitigation)
- Monitor Every Rack and Every Location (monitor all links within a DC and remote DCs/POPs/branch/site)
- 4G / LTE Traffic Visibility (monitor tunneled control and data traffic)
- Dynamic Threat Mitigation in a DMZ (inline tool chaining)



## All Needed Features for a Fraction of the Cost

The Big Monitoring Fabric (BMF) is a next-generation Network Packet Broker (NPB) that has been designed from the ground-up to build a pervasive visibility fabric that addresses the challenges of current NPB-based monitoring solutions. BMF's architecture is inspired by Hyperscale Networking designs, which consist of Open Ethernet switch hardware, SDN controller software and centralized tool deployment.

BMF competes head to head with traditional NPBs on feature/functionality, all for a fraction of the cost:

Feature	Big Switch	Gigamon	VSS Monitoring	Ixia / Anue
Filtering / Aggregation / Replication / Load Balancing	✓	✓	✓	✓
VM Traffic monitoring	✓	✓	✓	✓
VLAN Tagging / Stripping	✓	✓	✓	✓
1G/10G/40G/100G	✓	✓	✓	✓
Event based Policy Mgmt / API	✓	✓	✓	✗
RBAC / TACACS+	✓	✓	✓	✓
Inter-DC Tunneling	✓	✓	✓	✗
Deeper packet Matching	✓	✓	✓	✓
Service Appliance (x86) & Service Node Chaining	✓	✗	✗	✗
Service - Packet Time-stamping	✓**	✓	✓	✓
Service - Packet De-duplication	✓*	✓	✓	✓
Service - Packet Slicing	✓*	✓	✓	✓
Service - Packet Obfuscation	✓**	✓	✗	✗
Service - Protocol Stripping	✓*	✓	✓	✓
Inbuilt Advanced Analytics (Packet Capture & Trackers)	✓	✗	✗	✗
<b>Cost Comparison (based on list price analysis)</b>	<b>Base (X)</b>	<b>&gt; 3X for comparable port-configuration</b>		

✓\* with x86 service node functionality from Big Switch Networks

✓\*\* with legacy NPB equipment as a service node

## Get Started Today – Big Monitoring Fabric Starter Kits

Getting started with this BMF for optimized and efficient monitoring of datacenter networks is easier than ever:

- **Big Switch Labs:** Get hands-on experience with Big Monitoring Fabric online, for free: <http://labs.bigswitch.com>
- **Product Videos / Collateral:** <http://bigswitch.com/products/big-monitoring-fabric>
- **Starter Kits:** Big Switch offers BMF starter kits, pre-configured with hardware, software, cables and support, starting at \$29k. For more details, download the brochure at: <http://bigswitch.com/starter-kits>

### ABOUT BIG SWITCH

Big Switch Networks is the market leader in bringing hyperscale data center networking technologies to a broader audience. The company is taking three key hyperscale technologies—OEM/ODM bare metal and open Ethernet switch hardware, sophisticated SDN control software, and core-and-pod data center designs—and leveraging them in fit-for-purpose products designed for use in enterprises, cloud providers and service providers. For additional information, email [info@bigswitch.com](mailto:info@bigswitch.com), follow @bigswitch or visit [www.bigswitch.com](http://www.bigswitch.com).