



Cost-Effective Traffic Monitoring with Cisco Nexus Data Broker

Benefits

- Offers a simple, scalable, cost-effective solution for monitoring high-volume and business-critical traffic
- Replaces traditional purpose-built matrix switches with Cisco Nexus® 3000 or 9000 Series Switches
- Supports port capacities from 1 to 100 Gbps within the network test access point (TAP) and Cisco® Switched Port Analyzer (SPAN) infrastructure
- Provides line-rate traffic filtering, replication, and forwarding functions
- Supports inline traffic redirection to multiple security tools at the perimeter of the data center network

Monitoring Application Traffic in Large-Scale Deployments

Evolving data center network technologies and the growing use of cloud-based technologies are driving exponential growth in application traffic. Visibility into this traffic is critical to maintaining security, supporting troubleshooting, helping ensure compliance, and perform resource planning. Today, traffic monitoring is evolving from a tool for managing network operations into a process that supports smart business agility and helps you grow your revenue.

Along with out-of-band traffic monitoring, an expanding migration to 40 Gbps in aggregation-layer and core network infrastructure presents new challenges for inline traffic monitoring at the perimeter of the network. But traditional packet-broker and inline monitoring solutions are expensive and rigid, making them difficult to use for large-scale deployments.

Tap and SPAN Aggregation

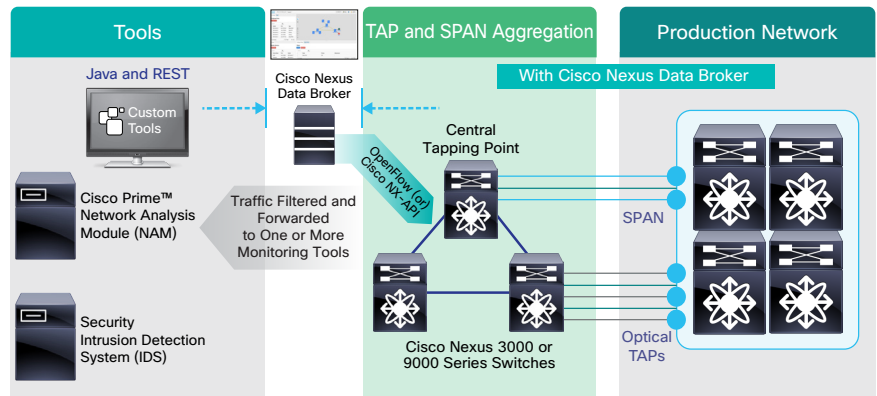
The Cisco Nexus® Data Broker is a simple, scalable, and cost-effective solution for enterprise customers who need to monitor high-volume and business-critical traffic. It replaces traditional purpose-built matrix switches with one or more Cisco Nexus 3000 or 9000 Series Switches that you can interconnect to build a scalable network test access point (TAP) and Cisco® Switched Port Analyzer (SPAN) aggregation infrastructure (Figure 1). The data broker lets you:

- Build a 1-, 10-, 40-, and 100-Gbps TAP and SPAN infrastructure
- Support line-rate filtering, replication and traffic forwarding
- Deploy advanced functionalities such as time stamping, source port tagging, and more
- Integrate with Cisco Application Centric Infrastructure (Cisco ACI™) to configure access SPAN sessions using the Cisco Application Policy Infrastructure Controller (APIC) REST API

Next Steps

For more information about Cisco Nexus Data Broker, please visit <http://www.cisco.com/go/nexusdatabroker>.

Figure 1. Cisco Nexus Data Broker Supporting Tap and SPAN Aggregation



Inline Traffic Monitoring

Today's security landscape requires proactive, inline tools to create a strong, layered security environment. Common tools include intrusion prevention systems (IPSs) and web filtering tools at the perimeter of the network. With the Cisco Nexus Data Broker inline option (Figure 2), you can add one or more Cisco Nexus 3000 Series or Cisco Nexus 9300 platform switches to your production infrastructure to connect to these security tools (service nodes). The data broker lets you configure redirection policies that match specific traffic, redirecting it through multiple security tools before it enters or exits your data center. In failure scenarios, the data broker automatically bypasses the service nodes, and it can completely bypass all security tools for emergency troubleshooting.

Figure 2. Cisco Nexus Data Broker Supporting Inline Traffic Monitoring

