nGenius 5000 Series Packet Flow Switch

Software-driven and Cost-effective Performance
The nGenius® 5000 series packet flow switch (PFS) provides cost-effective edge aggregation for cybersecurity and service assurance monitoring. The nGenius 5000 series packet flow switch models operate at speeds from 1GbE to 100GbE, providing core packet broker functionality, including filtering, load balancing, aggregation, and replication.

These models are designed for remote sites where compact 1 Rackmount Unit (RU) sizes are preferred or for standalone deployments that require core functionality. Additionally, the nGenius 5000 series packet flow switch can leverage any other packet flow switch within the portfolio, such as the nGenius 3900 series packet flow switch or nGenius 6000 series packet flow switch, in cases where advanced functionality is needed, and aggregate into another packet flow switch for advanced packet conditioning. The series complements NETSCOUT’s purpose-built PFS products that deliver advanced packet manipulation to enable deep and scalable packet visibility.

nGenius 5000 Series Packet Flow Switch helps you to:
- Simplify and grow your visibility architecture on demand.
- Easily scale deployments with self-healing, intelligent self-organizing mesh technology.
- Aggregate to nGenius 6000 series packet flow switch or nGenius 3900 series packet flow switch for advanced conditioning.
- Active inline and passive traffic forwarding, with tool chains, health checks, and bypass capabilities to ensure your network functions as expected.

High-port Count for Dense 10/40/100GbE Deployments
Packing a lot of interfaces into a compact form factor, the nGenius 5000 series packet flow switch delivers a cost-effective solution for aggregation and packet brokering needs. Connect HD Fiber TAPs and any number of tools, including the NETSCOUT® InfiniStream® platform, to the nGenius 5000 series packet flow switch, and easily manage a diverse and complex monitoring network.

Flow-aware load balancing enables intelligent control of traffic distribution to the monitoring tools, increasing output capacity while maintaining session integrity. For example, a 100GbE tap from the network can be captured and automatically balanced across multiple 10GbE or 40GbE monitoring tool ports based on user-defined session criteria.

Scalability on Demand
The nGenius 5000 series packet flow switch streamlines, extends, and scales packet-flow access across the enterprise to enhance the efficiency of service assurance monitoring and cybersecurity strategies. The nGenius 5000 series packet flow switch eliminates unnecessary load on monitoring tools and enables optimal performance. It protects investment in existing monitoring infrastructure by enabling IT organizations to extend the usability of 1/10 GbE tools to monitoring flows on 10/40/100 GbE links.

Unique in the market, the NETSCOUT approach of pfsMesh complements cost-effective aggregation with massive scalability and line-rate performance where it matters. With the combined solution, there’s no trade-off to be made between line-rate performance or sophisticated packet conditioning. While nGenius 5000 series packet flow switch provides cost-effective aggregation and standard packet broker functionality, the advanced processing can be centralized in the data center, close to the cybersecurity systems and service assurance tools, where the density and performance delivered by the nGenius 6010 packet flow switch or the nGenius 3900 series packet flow switch would meet critical requirements.

Figure 1: Use nGenius 5000 series packet flow switch in combination with other PFS products or in stand-alone deployments.
Leverage a Unified Architecture for Active Inline and Passive Security

The nGenius PFS 5000 Series enables both passive and active inline security applications from a single platform. Passive traffic forwarding allows service assurance teams to monitor their network with powerful PFS tools, including filtering and load balancing, while simultaneously allowing the same infrastructure to set actively inline in the network, leveraging tool chains for advanced packet flow switching, for 1G, 10G, 40G, and 100G networks, optimizing the effectiveness of security tools. This unique approach boosts monitoring and security tool efficiency while maintaining budgets and building upon a single cost-effective platform. Ensure tools, passive or active, are not only present on the network, but functioning as they should (or shouldn’t) be. Health checks from PFOS deliver operational peace of mind, and the ability to bypass a problem in the network ensures packets and traffic will continue to flow as desired.