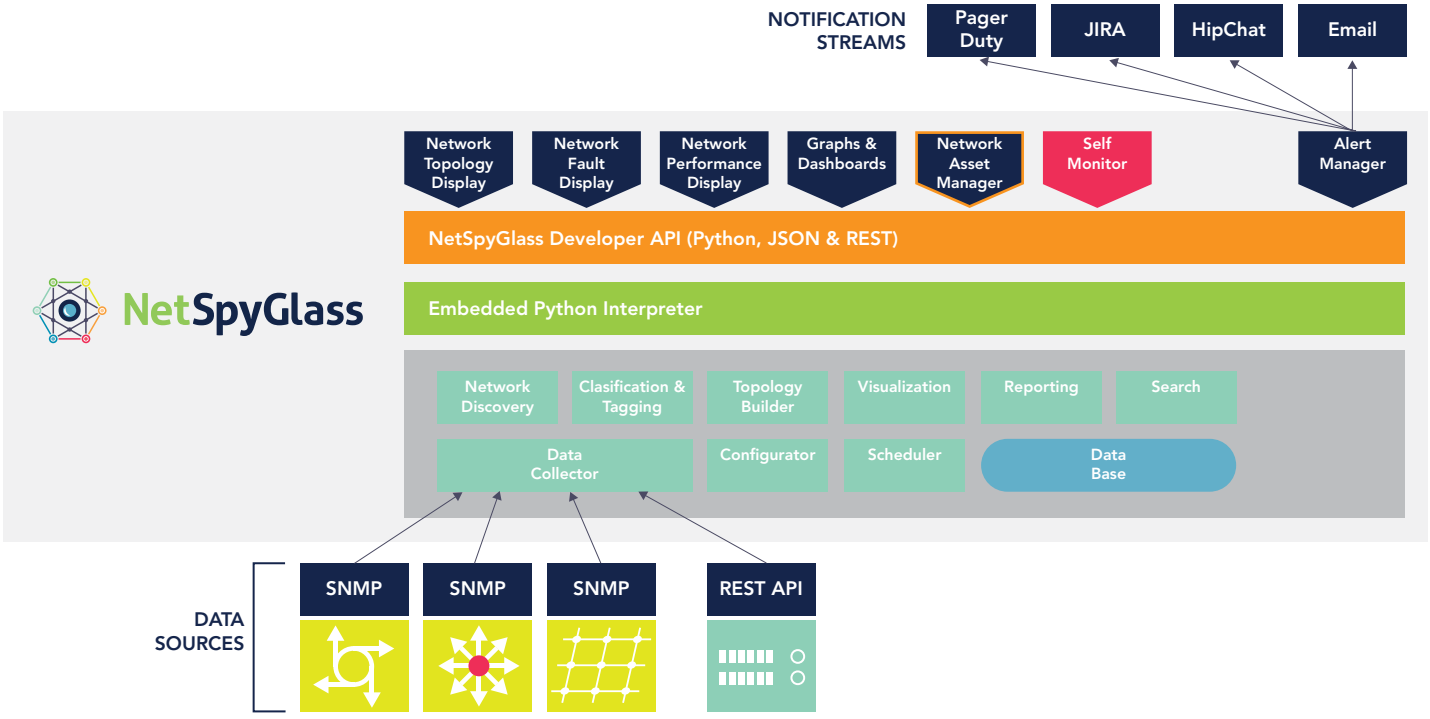
NetSpyGlass

Conquer Network Complexity with NetSpyGlass and Cumulus Linux

SOLUTION OVERVIEW: NETSPYGLASS + CUMULUS® LINUX®

Network Performance Monitoring, Diagnostics & Topology Visualization with NetSpyGlass

Network performance monitoring and diagnostics (NPMD) defines a broad set of activities by IT operations teams seeking visibility into performance of application, network and infrastructure components with the aid of a wide assortment of tools and technologies. As networks become increasingly more complex there is a corresponding proliferation of network management instrumentation, which ironically compounds the complexity. NetSpyGlass was built by network operators for network operators with a focus on reducing complexity through a consolidated platform for network performance monitoring & diagnostics with innovative features for real-time network discovery, topology visualization, data analysis, reporting and alerts that collectively increase efficiency and network performance while reducing costs and network downtime.



NetSpyGlass

cumulus®

NetSpyGlass

NetSpyGlass is an integrated network mapping and monitoring real-time system for the multivendor data center and WAN networks that is highly automated and fully scriptable, scales to thousands of devices and millions of metrics and supports data analytics with embedded programming language (Python). Built for NetOps, DevOps, Security and Application teams, it provides real-time dashboards and historical network topology maps with the ability to search on and overlay network-related information (i.e. faults, alerts, and performance data).

Enterprises, SaaS Operators, Data Centers & Service Providers use the NetSpyGlass platform to:

- Monitor 2M+ metrics from over 2,500 devices and 150,000 interfaces at a 30 sec polling interval to discover and visualize network topology, configuration, state and create alerts.
- Perform complex computations with collected monitoring data and store the results for processing using an embedded analytics engine and programmatic interface via Python API.
- Integrate with business support systems using the REST API to access monitoring data.

Cumulus Linux

Cumulus Linux is the first native Linux network operating system (NOS) for industry-standard bare metal networking switches. Cumulus Linux is a Debian-based distribution and offers the full Linux experience on networking hardware. Cumulus Networks uses existing Linux networking packages and capabilities, addresses the gaps by adding additional innovation that provides modern tooling and functionality for data center networking, and then contributes these packages and capabilities back to the upstream community.

Cumulus Linux supports x86, PowerPC, and ARM CPU architectures running Broadcom and Mellanox chipsets, so you can accelerate robust networking functions at wire rate on a variety of hardware platforms. Cumulus Networks also certifies the Cumulus Linux operating system for products listed publicly on the Cumulus Hardware Compatibility List (HCL).

Integrated Solution Features

NetSpyGlass and Cumulus Linux together provide a powerful, cost-competitive platform for managing web-scale networks via native Linux environment.

NetSpyGlass

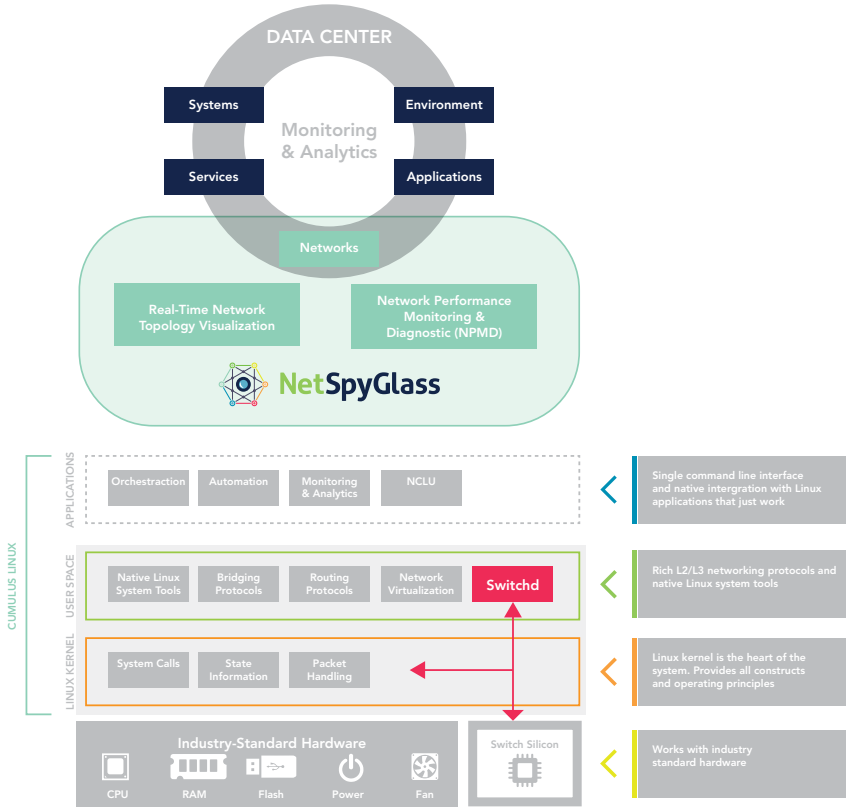
- **Network Administration:** Automatically discover network devices, build topology maps and collect metrics right out of the box.
- **Network Operations:** Scalable real-time monitoring with auto configuration, alerts and integration of maps and monitoring data.
- **Network Maintenance:** Generate customizable performance and availability reports on vlans, switch ports, subnets, protocols and more.
- **Network Provisioning:** Capacity forecasting with embedded Python scripting engine and SQL-like query syntax for deep data analysis.

Cumulus Linux

- **Production-grade networking focused Linux software distribution based on Debian and an open source framework of components.**
- **Support for zero-touch network installation using ONIE loaded on bare metal switches.**

Challenges Addressed

The era of hybrid cloud, hyper-converged and web-scale networks has arrived and along with it has come entirely new network management challenges. Vendor proprietary network operating systems and a proliferation of network management tools presents network teams with a level of complexity that threatens network availability and performance. And now, more than ever before, network engineering and operations teams are integral to the success of the modern network-driven enterprise. Therefore, these teams must continually strive for optimum efficiency in network operations. NetSpyGlass and Cumulus Linux together provide a powerful platform for conquering the complexity of modern data center and web-scale networks.



Customer Benefits

Combined NetSpyGlass and Cumulus Linux delivers a compelling set of benefits to network engineering and operations teams, including:

- Scalability: monitor thousands of devices, hundreds of thousands of interfaces and millions of metrics in real-time
- Efficiency: fully automatic self-configuring network discovery and monitoring via SNMP with real-time animated topology visualization
- Analytics: powerful Python scripting engine and integrated SQL-like query syntax for very advanced processing of monitoring data
- Insights: quickly locate metrics to generate manual or rules-based graphs, integrate with Grafana to build interactive dashboards
- Awareness: express complex logic for alert conditions incorporating dependencies and correlations between metrics
- Auto-provisioning: Zero touch install and zero touch provisioning simplify operations
- Automation: Manage switches like servers with automation tools
- High capacity IP fabrics enable scale, simplicity and rapid evolution

Get Started!

- Try NetSpyGlass by downloading one of the available Linux packages for a free trial: http://www.netspyglass.com/downloads.html
- Learn more about NetSpyGlass at: http://www.netspyglass.com
- Try Cumulus Linux with Cumulus VX: https://cumulusnetworks.com/productscumulus-vx/download/
- Cumulus Linux Hardware Compatibility List (HCL): https://cumulusnetworks.com/products/hardware-compatibility-list/

Summary

NetSpyGlass and Cumulus Linux are uniquely synergistic. The two solutions combine to activate a powerful value proposition based on reducing complexity and costs while increasing visibility into network performance and quality of service. The solutions combine to improve the efficiency of network operations teams, freeing them to focus on the higher-value needs of the business.

NetSpyGlass

cumulus®

NetSpyGlass

About Cumulus Networks®

Cumulus Networks is leading the transformation of bringing web-scale networking to enterprise cloud. As the only systems solution that fully unlocks the vertical network stacks of the modern data center, Cumulus Linux's network switch allows you to affordably build and efficiently operate your network just like the world's largest data centers. By allowing operators to use standard hardware components, Cumulus Networks offers unprecedented operational speed and agility, at the industry's most competitive cost. Cumulus Networks has received venture funding from Andreessen Horowitz, Battery Ventures, Sequoia Capital, Peter Wagner and four of the original VMware founders.

For more information visit **https://cumulusnetworks.com** or follow **@cumulusnetworks**.

About Happy Gears Inc.

Happy Gears provides comprehensive network performance monitoring, diagnostics and topology visualization solutions for the multi-vendor data center and WAN networks. The Company's first product – the NetSpyGlass platform was built for NetOps, DevOps, Security and Application teams to have real-time dashboards and historical network topology maps along with the ability to search and overlay network-related information (i.e. faults, alerts, and performance data). Happy Gears customers include Enterprises, SaaS Operators, Data Centers and Service Providers struggling to conquer the complexity of modern web-scale networks.

For more information visit **http://www.netspyglass.com**