

# ACTIONABLE TRAFFIC ANALYSIS WITH JUNIPER AND ELASTIFLOW

*Joint solution provides unprecedented insights into critical business networks*

## Challenge

To support the increasing traffic loads of the largest organizations in the world, modern networks require user-centric data delivered in a human-readable format that offers extreme scalability.

## Solution

ElastiFlow and Juniper have joined forces to deliver a solution that offers complete and immediate network visibility, where and when it is needed, to help enterprises and service providers meet their business obligations.

## Benefits

- Provides unprecedented visibility into network performance and availability, including what is consuming the most resources or generating the most traffic
- Maintains security and compliance by reporting suspicious activity or risky user behavior
- Reduces unnecessary spending by identifying underutilized resources and activity that cost the company money
- Provides seamless scalability for consistently high performance

*The average number of connected devices in our day-to-day lives has increased exponentially in recent years. Combined with an increasingly distributed workforce and IoT-driven services, enterprise SecOps has never been more important or more challenging.*

Modern IT must scale to meet the needs of connected users while maintaining visibility over ever-evolving infrastructure. The Juniper Networks-ElastiFlow solution enables IT professionals to make informed policy decisions through actionable insights. Juniper's rich suite of flow and telemetry streaming options provide real-time data at scale. ElastiFlow's Unified Collector receives, decodes, transforms, normalizes, translates, and enriches this data, providing administrators with powerful, intuitive visualizations. Together, Juniper and ElastiFlow improve the ability to detect suspicious network activity, identify at-risk resources, and reduce incident mitigation time.

## The Challenge

Legacy monitoring solutions are designed to provide element-centric data, collecting and parsing information based on the source. While this information can be useful for determining the health of specific network elements, it can't convey the experience of connected users. Monitoring tools designed for individual network components just aren't very good at translating actionable insights into user experience.

## The Juniper Networks-ElastiFlow Solution

The network is the foundation of any business. As a result, network traffic analysis is now a mandatory requirement of enterprises and service providers everywhere. To fill this critical need, Juniper Networks and ElastiFlow have worked together to deliver a groundbreaking solution that provides network managers with complete and immediate visibility into network activity. By delivering the right visibility at the right time, the joint Juniper-ElastiFlow solution helps organizations gain complete visibility into, and control over, their most critical business asset.

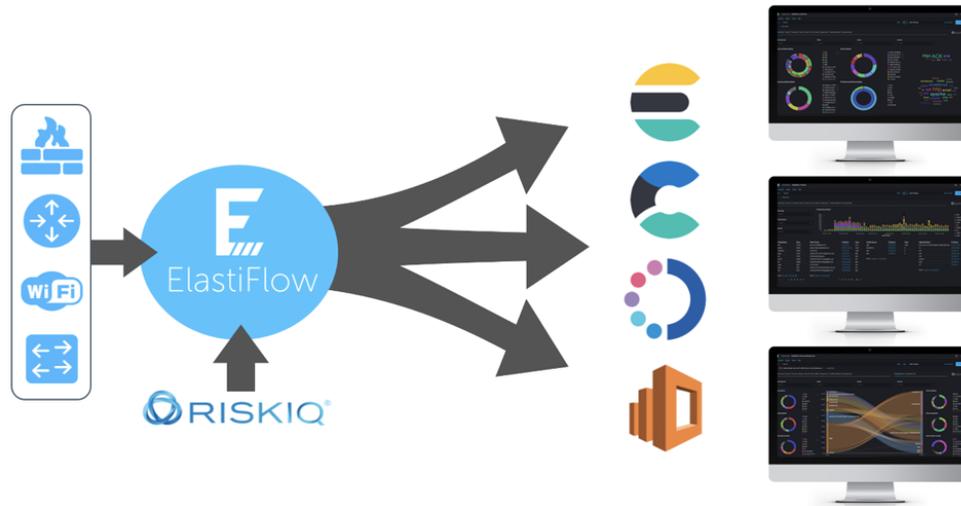


Figure 1: The ElastiFlow Unified Flow Collector is designed to transform open data platforms into powerful network traffic flow analytics solutions.

## Features and Benefits

The joint Juniper-ElastiFlow solution addresses the following use cases.

### Performance and Availability

With the Juniper-ElastiFlow solution, network managers gain detailed insight into critical network performance and availability metrics. With this joint solution, users can not only determine why a specific service such as e-mail, the Internet, or cloud services are underperforming, they can also see which applications are consuming the most bandwidth and who is generating the most traffic.

### Security and Compliance

The Juniper-ElastiFlow solution helps organizations enforce security and compliance rules by reporting which users are accessing what services, which users are visiting sites that pose a known risk, and whether any restricted services are being accessed by an external source.

### Cost Controls

The joint Juniper-ElastiFlow solution helps companies spend more efficiently by identifying which users or applications are incurring cloud egress costs, showing whether the SD-WAN is worth the investment, and reporting which resources are underutilized so they can be redeployed.

### Extreme and Seamless Scalability

The joint Juniper-ElastiFlow solution delivers a high-performance, horizontally scalable architecture that provides complete visibility into the network, with full IP Flow

Information Export (IPFIX), sFlow technology, and more than 6400 NetFlow data fields from hundreds of network vendors.

Best of all, the solution is flexible—it can be deployed on premises, as a cloud service, or in a hybrid cloud. The joint solution can also be installed natively, running as a Docker container or deployed in a virtual machine.

## Solution Components

The Juniper contributions to the joint Juniper-ElastiFlow solution deliver a self-driving network experience featuring built-in automation and AI-driven support through open standards, APIs, and disaggregation. ElastiFlow integrates across the entire Juniper portfolio, giving administrators real-time end-to-end visibility into the network experience of connected users.

Juniper components include:

- Juniper Networks® MX Series Universal Routing Platforms
- Juniper Networks PTX Series Packet Transport Routers
- Juniper Networks ACX Series Universal Metro Routers
- Juniper Networks QFX Series Switches
- Juniper Networks EX Series Ethernet Switches
- Juniper Networks SRX Series Services Gateways
- Juniper Wireless Services driven by Mist™ AI
- Juniper Session Smart SD-WAN

The ElastiFlow solution components include the ElastiFlow Unified Collector, which delivers:

- Flow record collection at any scale with more than 6400 flow fields
- Advanced decoding and transformation
- Dataset normalization
- Advanced machine-driven analytics
- Human-readable flow insights
- External data integration (GeoIP, AS, IP reputation, and more)
- Flow analytics focused on user experience

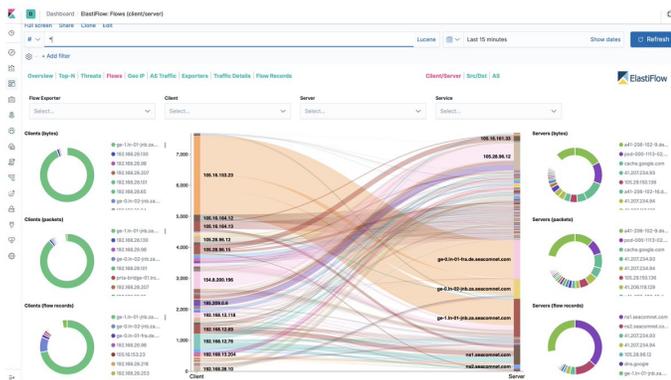


Figure 2: ElastiFlow Unified Controller home screen.

## Summary—A New Level of Network Visibility from Juniper and ElastiFlow

ElastiFlow perfectly complements Juniper’s experience-first network solutions, delivering unparalleled traffic visibility that allows you to quickly detect performance impacting issues and enhance digital experiences. Data is presented in intuitive, human-readable formats, while a rich array of data modeling tools and API integrations support customization for nearly any use case.

## Next Steps

To learn more about the joint Juniper-ElastiFlow solution, please contact your ElastiFlow or Juniper representative.

## About ElastiFlow

ElastiFlow delivers the world’s most scalable and performant network performance and security analytics solutions. The ElastiFlow team believes that networks and the people who engineer, deploy, and maintain them, are the unsung heroes of the modern world in which we live. Whether for business, healthcare, entertainment, or social connection, we all depend on the reliability, performance, and security of network infrastructure. ElastiFlow was created to provide the visibility and insights necessary to make this world possible.

## About Juniper Networks

At Juniper Networks, we are dedicated to dramatically simplifying network operations and driving superior experiences for end users. Our solutions deliver industry-leading insight, automation, security and AI to drive real business results. We believe that powering connections will bring us closer together while empowering us all to solve the world’s greatest challenges of well-being, sustainability and equality.

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