

## Solution Brief

# VPN Traffic Steering for Superior Availability, Performance and Optimization

VPN technology is crucial for providing remote employees secure access to internal company resources. As organizations implement remote working policies to protect employees during the COVID-19 global pandemic, the demand for remote access VPN is dramatically growing and usage patterns changing. As a result, many enterprises need to ramp up their VPN infrastructure and are struggling to address user performance and scaling related issues.

To address these challenges, NS1 has partnered with Cisco to enhance the Cisco AnyConnect solution by adding VPN Traffic Steering. With NS1's traffic steering policies, AnyConnect users are sent to the optimal, healthy Cisco VPN site that has the most capacity. This vastly improves VPN availability, performance, and optimization over basic round-robin load balancing or having employees randomly choose from a provided list of VPN sites.



### Availability

NS1 gives AnyConnect users enhanced availability of its VPN connections and prevents connection overload with intelligent, real-time traffic steering

### Performance

NS1 provides AnyConnect users with optimal performance by steering users to lowest latency VPN sites

### Optimization

NS1 increases and improves AnyConnect VPN capacity utilization to easily adapt to VPN infrastructure changes

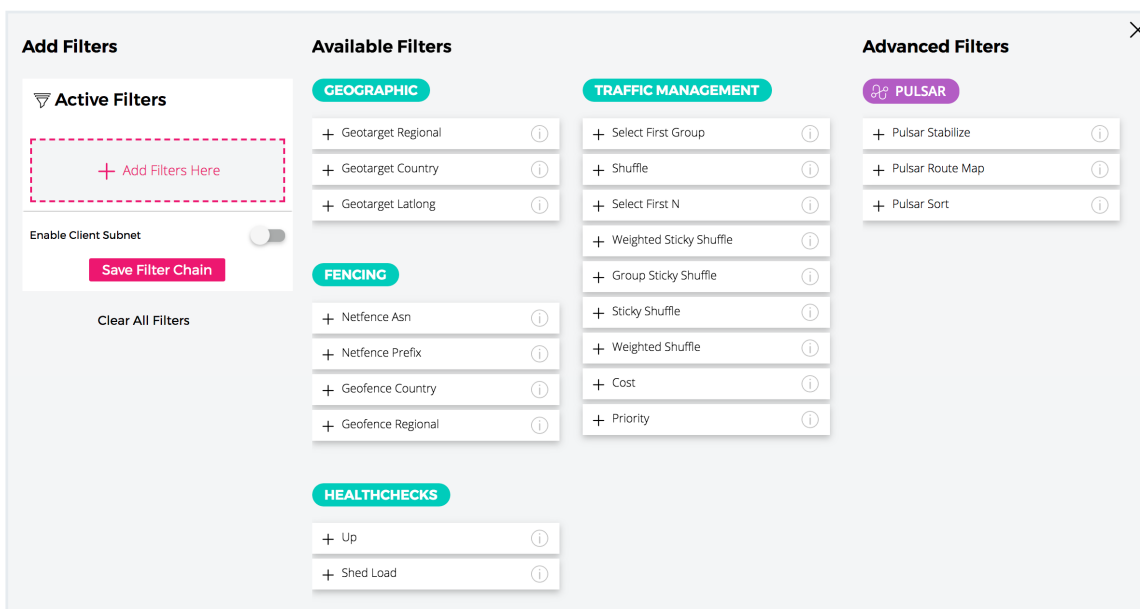
### Active Traffic Steering

NS1 leverages real-time infrastructure data and configurable logic for intelligent traffic steering for increased performance and reduced risk

# NS1 + AnyConnect: Stronger Together

## Reduce costs and deliver superior VPN end user experiences

NS1's intelligent traffic routing helps minimize the cost of scaling up to support increasing VPN demand. Rather than simply adding capacity individually at each VPN site as limits are reached, NS1 automatically balances incoming connections across the entire available VPN network. As a result, organizations get the most of their existing VPN investment without sacrificing the AnyConnect user experience.



## NS1 + AnyConnect: How it Works

NS1's Filter Chain technology allows you to easily make a series of decisions in real time for each VPN query so your users always receive the best possible answer. It is a configurable sequence of filters that are applied in real time—dynamically choosing the best answers for VPN queries.

When NS1 receives a VPN query, we first look up the list of potential answers, and then apply the filter chain to that list before serving an answer. Each filter takes a list of VPN sites as its input, performs a simple transformation (e.g. sorting by geographical proximity, or removing down answers), and then passes the modified list to the next filter in the chain. This allows you to implement complex decision-making logic very easily by chaining together simple, single-purpose components.

### NS1 VPN Traffic Steering: Delivering Optimum VPN Experience and Cost

NS1 delivers an advanced, cloud-scale, API-driven DNS and VPN traffic management solution that provides intelligent availability, performance and optimization of Cisco AnyConnect.

### Cisco AnyConnect: Secure VPN Access for Remote Workers

Cisco AnyConnect Secure Mobility Client empowers employees to access secure corporate networks while still providing the security necessary to help ensure that your organization is safe and protected.