

Performance Monitoring for SteelConnect

SteelCentral Insights for SteelConnect

Providing visibility into what is occurring on a software-defined WAN (SD-WAN) is essential for successful deployment and operation. The ability to validate policies are working as expected, to troubleshoot problems quickly, and plan for changes can help ensure the success of your SD-WAN environment.

The adoption of cloud resources, coupled with increased bandwidth requirements to support rich media, interactive communications, and other bandwidth-heavy applications, has created interest in deploying hybrid WAN topologies (e.g., a combination of MPLS, Internet, LTE, etc.). While multiple transport technologies increase capacity and reliability, they also increase complexity and create new challenges for network managers. Software-defined WAN (SD-WAN) solutions can help to alleviate these challenges, enabling you to capitalize on the benefits of hybrid WANs, while increasing overall agility and operational efficiency.

Visibility blind spots can decrease the effectiveness of SD-WAN deployments. Without insight into what is running on your sites and zones, it's difficult to plan, monitor, troubleshoot, or validate things are working as expected. While a big reason for implementing SD-WAN

is time and cost savings, you can't realize their full benefits without visibility.

Visibility for SteelConnect SD-WAN

Riverbed® SteelConnect™ is an SD-WAN networking solution that offers a radically new approach to networking in a cloud-centric world. SteelConnect is uniquely designed to enable business-intent policies for applications to provide the performance and agility enterprises need today. It is the industry's first and only product to unify network connectivity and orchestration of application delivery across hybrid WANs, remote LANs and cloud networks.

SteelCentral™ Insights for SteelConnect integrates with SteelConnect to provide visibility into what is occurring on SteelConnect software-defined WAN environments.

How it works

SteelCentral Insights for SteelConnect collects data from SteelConnect Manager securely uses SteelFlow™ (a Riverbed-specific form of NetFlow) and REST APIs. SteelCentral Insights for SteelConnect uses this data to provide visibility into usage and availability about your overall network, specific sites, servers, applications, and users. With this information, network managers can make informed policy and deployment decisions, monitor and troubleshoot performance issues, and plan for changes.

Rich insights into usage and availability

Get insights and the workflows you need to understand the performance of your SD-WAN environment. Quickly and easily monitor, analyze and troubleshoot large-scale software-defined infrastructure using detailed reports about your

- **Organization summary**– provides detailed usage information about links, applications, sites, and users
- **Site summary** – shows overlay and underlay views, QoS class breakdown of the traffic, top users and top site interactions
- **Application summary** – understand how apps are being used, where and by whom
- **User summary** – breakdown of the users activity, which applications are being used and where is the user most active.

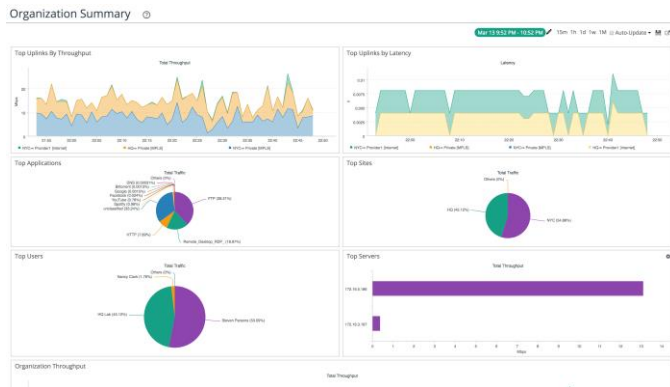


Figure 1 This is an example of the Organization Summary report showing uplinks, sites, applications, top users and top servers.

Use SteelCentral Insights for SteelConnect to answer questions such as:

- What's happening on my network? What was the behavior in the last hour, day, or week?
- Are there issues with uplinks? Which uplinks are handling the most traffic?

- Which applications are used most often?
- Who is using the network? What applications are they using?
- What's happening at site X? How is the traffic flowing out of the site? Is it in line with the policies? What is the QoS priority of the traffic?
- What is the activity for a particular uplink? Are there any performance problems? What is affected?

Sample Use Cases

Investigating an Application Slowdown

Users are complaining about performance in New York. Why is it slower than expected?

1. Checking the Site Summary in SteelCentral Insights for SteelConnect shows performance in NYC is indeed slower than usual and that there is BitTorrent traffic taking up significant bandwidth.

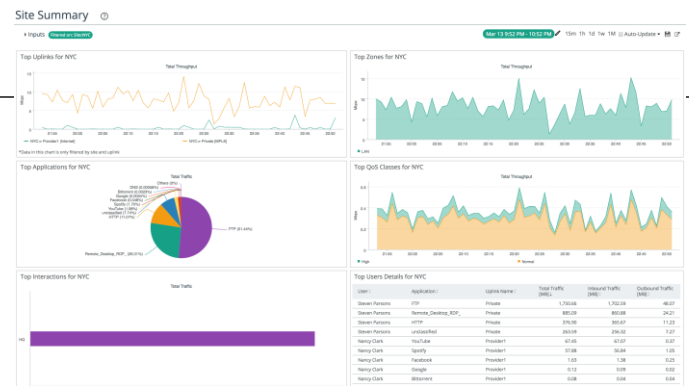


Figure 2 The Site Summary for NYC shows significant BitTorrent usage.

2. If we set an Outbound/Internal Rule in SteelConnect Manager, we can stop BitTorrent traffic from even entering the network.

Outbound / Internal rules

	Users / Source	Applications / Target
#01	On <input type="checkbox"/> Off <input type="checkbox"/> Nancy Clark	BitTorrent <input checked="" type="checkbox"/>
#02	On <input type="checkbox"/> Off <input type="checkbox"/> Guests	Any (Unrestricted access) <input checked="" type="checkbox"/>
#03	On <input type="checkbox"/> Off <input type="checkbox"/> All users and devices (excluding guests)	Any (Unrestricted access) <input checked="" type="checkbox"/>
#04	On <input type="checkbox"/> Off <input type="checkbox"/> Guests	Internet Access <input checked="" type="checkbox"/>
#05	On <input type="checkbox"/> Off <input type="checkbox"/> All users and devices (excluding guests)	Internet Access <input checked="" type="checkbox"/>

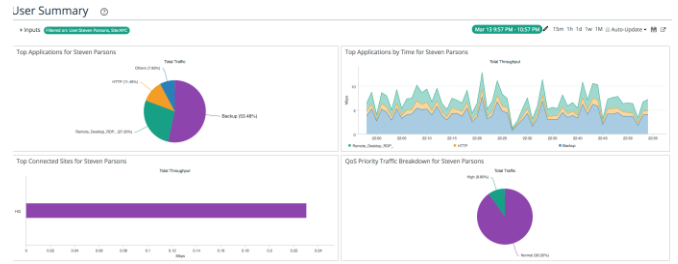
Figure 3 Using SteelConnect Manager, it's simply to create a new rule and specify who and where it applies.

- When we check again, all BitTorrent traffic is gone from the site.

Investigating a Capacity Spike

While reviewing the performance of the Paris site, you notice there is a spike in the usage of one of the uplinks. What's causing it?

- Drill down into the activity for the uplink. Which applications are being used?
- There's a big spike in cloud backup activity. Who initiated it during business hours?



- Drill down to the user who initiated the backup. Let's notify him about the policy of running backups after business hours and create a rule to de-prioritize all back up traffic to avoid future issues.

Summary

Visibility is crucial for effective SD-WAN deployment and operation. The ability to validate policies are working as expected, to troubleshoot problems quickly, and plan for changes can help ensure the success of your SD-WAN environment. SteelCentral Insights for SteelConnect provides essential visibility for deploying, monitoring, and troubleshooting software-defined networks. If you would like to try Riverbed SteelConnect SD-WAN, [click here](#). For more information about end-to-end SteelCentral visibility, [click here](#).

About Riverbed

Riverbed, at more than \$1 billion in annual revenue, is the leader in application performance infrastructure, delivering the most complete platform for the hybrid enterprise to ensure applications perform as expected, data is always available when needed, and performance issues can be proactively detected and resolved before impacting business performance. Riverbed enables hybrid enterprises to transform application performance into a competitive advantage by maximizing employee productivity and leveraging IT to create new forms of operational agility. Riverbed's 27,000+ customers include 97% of the *Fortune* 100 and 98% of the *Forbes* Global 100. Learn more at Riverbed.com/SteelConnect

The Riverbed logo consists of the word "riverbed" in a lowercase, sans-serif font. The letters are a vibrant orange color. The "i" and "e" in "river" have small white dots, and the "d" in "bed" has a small white dot at the top of its stem.

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