

# Spirent Network Emulator

## Customer Need:

- Retailers with SD-WAN congestion
- Data-centers looking to migrate
- Cloud Service Providers looking to verify service performance
- Banks needing to respond quickly to modeling requests

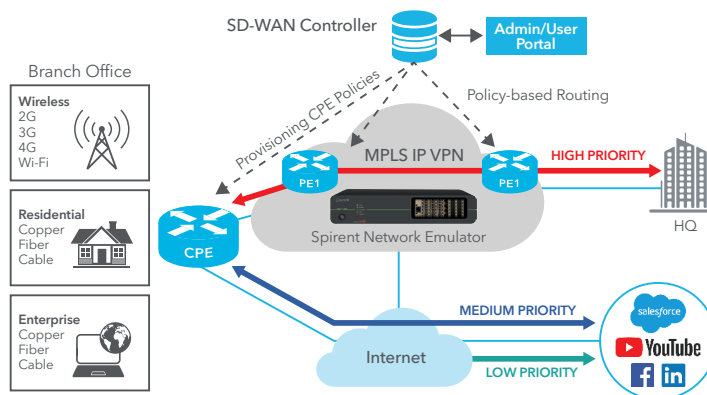
## Customer Challenge:

How to cost effectively address the above needs.

## Spirent Solution:

Add emulation to live and/or lab networks using multi-port, multi-user Spirent Network Emulator.

## SD-WAN Use Case - Major retailer with large offices in Pennsylvania and Seattle



The retailer formerly had MPLS WAN. They switched to SD-WAN (Dual MPLS and Internet connectivity) saving \$380k per year by down-grading their 1Gb/s MPLS link to 250Mb/s.

However, the VoIP service degraded significantly after switchover due to suspected MPLS link congestion. Rather than spending \$120k to upgrade the MPLS link service, they instead decided to invest in the Spirent Network Emulator.

By creating latency and loss scenarios, they tested the VoIP Quality thus establishing loss, latency and jitter limits at which VoIP degraded. The retailer then added these numbers into their SLA with their SD-WAN provider. The SD-WAN provider entered these numbers into their 'MPLS link switchover limits' so that if latency, loss or jitter came close to the limits, non-VoIP traffic was offloaded to the Internet.

The retailer was able to stick to the existing SD-WAN service saving them the \$120k per year.

## Data-Center Use Case - Large European insurance company

The insurance company wanted to move their Data-center from Germany to Italy in order to save an estimated €10Million per year. However, they had to sign a 12-month contract which meant that they were unable to do a trial. This raised concerns about the unknown impact on applications.

Consequently, they inserted the Spirent Network Emulator into a "live" network and added an estimate of the additional latency and the added packet loss to user traffic. After one week there was no noticeable increase in user complaints to their IT Helpdesk.

As a result, the Insurance Company migrated to Italy and saved the €10M per year.

## About Spirent Communications

Spirent Communications (LSE: SPT) is a global leader with deep expertise and decades of experience in testing, assurance, analytics and security, serving developers, service providers, and enterprise networks.

We help bring clarity to increasingly complex technological and business challenges.

Spirent's customers have made a promise to their customers to deliver superior performance. Spirent assures that those promises are fulfilled.

For more information, visit: [www.spirent.com](http://www.spirent.com)

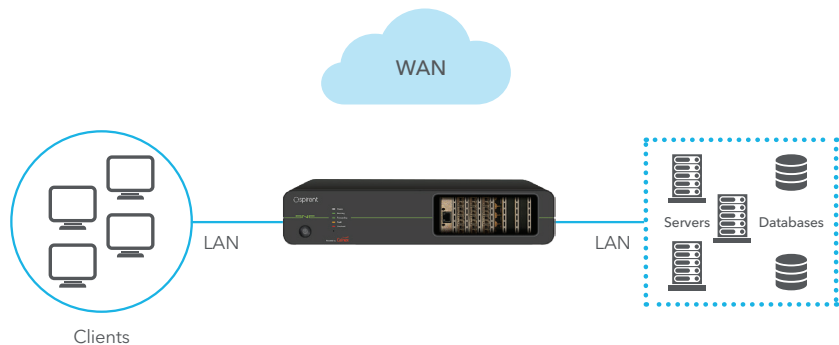
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## Cloud Use Case - Major Global Cloud Provider



The cloud provider needed to grow its business by adding new customers, while retaining existing customers by efficiently troubleshooting client issues. The cloud provider's average order value was approximately \$500k per year, however, the major barrier to adoption was service performance - clients were very concerned and cautious about the cloud provider's ability to move client data quickly enough onto the cloud without impacting their business.

The cloud provider stated that current testing didn't accurately replicate the customer's environment. Now, with the Spirent Network Emulator, they can accurately mimic customer environments, proving performance and setting appropriate SLAs. Customer satisfaction scores have already increased. These are key metrics monitored at Board level within the cloud provider.

To date, they have seen a **12% uplift in new business** and are expecting to see a **10% increase in year-on-year retention**, saving **\$10M per year**.

## Cloud Use Case - Large US Bank

*"Spirent Network Emulator is the only platform that allows the quickest and broadest network emulation and topology capabilities."*

The Data-lab within this large US bank gets network modeling/testing requests from customers that must be responded to quickly.

Typically, they create a network topology/simulation and then send customer application traffic across it to assess performance. The Bank also uses the Spirent Network Emulator to exercise/stress their Cisco network infrastructure by "working around" the forwarding table by using impairments to look at the impact on network reconvergence performance.

The Data-lab benefits from reduced test setup time in creating the correct network topologies. Average test-duration is 72 hours, and voice tests can run up to 5 weeks.

**Reduced test setup time, faster customer responses and more realistic testing** will save the Bank at least **\$1M per year**.