



SES Data Optimisation

DELIVERING AN EXCEPTIONAL EXPERIENCE TO BANDWIDTH-HUNGRY CONSUMERS

Consumer demand for high-bandwidth services is on the rise, with video traffic representing over 60% of the total downstream traffic volume on the internet. HTTP video streaming applications such as Netflix now represent 60% of downstream traffic, while gaming traffic is on the rise as game downloads, Twitch streaming and eSports go mainstream.¹

Optimised Application Performance

Users of internet-based applications do not want to disconnect from them simply because they are on an airplane, a cruise ship or otherwise away from home. They want to be able to access their favourite content and applications, and they want that experience to be responsive and trouble-free. However, overburdened satellite links can cause dropped connections and service outages, severely impacting the satisfaction of customers who are on the go.

SES's Data Optimisation service provides a suite of techniques developed to improve the end-user experience. These solutions maximise the efficiency and responsiveness of the wide area links that your customers depend on to interact with their internet-based applications.

Ensuring Quality of Experience

Quality of Experience (QoE) can refer to a broad range of metrics which affect the user experience. While Quality of Service (QoS) objectively measures specific service parameters to evaluate service performance, QoE is a more subjective measurement that refers to user satisfaction. The two metrics aren't always aligned; for example, a user may perceive a web page as slow to display, but QoS measurement tools may report satisfactory network performance.

Data optimisation promotes an enhanced QoE by improving transfer times, thus providing users with a more responsive online experience. Tests over MEO links have demonstrated that data optimisation can yield improved transfer times of 70% over non-optimised traffic. In a GEO environment, the impact of optimisation is even more dramatic, with 90% lower transfer times as compared to non-optimised traffic.



1. Source: Sandvine Global Internet Phenomena Report, 2019

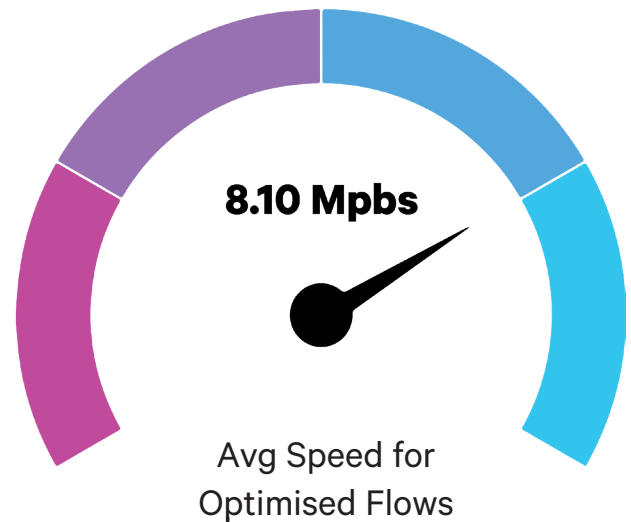
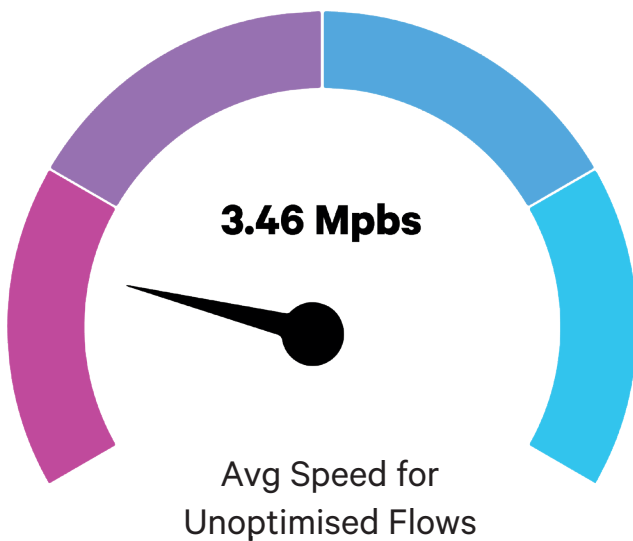
Key features:

- Link Bonding and Balancing (LBB) allows multiple physical links to be combined into a single logical link with higher capacity
- TCP optimisation enables faster web page load times and more responsive interactive sessions
- DNS and byte caching allow repetitive data to be stored locally at the end-user location to avoid repeated transmissions that only serve to add congestion to the link
- Packet coalescing reduce the repetitive and unnecessary network overhead traffic, further improving link utilisation

Benefits:

- Keep end-users happy and customer survey scores high
- Extract maximum value out of valuable and expensive wide area links by improving utilisation by as much as 20%, depending on traffic composition and usage patterns
- Lower the cost per bit of optimised data streams over congested links
- Ensure reliable and high-performing internet access remains a key part of your value proposition by delivering a high quality end-user experience
- Create opportunities for repeat customer business
- Cut down on expensive complaints to your customer service center

AVERAGE SPEED FOR UNOPTIMISED & OPTIMISED FLOWS



Based on Xiplink analysis of representative customer test data