Transportation and Logistics Provider Accelerates UCaaS Solution By Up To 20X with Aryaka

UCaaS (Unified Communications as-a-Service) is expected to reach $167.1 billion in market size by 2025. As a single integrated solution for all things collaboration, from email and video conferencing to file sharing and directory services, UCaaS has become an essential tool for global enterprises. Replacing on-prem UC with UCaaS, however, comes with a condition: it's only as good as the network it's delivered upon. A well-performing UCaaS service can mean better collaboration and improved productivity for a company, while dropped calls, distorted video and slow-to-send files can result in the opposite. UCaaS solutions are especially prone to packet loss, latency and jitter – the public internet can't support UCaaS performance and purchasing private circuits can be prohibitively expensive. Aryaka's managed SD-WAN solution, however, was built for a cloud-first world. Our cloud-native private network provides enterprise-grade connectivity enabling reliable UCaaS performance globally.

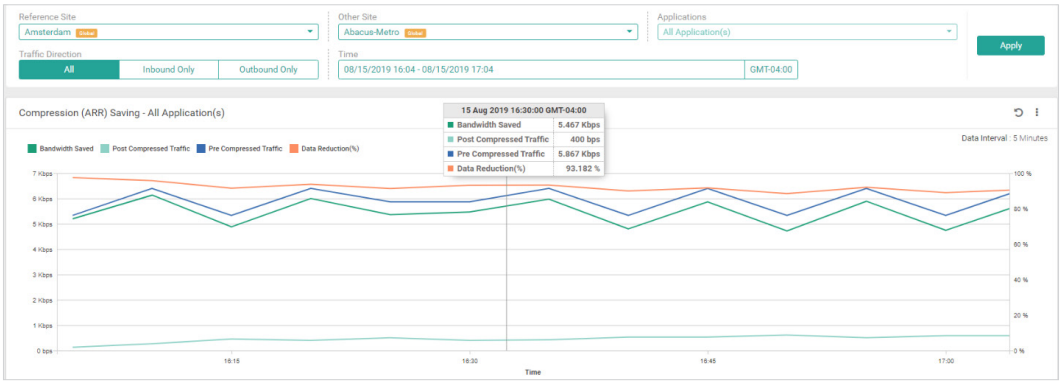
The Challenge

When a US-based transportation and logistics company initiated a company-wide digital transformation project, improving the performance of 8x8, their UCaaS solution, was key to the first phase of their plan. In order to address this issue, as well as futureproof their network for future cloud-based and SaaS application deployments, the company needed to transform their core on-premises network.

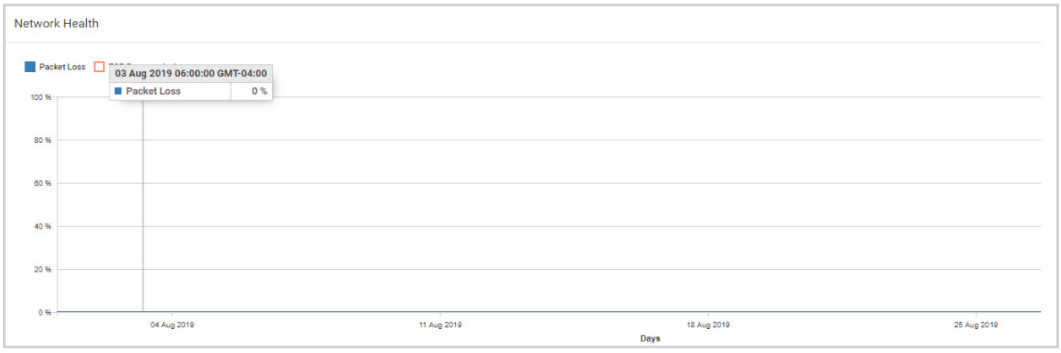
The Solution

After deploying Aryaka SmartConnect, the company experienced major improvements in their 8x8 traffic, including:

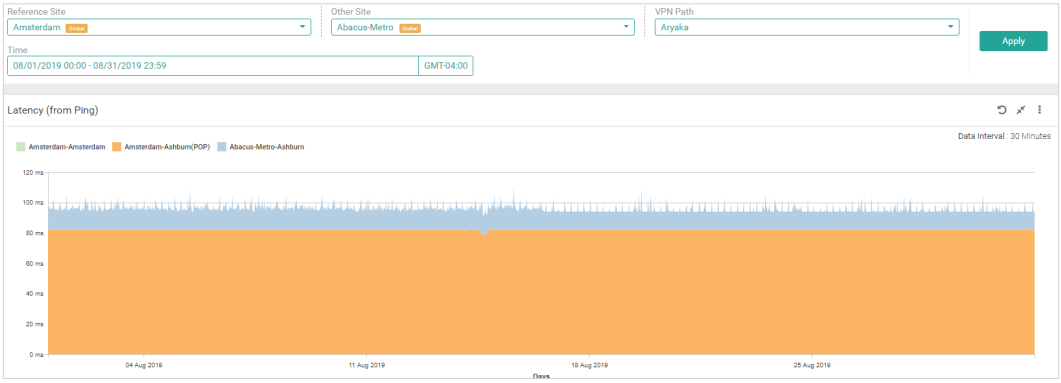
1. **93% data reduction and an increase in application performance by up to 20X. The figure below shows the data between Amsterdam and Ashburn, Virginia.**



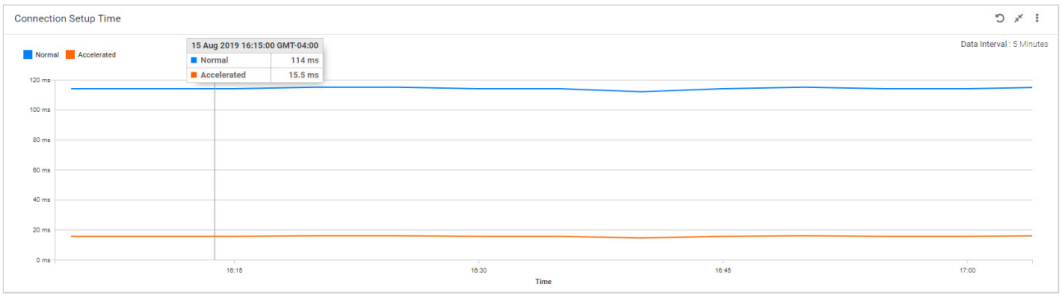
2. **Packet loss decreased to almost 0%!**



3. **Stable core latency between Amsterdam and Ashburn, Virginia.**



4. **The TCP Connection set up time immediately increased to 8X faster over the Aryaka core network. The time spent setting up the transport connection and is much higher over the internet as it is not a dedicated medium. With Aryaka's optimization technology, the transport layer is always available for the packet to move securely over the core. For example: an 8-second process over the internet decreases to a one-second process with Aryaka.**



Please note that in the figures shown above, 99% of the traffic shown is 8x8 traffic.

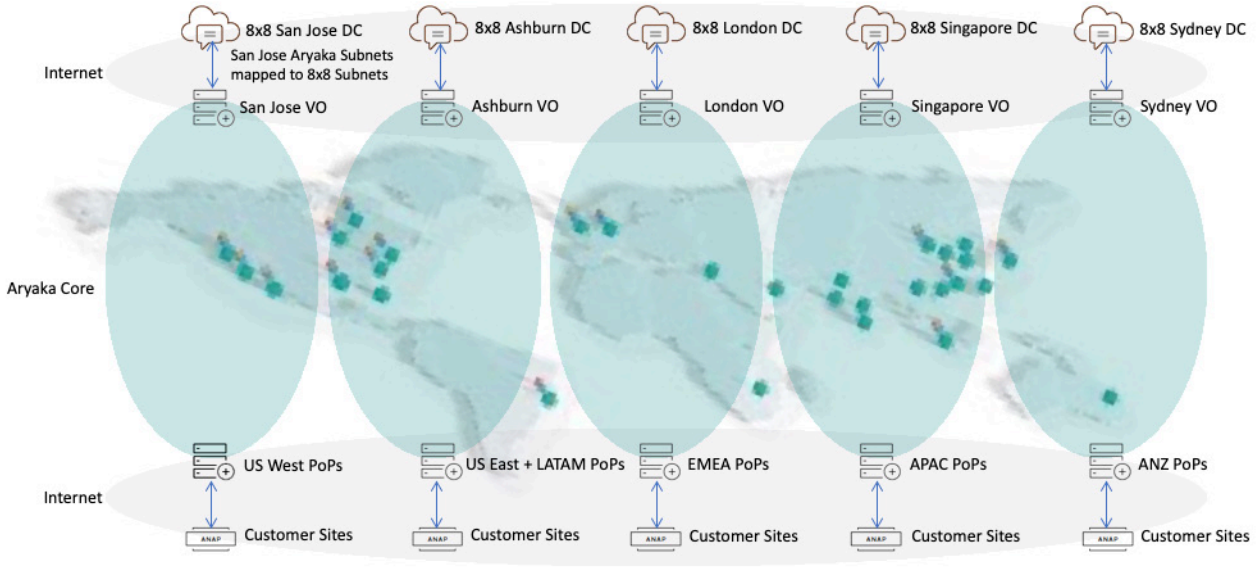
How It Works: Aryaka and 8x8

Aryaka implements connectivity to 8x8 datacenters (DC) using its Virtual Office (VO) implementation. It creates 5 VOs on its backend and each customer site belonging to Aryaka is mapped to a region, connects to a VO and is used to access 8x8 for that region. The customer site is mapped based on the POP to which it connects. The following table provides a mapping of the Aryaka customer site POPs and regions:

Aryaka PoPs	Region
Los Angeles, San Jose	US-West
Dallas, Miama, Ashburn. Chicago, San Paulo	US-East
Frankfurt, Amsterdam, Tel Aviv, London, Johannesburg	EMEA
Singapore, India, Taipei, Dubai, Tokyo, Seoul, China PoPs, Hong Kong	APAC
Sidney	Sydney

8x8 provides the public IP subnets to Aryaka, which is hosted in their DCs. The traffic to 8x8 GTM/DNS server IP address is routed over the regional VO. 8x8 maintains a mapping of the Aryaka pubic subnets to that region, so that when endpoints register via Aryaka, they are redirected to the services hosted in that region.

The following diagram provides a high-level overview of the solution architecture. It is important to note that Aryaka connects the customer location to the closest 8x8 DC.



Aryaka Key Results

UCAAS PERFORMANCE ACCELERATED BY UP TO 20X

PACKET LOSS DECREASED TO ALMOST 0%