

# Pure Math Backbone for a Post-HTTP World

## High Performance for UC, SaaS, Remote Access & Site-to-Site

The internet wasn't built for real-time applications or reliability. It was designed for web pages, optimized to transport HTTP/HTTPS on TCP. Today's internet is plagued with latency variance and jitter, 99.5% of which occurs in the first and middle miles (core). The post-HTTP world needs a new backbone. Mode was created around a breakthrough math discovery, implemented across a global, secure underlay network. The result is the highest-performing, most-secure, most-reliable core network in the world.

The patented Mode algorithm may be reviewed here: [https://people.ece.cornell.edu/atang/pub/15/HALO\\_ToN.pdf](https://people.ece.cornell.edu/atang/pub/15/HALO_ToN.pdf)

# MODΣ

HIGHEST-PERFORMING SD-CORE

SD-CORE (software-defined network core) is an internet core alternative for applications which demand reliability, security, and/or real-time performance. SD-CORE must be affordable to be used pervasively. Optimization techniques like WANOP and TCP tuning aren't helpful here. A networking breakthrough is needed.

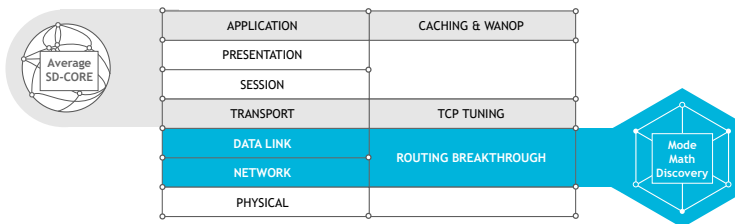
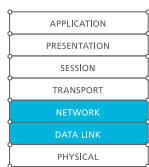


FIGURE 1 - MODE ROUTING BREAKTHROUGH REDEFINES NETWORK PERFORMANCE

The Mode breakthrough is a Cornell computer science discovery that replaces current routing state-of-the-art at layers 2 and 3 of the OSI model. This allows Mode – and Mode alone – to define and deliver the theoretical limit of network routing.

Mode applies our pure math routing algorithm to a combination of Microsoft and Ericsson global underlay networks, creating the highest-performing SD-CORE in the world.

Mode Math Discovery  
Applied @Layers 2 & 3



Global, Reliable, Secure Underlay

**ERICSSON**  
UNIFIED DELIVERY NETWORK

**Microsoft  
Azure**

Leads to a New Era in  
Network Performance



FIGURE 2 - MODE CORE: MATH DISCOVERY + GLOBAL SECURE UNDERLAY NETWORK

Mode Core features MPLS reliability, private-network security, and the near elimination of latency variance and jitter – at a business-internet price point.

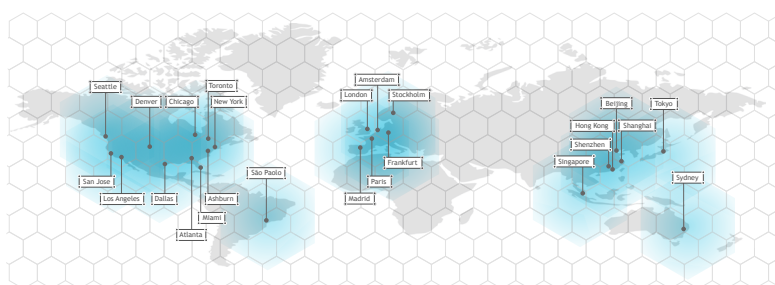


FIGURE 3 - MODE IS EVERYWHERE YOU DO BUSINESS

Mode Core gives UCaaS providers access to a post-HTTP global core network that brings ultimate UCaaS performance worldwide for hundredths of a cent per connection minute.

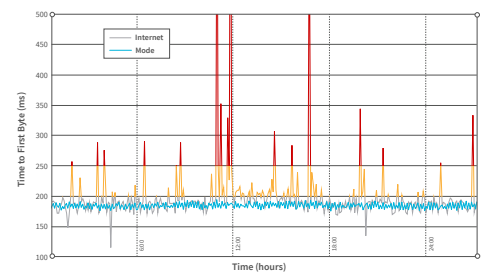


FIGURE 4 - LATENCY VARIANCE: WASHINGTON, DC TO TOKYO

Mode Core works with any SD-WAN to enable the safe, phased transition of mission-critical business applications – on-site or cloud – from MPLS to an affordable, > 99.99% reliable, QoS private network with SLA guarantees. Mode Core enhances UC, SaaS, remote access, and site-to-site.

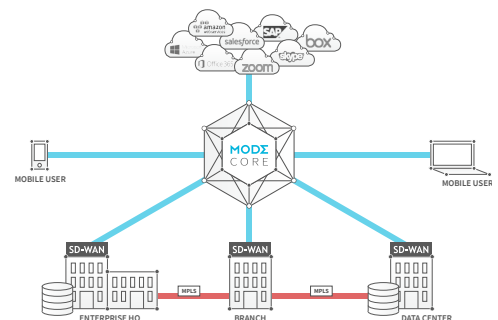


FIGURE 5 - MODE CORE + SD-WAN

Mode Core supports real-time applications that require ultra-low latency (ULL) performance, from interactive livestreaming to feedback-loop AI.

Mode is backed by Google Ventures, New Enterprise Associates, and the National Science Foundation. For a demonstration of Mode, please contact [sales@mode.net](mailto:sales@mode.net).