MODE

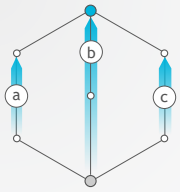
HIGHEST-PERFORMING SD-CORE

Mode Core

Global UCaaS Reliability. Cloud Elasticity. Business-Internet Pricing.

Technology evolves. Math disrupts. The Mode math discovery applied to layers 2 and 3 of the OSI model changes networking forever. While UCaaS disrupts enterprise communications, Mode shatters network limits, driving efficiency and performance once thought unachievable. These two disruptions work best together.

PURE MATH FOR A PURE WAN



Mathematical Solution for Optimal Routing applied at Layers 2 & 3

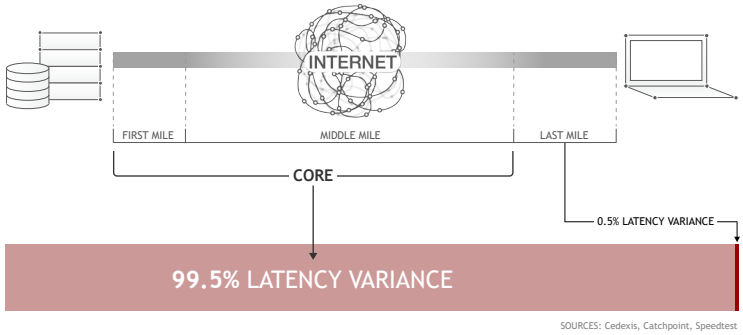
Achieves Theoretical Maximum for Network Performance

Won't be Surpassed. EVER.

UCaaS Backbone Challenge

UCaaS is growing rapidly, but the biggest threat to this growth is inconsistent end-user performance due to an unreliable internet backbone.

Third-party data shows that over 99.5% of Internet latency variance is attributable to the core (first + middle-mile), so last-mile solutions can't help. Private-circuit solutions like MPLS are prohibitively costly and inelastic.



CORE LATENCY VARIANCE IS 99.5% OF TOTAL LATENCY VARIANCE

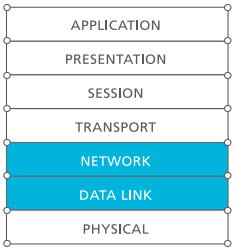
WAN optimization solutions don't address the fundamental shortcomings of today's networks, and these techniques aren't applicable to UCaaS. Many UCaaS providers have had little choice but to build their own private core – costly, far outside their core competency, and a drag on the speed of global expansion.

Math Builds the Best SD-CORE

At Mode, we believe UCaaS providers deserve an affordable, QoS connectivity option, one that can work side-by-side with their own private core, and that is as elastic in setup, use, and coverage as the cloud itself. We built our version of SD-CORE as a software-defined global private network that leverages our fundamental networking discovery to offer QoS, high availability, and SLA guarantees – delivered at a business-internet price point.

Simple network optimizations like WANOP, caching, and TCP tuning aren't applicable to UCaaS. A more fundamental network breakthrough is required.

Mode Math Discovery Applied @Layers 2 & 3



Global, Reliable, Secure Underlay

ERICSSON
UNIFIED DELIVERY NETWORK

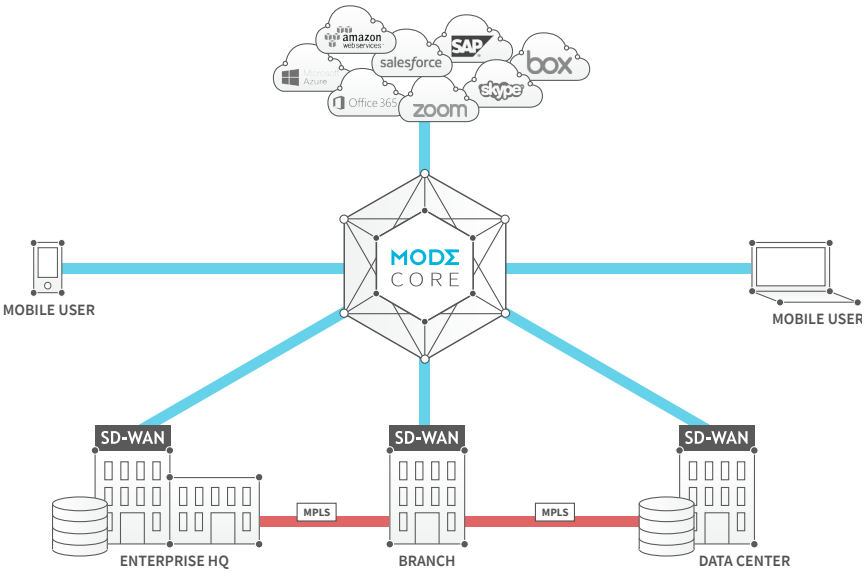
Microsoft Azure

THE BEST SD-CORE REQUIRES A NEW NETWORK BACKBONE

MODΣ

HIGHEST-PERFORMING SD-CORE

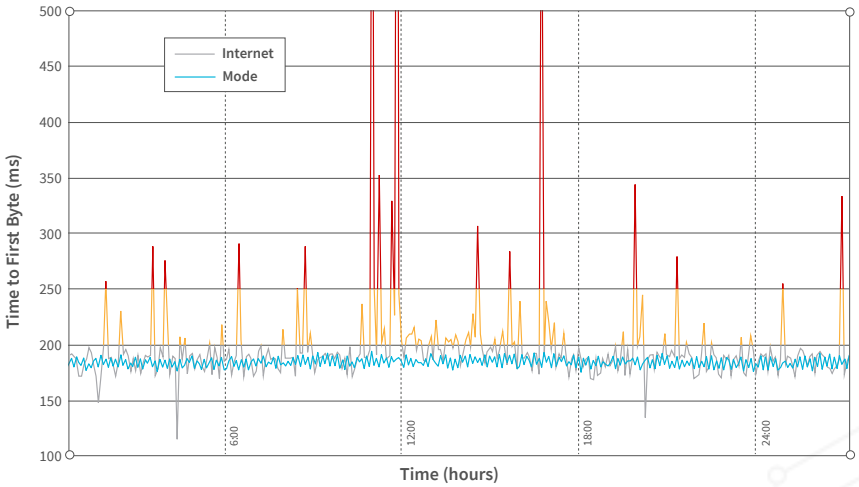
Mode was founded by two Cornell computer scientists who – for the first time – derived the dynamical system equations that define all packet-switched networks, and designed a distributed, optimal feedback control system we call Mode HALO. Mode has partnered with Microsoft, Ericsson, and over 100 global service providers to apply our routing breakthrough to their massive, secure, underlay network. The result is an autonomous global network with multiples of throughput performance, and the near elimination of latency variance. Mode Core is the world's highest-performing SD-CORE.



UCaaS PRIVATE CORE AT BUSINESS-INTERNET PRICING

Mode Core: Ultimate UCaaS SD-CORE

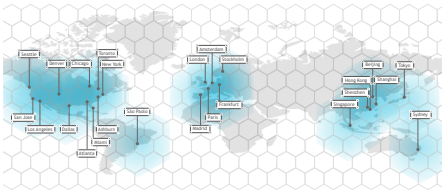
Mode Core supports an unprecedented UC experience, with superior voice and video quality (minimized jitter, latency, and packet loss), and non-stop uptime. When problems arise, Mode offers full application and user visibility and metrics for easy troubleshooting.



INTERNET VS. MODE CORE: WASHINGTON, DC TO TOKYO

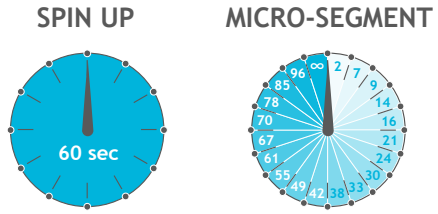
Mode Core provides guaranteed elastic bandwidth via service prioritization, traffic shaping, and bandwidth reservation algorithms. Mode ensures QoS for all locations, even those with poor-quality internet links.

Mode Core offers seamless integration with UCaaS vendors, without any new hardware or software. Mode complements existing UCaaS core networks, or obviates the need to build one in the first place. Mode Core gives UCaaS providers instant global presence across the world's major business centers.



MODE IS WHEREVER YOU DO BUSINESS

Mode enables the spin up of a global private network in under 60 seconds, and the ability to micro-segment private networks by customer, application, etc.



INSTANT, MICRO-SEGMENTED PRIVATE NETWORKS

UCaaS is revolutionizing enterprise communications, and Mode is redefining enterprise connectivity. As a complement to an existing UCaaS core, or as an holistic alternative, Mode Core and its pure math backbone delivers true, synergistic disruption: instant, global UCaaS reliability, at a business-internet price point.

Mode is backed by Google Ventures, New Enterprise Associates, and the National Science Foundation.

For more information about Mode Core for Global UCaaS, contact **sales@mode.net**.

The patented Mode algorithm may be reviewed here: https://people.ece.cornell.edu/atang/pub/15/HALO_ToN.pdf