

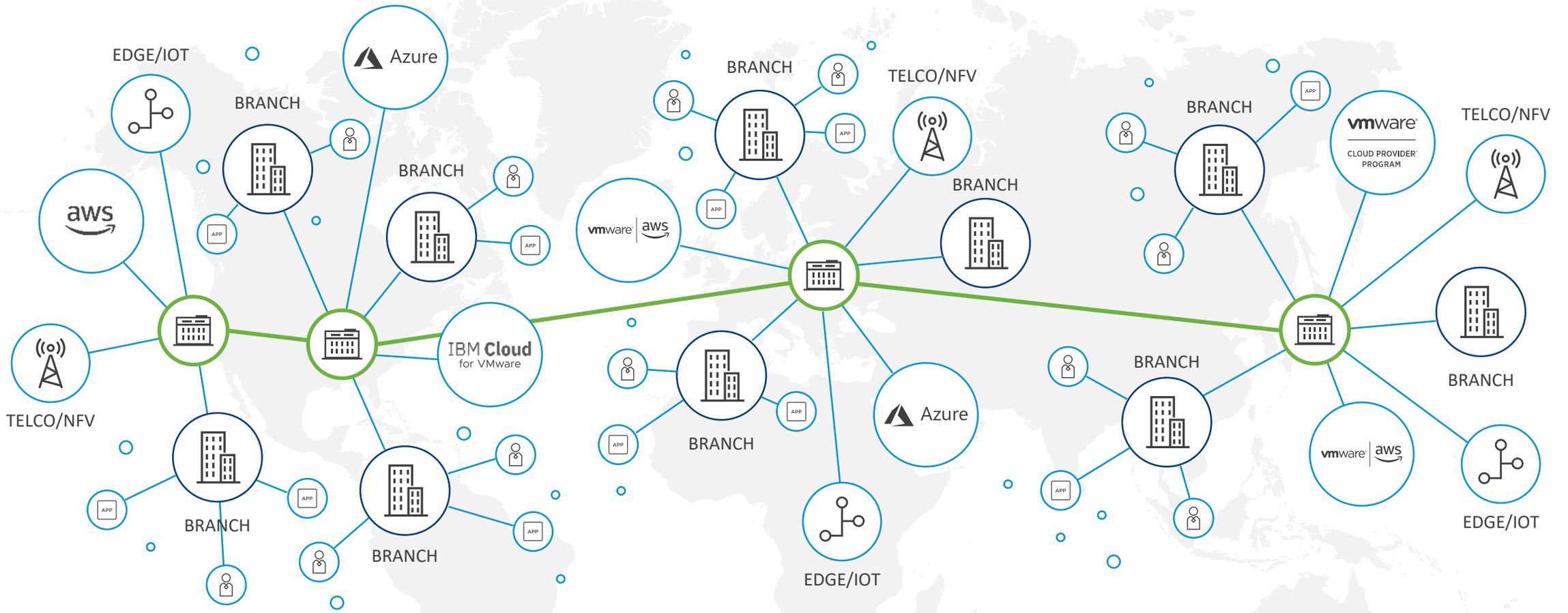


NSX SD-WAN by VeloCloud

The Cloud is the Network

Quinton Coelho
Regional NSX Specialist

October 2018



The Virtual Cloud Network

Connect and Protect your Business

Application Trends

30-50%

of large Enterprise traffic is shifting to the cloud, changing traffic flows and making traditional WAN suboptimal

—Gartner

248M

desktop video conferencing users and 79% of global Internet traffic is video in 2020

—VNI Index

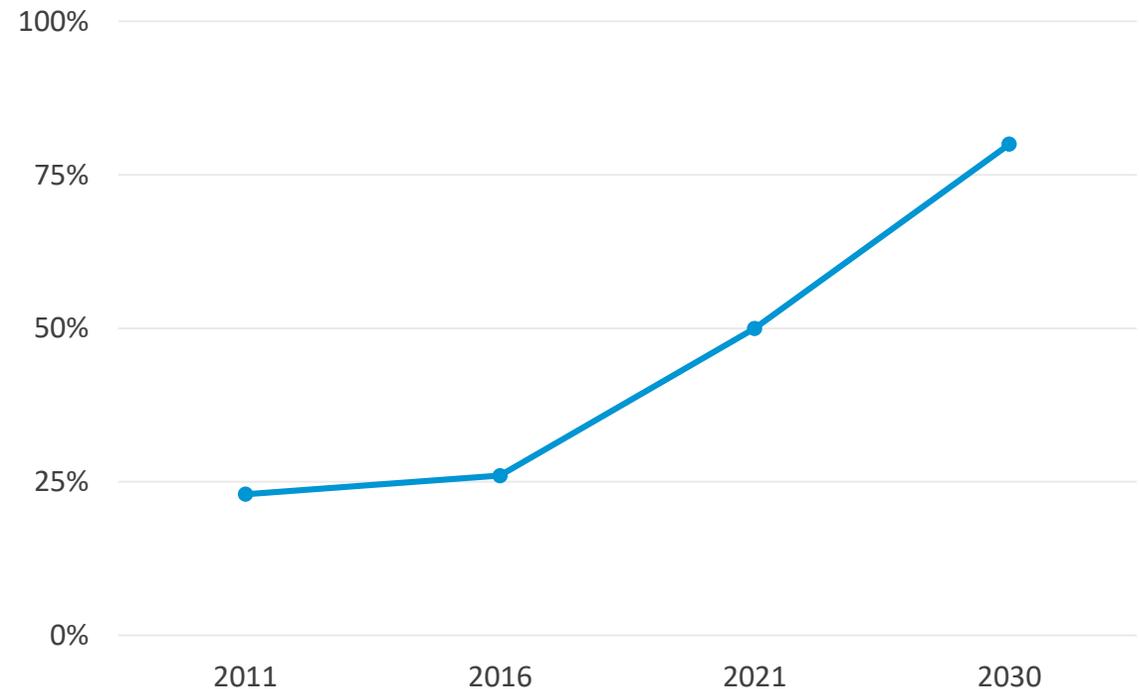
VoIP Reaches 158 Petabytes Monthly

—Statista

Changing Traffic Flows to the Cloud

Enterprise Cloud IT

-SDX Central



With VMware NSX, VMware has Reinvented Cloud and Data Center Networking...

Data Center



Public Cloud

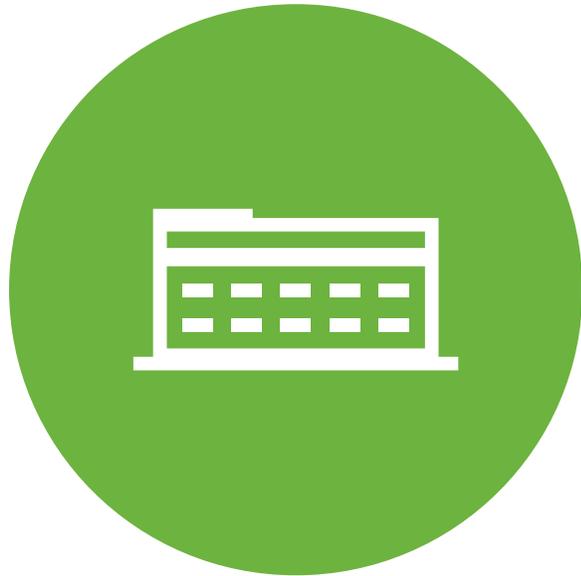


Connecting Everything, from Data Center to Edge

Data Center

SD-WAN

Public Cloud



velocloudTM
Now part of VMware

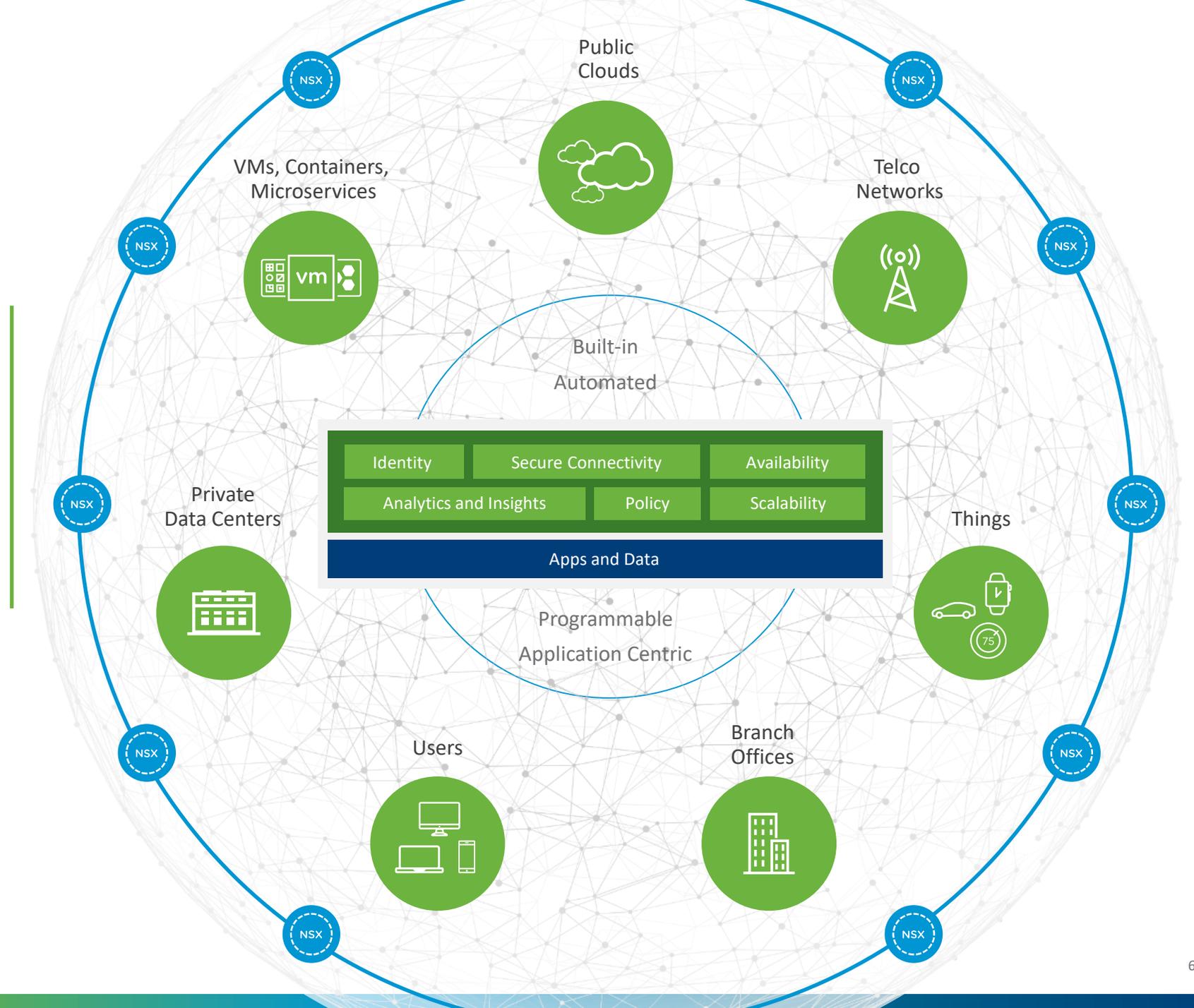


Critical Touch Point for our
Customers



Virtual Cloud Networking

Connect & Protect
any workload across any
environment



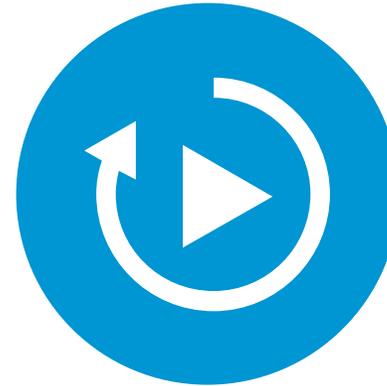
Today's Branch Office



Applications are moving from branch to the cloud: Public, Private, Hybrid, SaaS



Increasing control at the edge, real-time decision making (IoT, Self-driving cars)



Rich application content at the edge: video, voice, dynamic



Mobile device proliferation: Same content over diverse devices

Legacy Networks Cannot Support Today's Edge



Private Line is 100X the Cost of Broadband



Deployment Takes Months

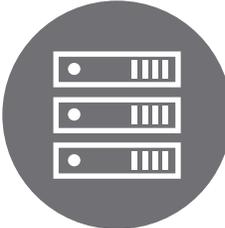


Capex of \$20K-\$50K per Branch

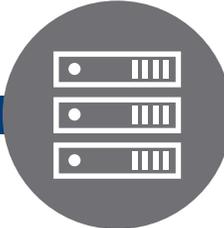


Applications Run Slow

Branch
100s to 1000s



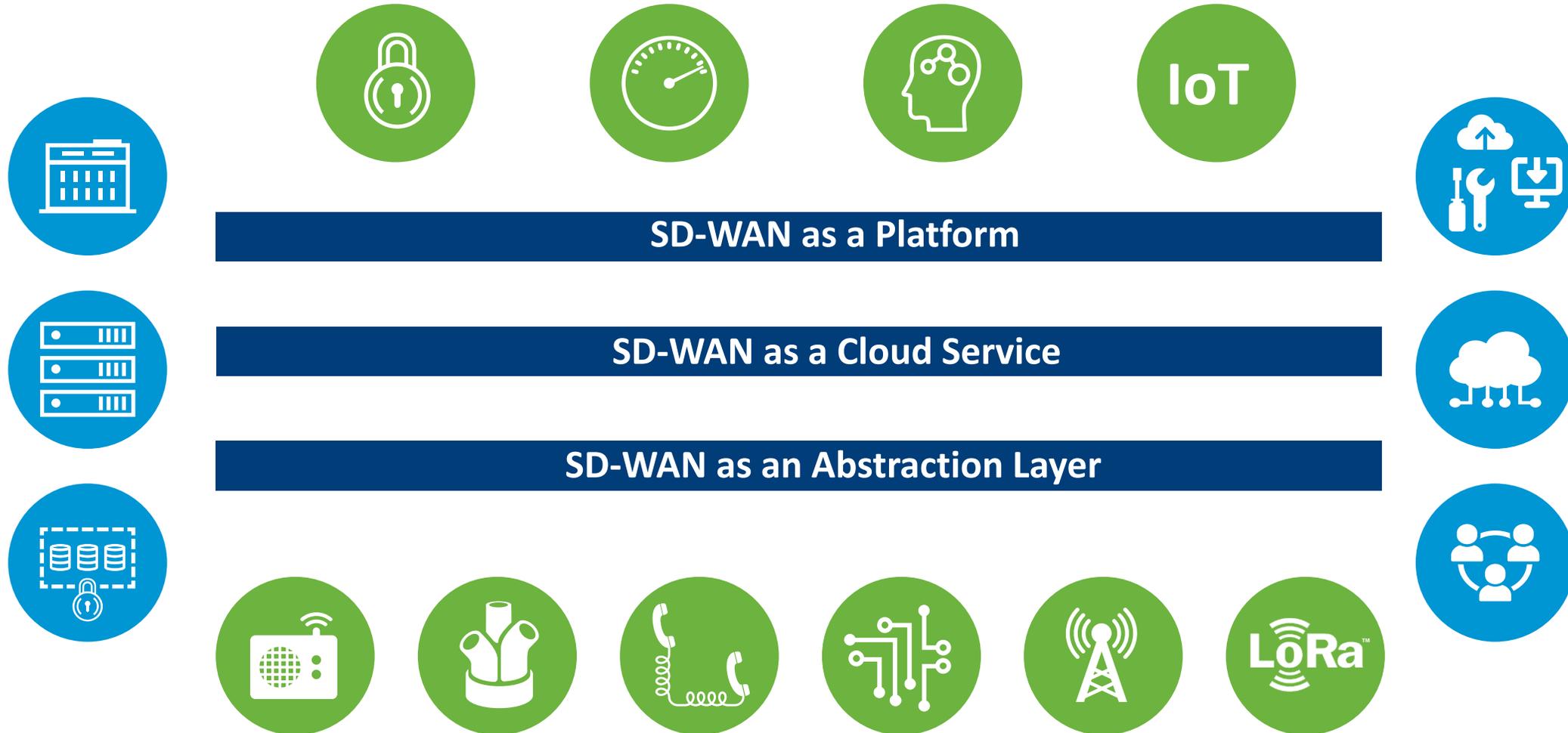
Private Line
(MPLS)



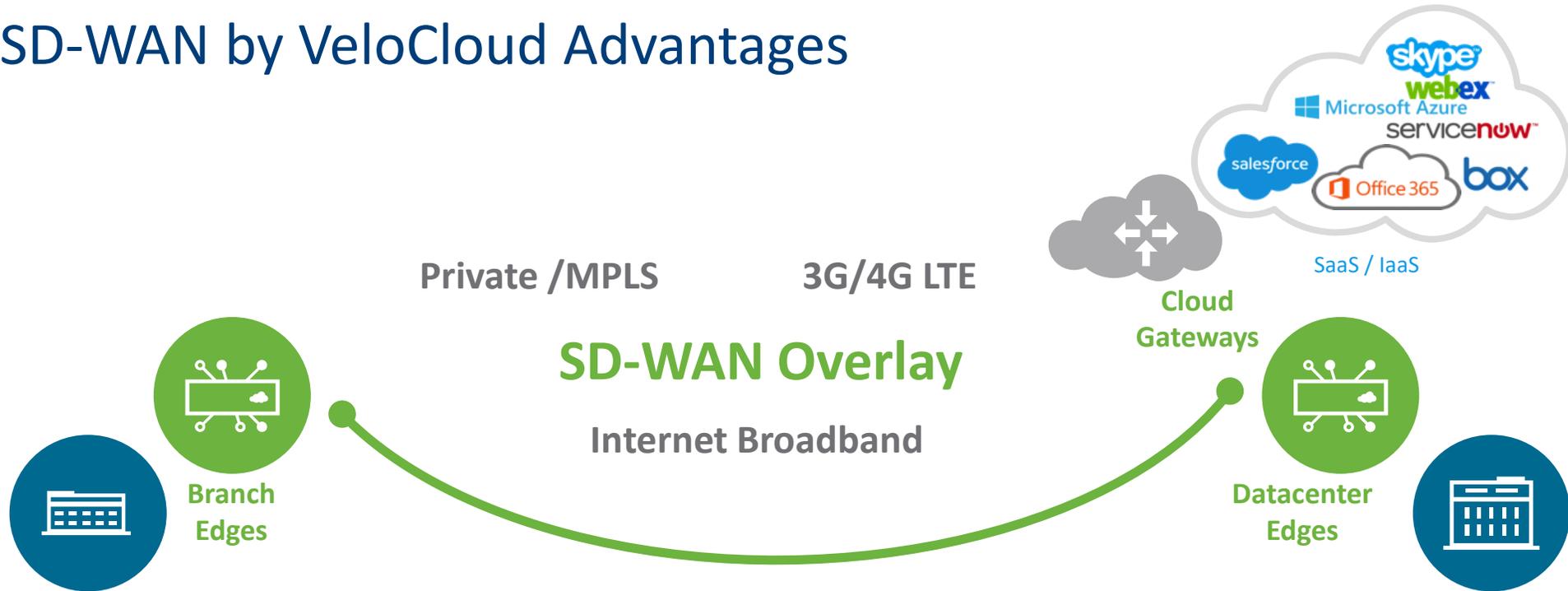
Datacenter



Why Cloud-Delivered?



NSX SD-WAN by VeloCloud Advantages



 **Simplified WAN Management**

Zero-touch deployments, simplified operations, one-click service insertion

 **Assured Application Performance**

Transport independent performance for the most demanding apps, leverages economical bandwidth

 **Managed On-ramp to the Cloud**

Direct cloud access with performance, reliability and security

Enterprise Deployments – Over-The-Top



Hub for SD-WAN to data center including private links

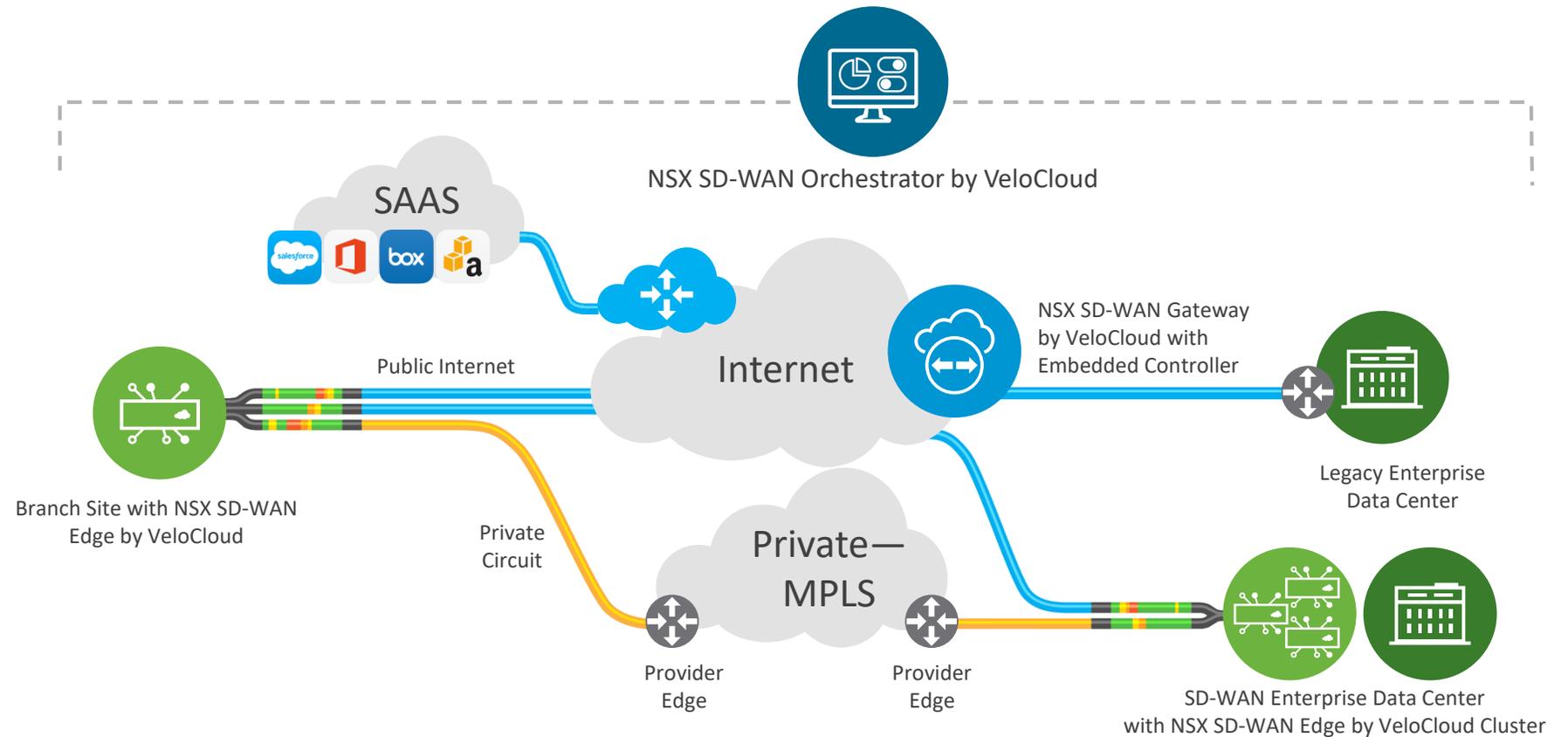


Hosted gateways for SD-WAN to SaaS/IaaS



Hub-less design for legacy data centers

“Site to site SD-WAN plus benefits of cloud gateways for SaaS”



Solution Components

NSX-WAN Edge by VeloCloud

Virtual Edge

Hardware fulfilled by Dell

Flexibility in Deployment

- Purpose-built hardware
- Virtual Edge for cloud or white box
- Services platform for VNF

For branch, datacenter
and cloud



NSX-WAN Orchestrator by VeloCloud and Controllers

Multi-tenant cloud-based
management, configuration, and
monitoring portal

NSX-WAN by VeloCloud or SP
hosted, and on-premises at
enterprise

Business policy abstraction

APIs

Enables fast deployment,
zero-touch operations



NSX-WAN Gateways by VeloCloud

Optimized cloud on-ramp to the
doorstep of SaaS / IaaS

Fully managed and operated by NSX-
WAN by VeloCloud
and SPs

Multi-tenant

Strategic world-wide locations, top-
tier network PoPs



Key Pillars of SD-WAN Approach



Abstraction
and Automation



Contextual
Implementation



Self-Learning
and Adaptation

Assured Application Performance

Simple and Secure VPN

Outcome-Driven Segmentation

Intelligent Routing

Distributed Service Insertion

Zero-Touch Operations



Business Outcomes



Business Policy Driven SD-WAN



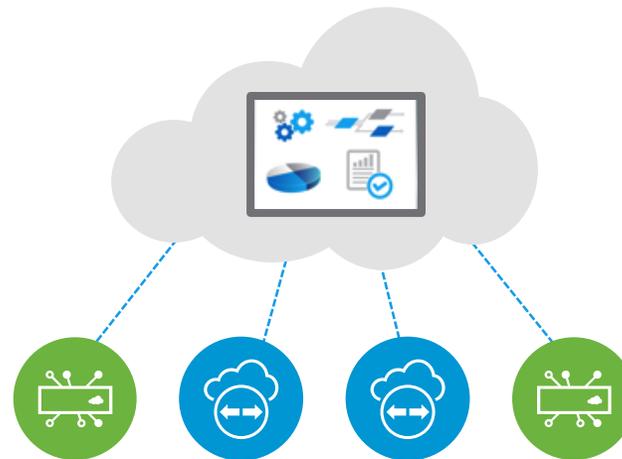
Automatic application recognition and categorization



Simple business prioritization



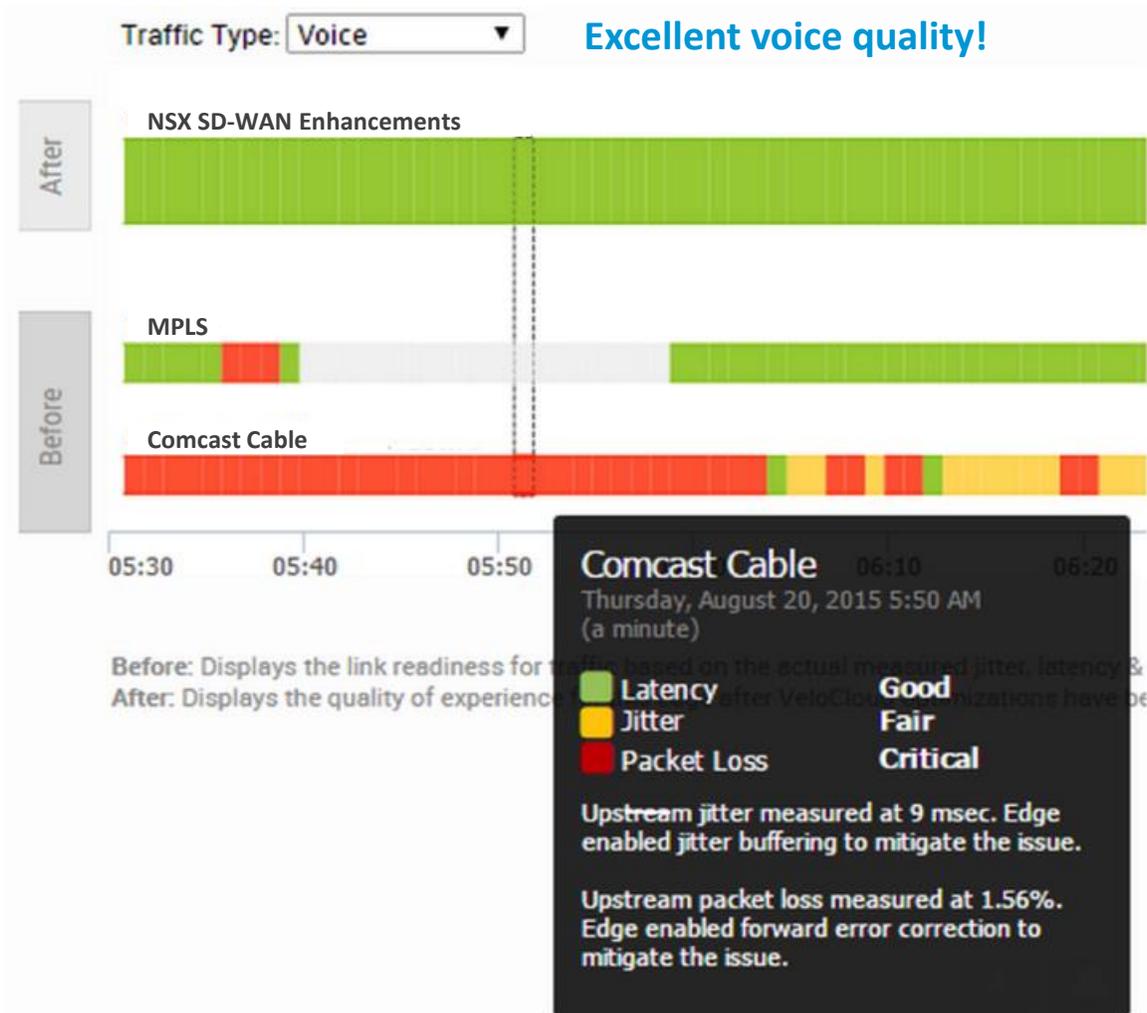
Dynamic path steering and on-demand remediation policy-based link assignment for security/compliance



Services catalog and network services insertion (on-premise, cloud)

Dynamic Multi-Path Optimization in Action

“Assured application performance over any type of link”



Continuous Link Monitoring

- Drives automation and optimization

Dynamic Per Packet Steering

- Sub-second steering without session drops
- Aggregated bandwidth for single flows

On Demand Remediation

- Protects against concurrent degradation
- Enables single link performance

Assure Application Performance

Video Conference over a WAN Link with 2% Packet Loss

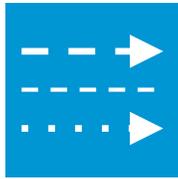
Without NSX SD-WAN by VeloCloud



With NSX SD-WAN by VeloCloud



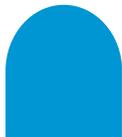
Distributed Services Insertion



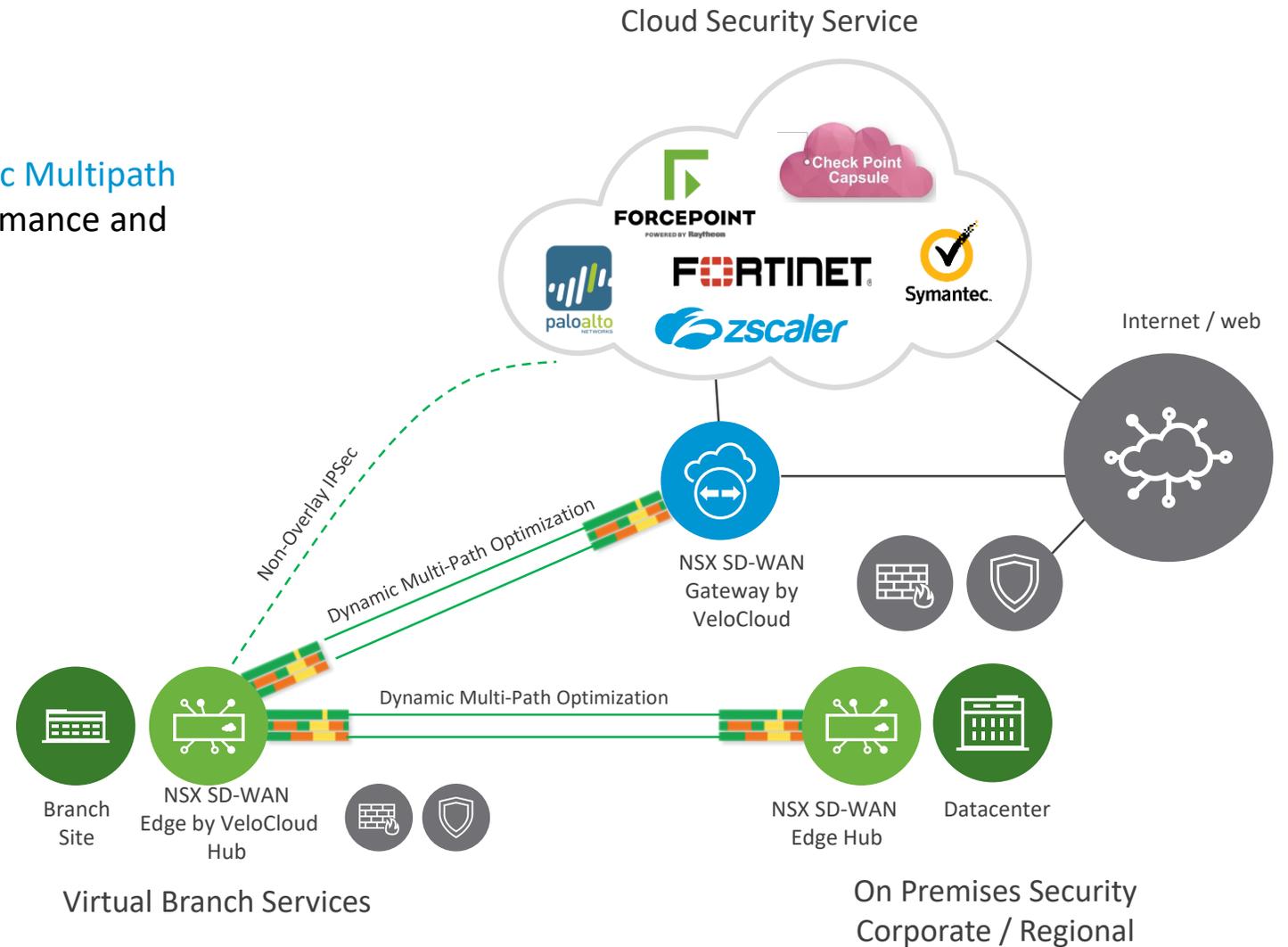
NSX SD-WAN by VeloCloud **Dynamic Multipath Optimization** delivers application performance and reliability to cloud



Single-click **Application-Aware Policies** for granular service insertion



Automated tunneling eliminates site by site configurations



Thank You

The Cloud is the Network

