Performance

Dynamic Path Selection

VeloCloud Dynamic Multipath Optimization™ comprises of automatic link monitoring, auto-detection of provider and auto-configuration of link characteristics, routing and QOS settings

Link Steering and Remediation

On-demand, Per-packet link steering is performed automatically based on the measured performance metric, intelligent application learning, business priority of the application, and link cost. Delivers sub-second blackout and brownout protection to improve application availability. Remediates link degradation through forward error correction, activating jitter buffering and synthetic packet production.

Smart QoS

Granular classification of 2,500+ applications enables smart control. Out-of-the-box defaults set the Quality of Service (QoS) policies for common business objectives with IT required only to establish traffic priority. Knowledge of application profile enables automation of QoS configurations and bandwidth allocations.

Application Performance Monitoring

VeloCloud continuously computes a VeloCloud Quality Score (VQS) to assess performance of critical voice, video, or data applications at any given time with the ability to alert IT staff. This analysis provides administrators a comprehensive before-and-after view into application behavior on individual links and the VeloCloud enhancements.

Cloud Network

Zero-Touch Deployment

VeloCloud Edge appliances automatically authenticate, connect, and receive configuration instructions once they are connected to the Internet in a zero-touch deployment. Deliver highly available deployment with VeloCloud Edge redundancy protocol. Integrate with the existing network with support for OSPF routing protocol and benefit from dynamic learning and automation.

Cloud VPN

One-click site-to-site cloud VPN is a VPNC-compliant IPSec VPN to connect VeloCloud and non-VeloCloud sites while delivering real-time status and health of VPN sites. Establish dynamic edge-to-edge communication for all types of branches based on service level objectives and application performance. Deliver secure connectivity across all branches with PKI scalable key management. New branches join the VPN network automatically with access to all resources in other branches, enterprise datacenters, and 3rd party datacenters, like Amazon AWS.

Security

Stateful and context-aware (application, user, device) integrated next generation firewall delivers granular control of micro-applications, support for protocol-hopping applications, such as Skype and other peer-to-peer applications (e.g., disable Skype video and chat, but allow Skype audio). The secure firewall service is user- and device OS-aware with the ability to segregate voice, video, data, and compliance traffic. Policies for BYOD devices (Apple iOS, Android, Windows, MAC OS, etc.) on the corporate network are easily controlled.

Automation & Orchestration

Business Policy

Quality of Service, resource allocations, link/path steering, and error correction are automatically applied based on business policies and application priorities. Orchestrate traffic based on service groups defined by private and public links, policy definition, and link characteristics.

Management and Control

VeloCloud's centralized monitoring, visibility and cloud control enable zero-touch branch deployment across distributed locations while delivering automatic business policy and firmware updates, link performance, and capacity measurements. VeloCloud supports northbound RESTful APIs for integration with different management solutions and multi-tenant dashboards for service providers.

Application Visibility

VeloCloud offers recognition and classification of 2,500+ applications and sub applications without the need to deploy separate hardware or software probes within each branch location. VeloCloud intelligently learns applications as they are seen on the network and adds them to the VeloCloud cloud-based application database. Services such as firewall, intelligent multipath, and Smart QoS may be controlled through VeloCloud application-aware business policy control.

Performance

- Dynamic Path Selection: VeloCloud will identify, detect and automatically configure traffic routing based on network health, and as needed route around it or adjust to ensure better performance on either a single link or multiple links.

- Smart QoS: VeloCloud is aware of 2,500+ applications and allows the administrator to apply higher or lower priorities to those applications based on the business objectives of the company.

- Link Steering and Remediation: Automatic routing of packets based off the health of the link by measuring metrics (Latency, Jitter, Congestion, packet loss and link cost). Link remediation occurs by utilizing FEC (Forward Error Correction) a technique used for controlling errors in data transmissions over unreliable or noisy communication channels. This is accomplished by activating

- Application Performance Monitoring: Continuous monitoring of critical services (Voice, Video, data applications) to provide IT staff with deeper visibility into the health of those critical services.

Cloud Network

- Zero-Touch Deployment: Centralized management of all VeloCloud appliances to simplify deployment and management.

- Security: Integrated layer 4 firewall. Granular control over applications and sub application functionality.

- Cloud VPN: Point-to-Multipoint IPSec VPN. Dynamically establish IPSec VPN sessions between sites eliminating a single point of failure or dependency on single site. Visibility into health of VPN site connectivity via real-time monitoring.

Automation & Orchestration

- Business Policy: Granular QoS based on configurable applications, coupled with built in resource allocation using link/path steering, and error correction.

- Application Visibility: VeloCloud simplifies the recognition and classification over 2,500 applications and sub application allowing for intelligent application learning and control with QoS prioritization with centralized control.

- Management and Control: Centralized monitoring, visibility and control over VeloCloud appliances.