



Turn your network into a strategic driver

As cloud-based application adoption continues to accelerate, IT is rethinking the the Wide Area Network or WAN architecture to connect users to applications with the highest performance and reliability.

Software Defined WAN is the next stage of the story, allowing enterprises to reliably and securely integrate broadband services into the transport mix to give greater "cloud speed" and a more intelligent business network.

iomart's Managed SD-WAN is a **Silver Peak® Unity EdgeConnect™ SD-WAN edge platform** that we install, maintain and manage round-the-clock.

Managed SD-WAN delivers an affordable, business-driven network designed to maximise the opportunities that today's diverse transport options provide and dramatically reduce the cost and complexity of building a WAN.

Connect

Intelligently connect users to apps. Stop unauthorised traffic from entering the branch.

Control

Centrally align application delivery to business intent. Simplify branch deployments.

Optimise

Accelerate performance. Eliminate repetitive transmission of duplicate data.

Unity EdgeConnect Key Features

Zero Touch Provisioning

A plug-and-play model that can be deployed at a branch office in seconds. Automatically connects with other instances in the data centre, other branches, or public cloud Infrastructure as a Service such as AWS, Microsoft Azure and Google Cloud Platform.

Tunnel Bonding

Configured for two or more physical WAN transport services, bonded tunnels form a single overlay connection, aggregating all performance of all underlying links. If a link fails, the remaining transport links continue to carry all traffic.

Virtual WAN Overlays

The Unity EdgeConnect SD-WAN solution is built on an application-specific virtual WAN overlay model. Multiple overlays may be defined to abstract the underlying physical transport services from the virtual overlays, each supporting different QoS, transport, and failover characteristics. Applications are mapped to different overlays based upon business intent. Virtual WAN

overlays may be deployed to help maintain security compliance.

Dynamic Path Control (DPC)

Real-time traffic steering is applied over any LTE, broadband or MPLS link based on business intent policies. In the event of an outage or brownout, DPC automatically switches over to a secondary connection.

WAN Hardening

Each WAN overlay is secured edge-to-edge via 256-bit AES encrypted tunnels. No authorized outside traffic can enter the branch.

Path Conditioning

Private line-to-line-like performance over the public Internet. Overcomes the adverse effects of dropped and out-of-order packets to improve application performance.

Application Visibility and Control

Identifies applications on the first packet to deliver SaaS and trusted web application traffic direct to the Internet, while directing unknown or suspicious traffic to the data centre firewall or IDS/IP.

Internet Breakout

Intelligently steers trusted Internet-bound application traffic from the branch directly to the Internet, eliminating inefficient backhaul of all HTTP traffic to the data centre. Directs other applications and unknown traffic to corporate security firewall and IDS/IPS services.

Stateful Zone-based Firewall

An extension of WAN hardening that ensures no unauthorised outside traffic can enter the branch. Branch-initiated sessions are allowed, enabling secure Internet breakout.

Routing

Supports standard Layer 2 and Layer 3 open networking protocols such as VLAN (802.1Q), LAG (802.3ad), IPv4 and IPv6 forwarding, GRE, VRRP, WCCP, PBR, BGP (version 4), OSPF.

Cloud Intelligence

Real-time updates on the best performing path to reach hundreds of SaaS applications, ensuring users connect to those apps in the fastest, most intelligent way available.

Unity Orchestrator Key Features

Single Screen Administration:

Enables quick and easy implementation of network-wide business intent policies, eliminating complex and error-prone policy changes at every branch.

Real-Time Monitoring and Historical Reporting:

Provides specific details into application, location, and network statistics, including continuous performance monitoring of loss, latency, and packet ordering to allow network paths. All HTTP and native application traffic is identified by name and location, and alarms and alerts allow for faster resolution of service provider issues.

Bandwidth Cost Savings Reports:

Documents the cost savings for moving to broadband connectivity.

Enables Faster SD-WAN Deployments

The Unity Orchestrator™ enables zero-touch provisioning of Unity EdgeConnect appliances in the branch. It automates the assignment of business intent policies to ensure faster and easier connectivity across multiple branches, eliminating the configuration drift that can come from manually updating rules and access control lists (ACLs) on a site-by-site basis.

- Avoid WAN reconfigurations by delivering applications to users in customised virtual overlays
- Align application delivery to business goals through virtual WAN overlays based on business intent
- Simplify branch deployments
- Profiles that describe the virtual and physical configuration of the location

In addition to centralised and automated control of the entire SD-WAN topology Unity Orchestrator provides specific detail into WAN performance, including:

- Detailed reporting on application, location, and network statistics
- Identification of all application traffic by name and location
- Tracking of SaaS provider network traffic
- Continuous performance monitoring of throughput, loss, latency, jitter and packet ordering for all network paths
- Alarms and alerts allow for faster resolution of service provider issues
- Cloud Intelligence provides Internet mapping of optimal egress to SaaS services
- Bandwidth cost savings report for documenting the cost savings of moving to broadband

Unity Boost - key features

This is an optional performance pack that includes:

> Latency Mitigation: TCP and other protocol acceleration techniques are applied to all traffic, minimizing the effects of latency on application performance and significantly improving application response times across the WAN.

> Data Reduction: Data compression and deduplication eliminates the repetitive transmission of duplicate data. Inspects traffic at the byte-level and stores content in local data stores. Advanced finger print techniques recognise repetitive patterns for local delivery. Data Reduction can be applied to all IP-based protocols, including TCP and UDP.

Why Add Unity Boost?

Sometimes additional performance is needed for specific applications or locations where distance has increased over the WAN. This has less to do with the available bandwidth, and is more about the time it takes to send and receive data packets over distance, and the number of times data must be re-sent.

Unity Boost™ gives the flexibility to enable enhanced WAN optimisation capabilities where and when it is needed in a fully integrated solution. This extra package is licensed per-megabit-per-second, per-month, so customers do not have to pay for WAN optimisation across the entire network.

Overcome Latency and Increase Throughput

Unity Boost offers a variety of TCP acceleration techniques to mitigate WAN latency, including Window Scaling, Selective Acknowledgement, Round-Trip Measurement, and High Speed TCP. It also increases throughput by inspecting WAN traffic at the byte-level. As each new packet arrives, it computes fingerprints of the data they contain and checks to see whether they match the data that is stored locally.

If the remote appliance contains the information, there is no need to re-send it over the WAN. Instead, specific start-stop instructions are sent to deliver the data locally.

As packets flow through the appliances, WAN traffic is inspected at the byte level and content is placed in local data stores. As new packets arrive, fingerprints of the data they contain are checked to see whether they match the data that is stored locally.

Managed SD-WAN. The Benefits



Business-driven performance

Business intent drives your applications. Configure network resources to match business priority for every application.



Improved user experience

Enable the highest quality of experience for end users with consistent, resilient and highly available application performance.



Continuous adaptation

Benefit from an AI-driven, self-learning area network that gets smarter every day by continually monitoring, measuring and analysing performance.



Single unified platform

One system that unites your firewall, segmentation, routing, WAN optimisation, application visibility and control in a centrally managed platform.



Low cost connectivity

Make the best use of bandwidth by leveraging any combination of transport services to deliver a simpler, faster, lower cost WAN.



End-to-end technical account management

From planning through to in-life, our expert team will configure and deploy the appliances to you match your requirements.



24x7x365 managed support

In addition to a dedicated account manager, our team of technical experts is always available to provide support and assistance.



Guaranteed Service Level Agreement

Our fully managed SD-WAN service is backed by industry-leading SLAs.

ADAPT YOUR NETWORK TO THE MULTI-CLOUD ERA