

# Securing SD-WAN

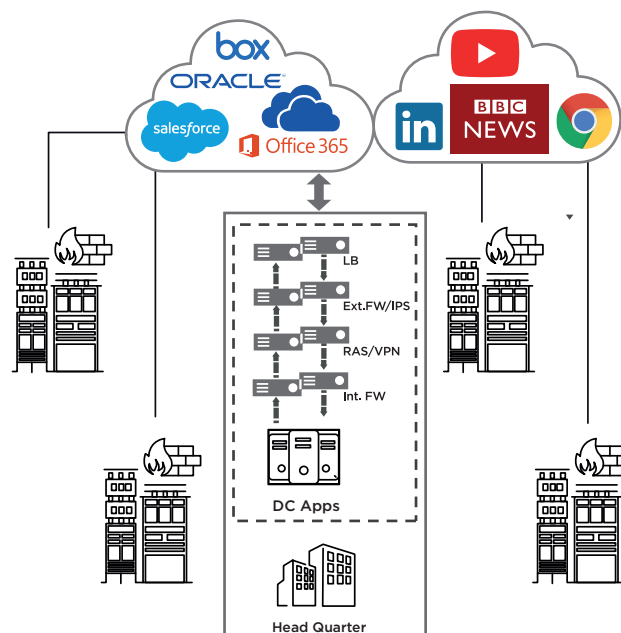


As applications move to the cloud and more traffic is destined for the internet, companies are turning to SD-WAN providers to efficiently route traffic locally. The traditional method of -backhauling internet traffic over MPLS to a centralized Internet gateway via a hub-and-spoke architecture is inefficient. SD-WAN solution simplifies branch operations and efficiently connects the organization branches to the internet. However in order to do the same, organizations face the following challenges:

## Challenges



- **Legacy hub-and-spoke architectures that were designed for users who connect to, and applications that reside in, the data center are proving inefficient:** The increase in usage of cloud applications, has led to increase in direct-to-internet connections. SD-WAN security with physical boxes at all locations is cost prohibitive.
- **Appliance based solution complicates the operations:** Deployment and management of security appliances or Virtualized Network Function (VNFs) at every branch / location of an organization is expensive and time consuming. This approach also makes it difficult to configure and manage updates and change controls. In addition, the traditional appliances are incapable of scaling elastically and does not meet the modern security requirements.
- **Compromises lead to security gaps and vulnerabilities:** As an alternative to deploying entire stacks of security appliances in each branch, some providers often suggest that organizations deploy smaller firewalls or UTM appliances in branch locations. These appliances are often underpowered or undersized, and are unable to adequately keep up with processor-intensive functions, such as SSL inspection. Without appliance upgrades, this approach results in security compromises, such as bypassing SSL inspection or advanced threat protection, leaving the organization branches and entire organization vulnerable.



Hub and Spoke Setup

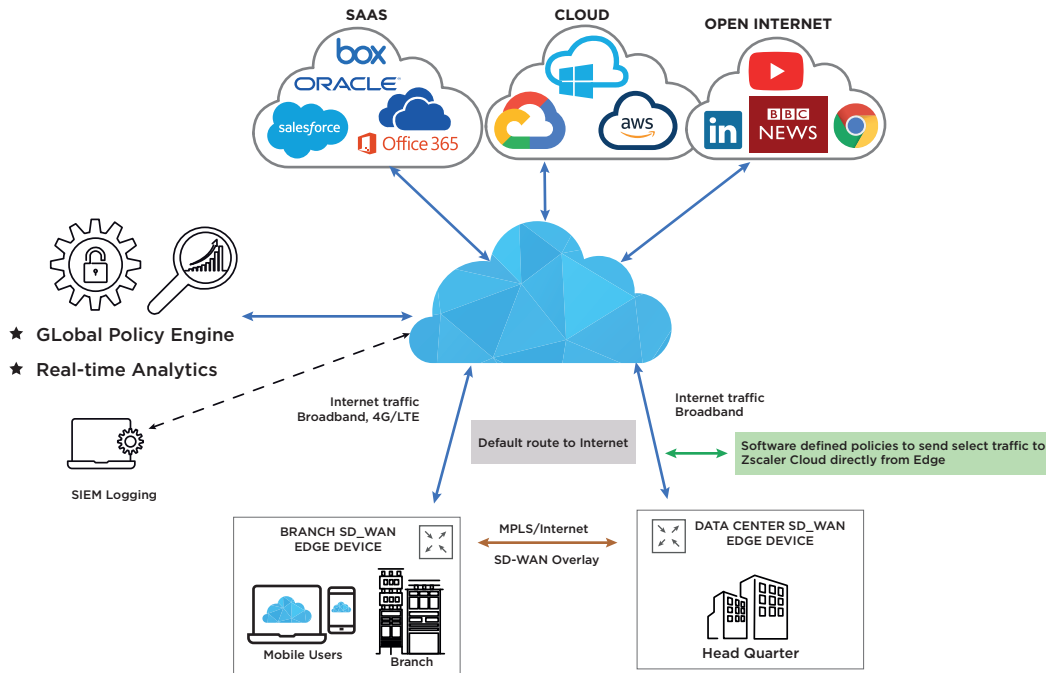


HCL has partnered with one of the leading vendors, Zscaler, to enable its customers to shift from a traditional hub-and-spoke architecture to an agile and direct-to-internet architecture by providing the entire outbound security stack as a cloud delivered service. This brings the entire security stack close to the user, ensuring identical data protection for users wherever they connect. The solution scales elastically to enable rapid deployment of new features (such as bandwidth control or data loss prevention) without impacting performance. The cloud firewall inspects all traffic, including SSL, with near-zero latency.

Our recommended solution integrates with most of the SD-WAN providers to provide secure local internet breakouts and gives full protection from web and internet threats.

The solution sits between the users (branch/ remote location) and the internet and secures them by providing the following functionalities:

- **Access Control** - via Cloud Firewall, URL Filtering, Bandwidth Control, and DNS Filtering
- **Threat Prevention** - via Cloud Sandbox, Anti-Virus, and DNS Security
- **Data protection** - DLP, CASB for Cloud applications, and file type control



## Solution Features



### Zscaler Internet Access

- Inspection of all internet bound traffic
- Security policies follow the users wherever they connect from across the globe
- Highly scalable security platform providing a proxy-based architecture with native SSL inspection at scale
- Security stack delivered as a cloud service without the need to deploy appliance based products

### HCL Managed Services

- Real time security monitoring of network traffic
- Faster deployment of security stack with SD-WAN solution
- Simplified SOC operations with out-of-the-box SIEM integration
- Security policies enforcement made easy

# Benefits of HCL Recommended Approach



- Seamless API based integration with SDWAN
- Real-time malware and APT protection, ensuring threats are prevented before entering the customer's network
- Direct-to-internet architecture provides faster user experience
- Reduction in CAPEX with the elimination of buying and maintaining security devices
- Granular application controls, stops data exfiltration attempts from infected devices, including Internet-connected devices
- Granular, dynamic reporting for visibility into internet usage, access control and user behavior

## Client Success Story



One of the world's largest confectionary, food and beverages company based in America

CUSTOMER CHALLENGE	HCL SOLUTION	BENEFITS
<ul style="list-style-type: none"><li>• UTM services which would improve the security posture of the customer's WAN environment</li><li>• Security enabled connectivity needed for guests and BYOD devices</li><li>• Control and reduction in WAN costs through increasing process and systems optimization</li></ul>	<ul style="list-style-type: none"><li>• Cloud based internet access gateway solution to enable secure local internet breakouts for branch users as well as mobile users</li><li>• Protection of network traffic/ endpoints against threats arising from web such as malware, data leaks, etc.</li><li>• Secure access to cloud applications through internet, irrespective of user location</li></ul>	<ul style="list-style-type: none"><li>• WAN cost decreased by 65%</li><li>• User experience increased by 50%</li><li>• Threat identification and mitigation improved</li><li>• SOC administration made easier by having central definition of security and access control policies in a single console</li><li>• Deployment of new security services and policies across environment made easier and faster</li></ul>

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