CLOUDGENIX
NETWORKS WITHOUT NETWORKING

SOLUTION BRIEF

Software-Defined WAN for the Enterprise

Securely connect users and applications while radically reducing hardware.

Be Agile, Be Business-Defined, Be an Innovator

Imagine a world where organizations deliver new applications or cloud-based services to end users across the private WAN or secured public internet without having to worry about the complexities of today's networks.

- Network policies are expressed in the language of applications, users, and business intent rather than IP address, Port and Protocol
- Complex, fragmented routing protocols are no longer necessary and replaced with a simplified, central controller
- Proprietary, expensive branch routing hardware is replaced by lightweight commodity off the shelf hardware (COTS)
- A dynamic WAN perimeter with secure connectivity is automatically extended to new branches, data centers and cloud applications based upon business context rather than network attributes
- Functions such as Application Performance Monitoring, IDS/IPS and Firewall are delivered to branches, data centers, and SAAS providers as needed without having to deploy and provision additional appliances or virtual machines to remote locations

Deploy cost-effective hybrid WAN's

In order to reign in WAN connectivity costs and deliver higher bandwidth applications to end users, enterprises will need to "pool" all available WAN capacity – be it MPLS, internet, satellite or 4G/LTE. CloudGenix ensures that each application will take the best available path at the lowest cost, based upon application-specific performance metrics, e.g., application response time for transactional applications such as Office 365 exchange or SAP and CODEC-specific requirements for collaborative applications like WebEx or MSFT Lync. No changes to the underlying network topology are required.

Today's WAN Paradox

According to a recent MIT SLOAN study, 63% of respondents felt the pace of technology change in their organization is too slow.

Other studies show that over 70% of IT budgets are spent on maintenance- "keeping the lights on" instead of driving innovation or delivering new applications. And WAN expenses already account for between 10 and 15% of enterprise IT budgets leaving no room for additional expense.

The call to action is clear: re-allocate spend from "keeping the lights on" to enabling technology and business innovation. CloudGenix solution is designed to help customers resolve this paradox and build the Enterprise WAN of the future.

Create software-defined branch using white box hardware

The benefits of the moving to a virtualized branch are evident; reduced cost and increased agility. A software-defined branch, however, is more than just replacing stacks of physical appliances with stacks of virtual appliances for network services. Even though the branch footprint would be reduced, enterprises would still be required to provision disk, compute and connectivity to each of these services if these resources happened to be available. If not, additional resources would need to be deployed to the branch. CloudGenix enables customers to project these services to the branch from either a central data center or other service hub without deploying additional hardware or virtual machines to the branch.

Deliver SAAS-based applications with performance

As companies adopt SAAS applications, IT organizations cannot afford to re-engineer their existing WAN topologies to provide reliable, high performance, low cost connectivity to the SAAS provider. SAAS applications, by definition are “in the cloud” and the location of these applications can change without notice or consent resulting in performance degradation or increase cost. CloudGenix’s SDN WAN Controller automatically monitors all available paths from user locations to any given application and dynamically selects the optimal path based upon performance and security requirements. No changes are required to underlying carrier network configurations.

Create dynamic security perimeters

As WAN networks evolve and adapt to provide connectivity between branches, data centers, cloud providers and business partners, the security perimeter must dynamically adjust to ensure both secure connectivity and secure segmentation of applications and users based upon business context. CloudGenix enables enterprises to create these dynamic perimeters and segment applications and users without changing the underlying network topology or deploying additional vlans or vrfs.