

Performance Visibility for Cloud Apps

CloudGenix ensures successful deployment and performance visibility of cloud apps

Business Challenges

Cloud-hosted applications are not only changing the way employees work and communicate, but also changing the way I/T deploys and manages infrastructure. Taking advantage of cloud platforms and hosted applications eases access for users around the globe while reducing I/T burden. While deployment of applications on the cloud does help to reduce the amount of infrastructure required and can reduce costs, many businesses find that the significant investment spent in their network architecture and application management tools make it difficult to have a smooth transition to cloud-hosted applications with the same levels of manageability and visibility.

With applications deployed in the data center or in centralized hub locations, I/T is able to deploy point products and suites to monitor various aspects of performance. While these products typically require complicated networking configurations and additional servers and software licenses, they allow I/T to understand what is happening on the network and how applications are performing, which is useful should a performance problem be encountered.

When applications are deployed on a public cloud—or are software-as-a-service (SaaS) applications that are fully managed by a vendor—the picture becomes murky. I/T is able to measure specific performance metrics at places under their control, however, visibility is practically non-existent for traffic and data that has left the company network. When performance issues arise for these applications, I/T will commonly find itself asking the vendor for assistance in tracking down the source of the problem, which inevitably is answered by a “please check your network” response. This cycle

of finger-pointing is not only frustrating but delays resolution to a critical problem that is impacting employee productivity.

Solution Requirements

In order to adequately solve the challenges listed above, any solution needs to meet criteria in five key areas.

| COMPLETE VISIBILITY | ACTIONABLE DATA | NATIVE SOLUTION | CLOUD DELIVERED | SELF-HEALING NETWORK |
|---|--|---|--|--|
| The solution must see all applications, over all networks, using any WAN link, and provide visibility into performance, health, and quality | Analytics and information presented by the solution must be useful and actionable while providing guidance based on machine learning | The solution must be native to eliminate complexity and require no additional hardware or software, connectors to third-party systems, agents, or new protocols or interfaces | The solution must be fully cloud-delivered to eliminate the otherwise substantial server and storage cost while also providing simple data access through export functions and a RESTful API | Actionable data gleaned from application, site, and WAN link visibility must also be able to be used to drive policy enforcement decisions to automatically heal the network according to policy |

Introducing CloudGenix Clarity

CloudGenix Software-Defined WAN (SD-WAN) is the industry’s most complete solution for customers that want to build hybrid networks consisting of MPLS private WANs and commodity Internet connections for cloud application adoption, remote office high availability, application performance, and end-to-end visibility. Powered by CloudGenix Instant-On Networks (ION) devices deployed in locations where visibility and control are desired, CloudGenix SD-WAN allows you to create policies based on business intent rather than a series of fragmented networking features, enables dynamic path selection using the highest performing network, and provides visibility into performance and availability for applications and networks.

CloudGenix Clarity is a foundational component of the CloudGenix SD-WAN solution that provides end-to-end visibility and analytics for your applications and networks, and operates independently of the full suite of CloudGenix SD-WAN capabilities. When the full suite of SD-WAN capabilities are added, CloudGenix begins using the actionable data gleaned from Clarity to self-heal your network in an automated manner.

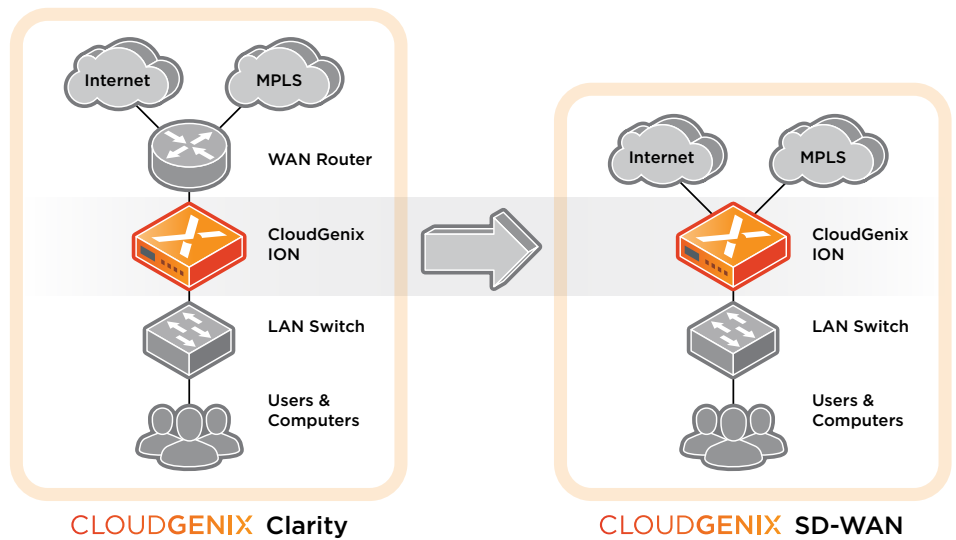


FIGURE 1: CLOUDGENIX CLARITY ENABLES SEAMLESS TRANSITION TO FULL SD-WAN CAPABILITIES.

Enable Cloud App Performance Visibility

CloudGenix continually monitors key performance indicators for every application and every flow on your network. By dissecting every flow on the network, CloudGenix uniquely identifies and measures each contributor to application performance, which is also used alongside policy to determine the best WAN path for the application. These metrics include everything from link statistics (bandwidth, latency, packet loss, jitter, availability) to application statistics (setup time, network transfer time, server response time). Further, CloudGenix examines metrics for real-time applications like voice, video, and teleconferencing, including mean opinion score (MOS), bandwidth consumption, packet loss, and jitter.

When application performance problems arise, CloudGenix helps pinpoint the exact cause of the performance problem, whether it's a server taking a long time to respond (indicating an overloaded or misbehaving server), insufficient WAN capacity (congestion caused by limited bandwidth or incorrect QoS capacity), or other problems. With CloudGenix, finger-pointing during an application performance crisis becomes a thing of the past.

This level of visibility is especially important in cloud and hosted environments where there is limited visibility into the hosting infrastructure. Having an understanding of the application transactions and visibility into the specific components that comprise the user's experience allows I/T to discern when the network is at fault or if the issue resides within the server or application on the server. Knowledge of which elements are contributing to the response time eliminates finger-pointing, enabling faster resolution.

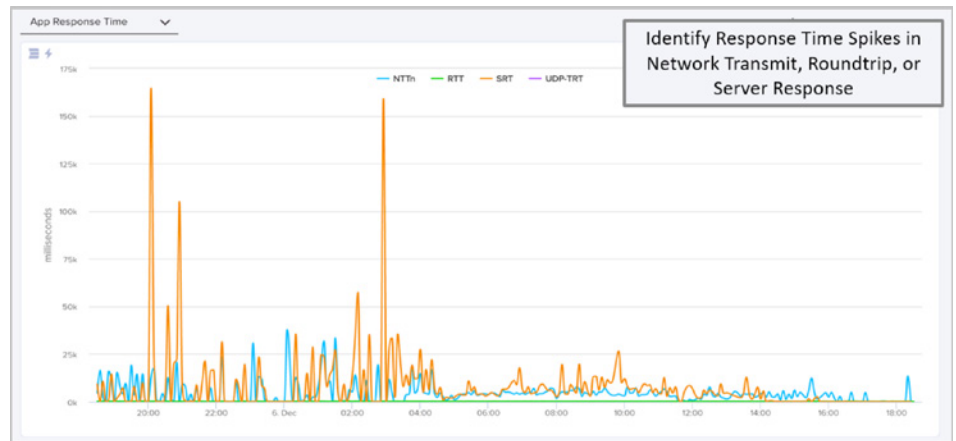


FIGURE 2: CLOUDGENIX CLARITY ALLOWS YOU TO QUICKLY IDENTIFY ROOT CAUSE OF APPLICATION PERFORMANCE ISSUES—NETWORK, SERVER, OR APPLICATION



FIGURE 3: CLOUDGENIX CLARITY CONTINUALLY MONITORS WAN LINK HEALTH.

Summary

CloudGenix makes it easy for businesses to deploy applications in the cloud or take advantage of cloud-hosted SaaS applications without compromising visibility into how applications are performing. CloudGenix allows businesses to leverage low-cost, high bandwidth, Internet connectivity at remote locations and seamlessly integrate them into their overall WAN architecture, offloading expensive private WAN links. With powerful visibility tools built in that continually monitor multiple key performance indicators for applications, CloudGenix allows I/T to identify exactly what is contributing to performance issues with cloud-hosted applications. Only CloudGenix gives businesses the tools they need to deploy an application-aware SD-WAN and fully leverage the benefits of cloud-hosted and SaaS applications.

SEE FOR YOURSELF

SEE CLOUDGENIX IN ACTION FOR YOURSELF!
VISIT WWW.CLOUDGENIX.COM/TRIAL TO REGISTER FOR A NO-RISK FREE TRIAL TODAY.

ABOUT CLOUDGENIX

CloudGenix provides a software-defined WAN solution with AppFabric technology that enables you to build a global WAN based on business policies for application performance, compliance, and security, across all sites and users. Unlike router-based solutions, CloudGenix AppFabric allows you to define top-down global policies based on business intent rather than fragmented bottoms-up configuration changes based on technical implementation. With CloudGenix, you can easily integrate heterogeneous WAN connections for any site, take advantage of cloud and SaaS applications, improve visibility for app performance and SLAs, and dramatically simplify network operations.