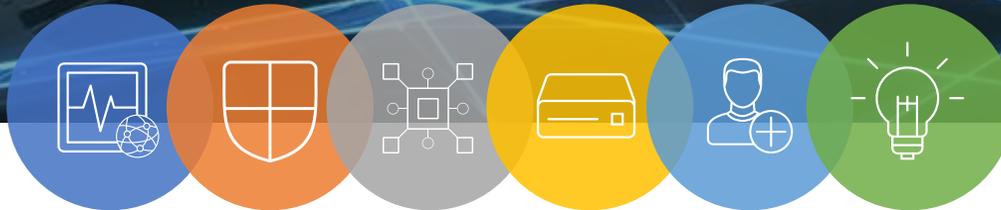


QOS
NETWORKS

Let's Get Real About Managed SD-WAN





TODAY'S HOSTS



Michael Brennan

VP of Strategic Channels for QOS Networks, Michael Brennan has vast experience working with partners to deliver the best solutions in the market today.



Arvin Chaudhary

Founder of Nadicent Technologies, Arvin Chaudhary, works with customers to be a trusted advisor and bring in the best offerings available.

Reach out to the team at partnerhelp@qosnet.com



REAL TALK AROUND SD-WAN

Limited Staff

Changes in staffing, available contractors, and budget for new hires has decreased due to the current times

Change in Priorities

2020 strategies took a total 180. Customers are now focused on end-user performance above large-scale IT overhauls

Security

The conversation around security is key and enterprises are looking for the answer to a question that keeps their businesses safe

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GETTING TO KNOW YOUR CUSTOMER!



Why?

- Why are we here today?
- Why are you, or your team, looking for a new solution?
- Why is your current network solution no longer sufficient?



What?

- What happened to launch this project?
- What does your network look like today?
 - What is your current ITSM platform?
- What edge solutions exist for you today?
- What happens when you have an outage today?



Where?

- Where do you have locations?
- Where do you have data centers and how many?
- Where are you getting your insights and analytics from today?



How?

- How does this process look on your end?
- How are your team members involved and who are your key stakeholders?
- How is this project viewed in your org today?

WHAT TO ZERO IN ON

They're Looking for Resiliency

In a world where “can you hear me now” isn't cute anymore, business need to have stability, confidence, and the trust that their network is performing at its peak. No matter the time of day, or the location the user is working from.

Desire for Network Flexibility

Working directly with carriers often puts customers in a position of vendor lock in where they have not just their connectivity but their platforms with a single vendor. This becomes a situation of whether you want the fox watching the hen house.

Cloud Adoption is a Priority

With 60% of enterprises planning more cloud adoption in 2021, SD-WAN is a major enabler for multi-cloud structures. This means better performance, virtual cross connects, and simpler cloud deployments.

They Care About Security

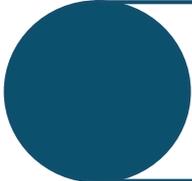
Whether it's end user device security or network security overall, organizations are prioritizing security at the top of the list to make sure it's one less pain they have to struggle with. SD-WAN plays a key role there as security can be native in the platform or integrated on top.

They're Looking to Adopt New Tech

For IoT, the cloud, or otherwise, having the network in check before adopting new technology is a necessity. SD-WAN can enable faster and simpler adoption of new platforms, it can reduce the number of steps required, and it can apply policies across the new functionality as necessary.

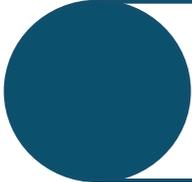


THE INDUSTRY IDENTIFIERS



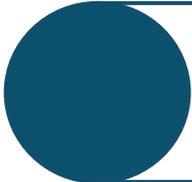
Financial and Insurance

Drivers for financial institutions often start with security-focus, but can also include call center reps, at-home day traders, teller stations, and more, that need real-time performance and high availability.



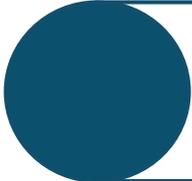
Corporations with Field Reps

The requirement today is support for users anywhere, whether that be on the road, at the airport, at the café, or working from their home. SD-WAN and cloud-based integrations can make a major impact on keeping business continuity across these users.



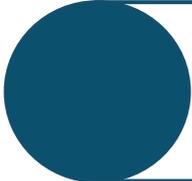
Support Centers

Organizations have zero tolerance for poor network performance when it comes to their call center representatives. Most operate over VoIP or UCaaS solutions which have high bandwidth needs and performance requirements.



Retailers

Most retailers don't have support staff at every single store they operate. It's critical to have centralized IT operations in order to perform updates and upgrades, enact policy changes, or make network tweaks.



Logistics

With real-time data and cloud connectivity, logistics operations need stable performance along with field-user connectivity. This can drive better operations, visibility, and high levels of efficiency.



THE SD-WAN OPTIONS

The DIYer's SD-WAN

The DIY Method or the Semi-DIY Method

DIY

Some enterprises are highly savvy and have a deep technical team on staff. They have expertise from past deployments or the technical know-how to self-deploy and manage their solutions. They're just looking to purchase the hardware and go from there.

Semi-DIY

Maybe the team is savvy in network management and is prepared to self-manage their SD-WAN solutions. However, they're not comfortable doing the deployment and integration themselves. This is more of a professional services solution.

Bundled SD-WAN

The Managed Option

Enterprises work with an MSP to handle the configuration, deployment, and network integration from day 0, and many will also request support for sourcing the hardware.

The MSP handles all the network design, deployment logistics, and services turnup, making sure nothing is negatively impacted and all readings are coming in green.

This also includes ongoing management and monitoring that includes change and configuration management, alerting and reporting, troubleshooting and remediation, and much more.

This is the ideal solution for complex networks with many moving pieces.

QOS structures this as a co-managed offering, working side by side with the customer to manage the network.

THE UPSIDE AND DOWNSIDE

The DIYer's SD-WAN

Pros

If an organization has a large staff and knowledge in place, a DIY might make sense if they want to keep control of every aspect of their infrastructure and ecosystem.

Cons

Network management can be round the clock dedicated man hours that require alerts to be set up and configured, remediation plans put in place, backup and failover plan in place, and much more. It can be resource intensive and takes staff away from other tasks and strategic initiatives.

Bundled SD-WAN

Pros

Having a full team dedicated to responding to alerts, correlating across platforms, managing circuits and carriers, network change and configuration management, and providing real-time updates throughout can be a huge stress relief. Not to mention, leveraging the expertise of a team that's singularly focused on the network 24x7.

Cons

Smaller companies may not need a full management stack if they're covering only a handful of sites or users. It can be overkill if the IT team already has a handle on the network configurations.

COMMON OBJECTIONS

Objection: DIY is cheaper than a managed service

Response: In theory, and on the surface, it may appear that way. But for many organizations, especially those that are implementing SD-WAN for the first time, the expense of time and headcount resources can quickly add up.

| QOS NETWORKS | | Managed SD-WAN Compared to DIY ROI Analysis | |
|---|--------------------------|---|---|
| Assumptions for a Moderately Complex Network Deployment | | | |
| Inputs | | | |
| Branch Count | | 100 | |
| Data Center Count | | 2 | |
| Home Users | | 0 | |
| Average Links per Edge | | 2 | |
| Headcount | | | |
| Network Manager | | 1 | |
| Network Admin | | 3 | |
| Average Headcount Costs - Hourly | | | |
| Network Manager | \$ | 40.87 | |
| Network Admin | \$ | 31.25 | |
| Average | \$ | 134.62 | |
| Average Edge Tickets/Month | Average Hours per Ticket | | |
| SD-WAN | | | |
| 102 | 2 | | |
| Carrier | | | |
| 510 | 1 | | |
| | | Cost of DIY | |
| MPLS Ethernet (10Mbps) | \$ 690.00 | \$ | 69,000.00 |
| Network Management - Hourly Costs | \$ 31.25 | \$ | 6,375.00 |
| Carrier Management - Hourly Costs | \$ 31.25 | \$ | 15,937.50 |
| SD-WAN Hardware | - | \$ | 30,784.00 |
| | | Setup | |
| Setup Costs - Avg Hours of Setup | 487 | \$ | 65,557.69 |
| | | 36 Month TCO | |
| | | \$ | 4,461,031.69 |
| | | Hours Spent Each Month | |
| | | | 714 |
| | | | Hours Spent on Deploying SD-WAN |
| | | | 487 |
| | | | Monthly Spend |
| | | | \$122,096.50 |
| | | | Technicians Required to Manage Just the Network |
| | | | 4.5 |
| | | Cost of SD-WAN | |
| Business Cable (10 Mbps) | \$ 142.00 | \$ | 14,200.00 |
| Business DSL (3.0 Mbps) | \$ 70.00 | \$ | 7,000.00 |
| Intelligent Network Platform + SD-WAN | - | \$ | 38,504.00 |
| Network Management - Hourly Costs | \$ 31.25 | \$ | 1,593.75 |
| | | Setup | |
| Setup Costs | | \$ | 136,944.00 |
| | | 36 Month TCO | |
| | | \$ | 2,343,663.00 |
| | | 3 Year SD-WAN ROI | |
| | | \$ | 2,117,368.69 |
| | | Hours Saved Each Month | |
| | | | 663 |
| | | | Hours Saved on Deploying SD-WAN |
| | | | 487 |
| | | | Monthly Budget Back in Your Pocket |
| | | | \$60,798.75 |

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THE KINDERCARE CO-MANAGEMENT STORY

Summary: 1400 centers, located in the United States, full IT team

Highlights: True co-managed solution

The KinderCare team built an internal IT organization to manage the key components of their IT infrastructure. Side by side with QOS Networks, the KinderCare team decided they wanted an SD-WAN solution. QOS handled the entire implementation process and has been acting as an integrated part of the KCE team to manage the network.

“We went with a managed service from QOS,” says Dennis Baker, Vice President, IT Technical Operations and Architecture. “They operate our network day to day, so if a problem arises, they deal with it for us. They talk to the access providers if we have circuit issues, and they’ve built a failover design using cellular service that has changed our availability significantly.”



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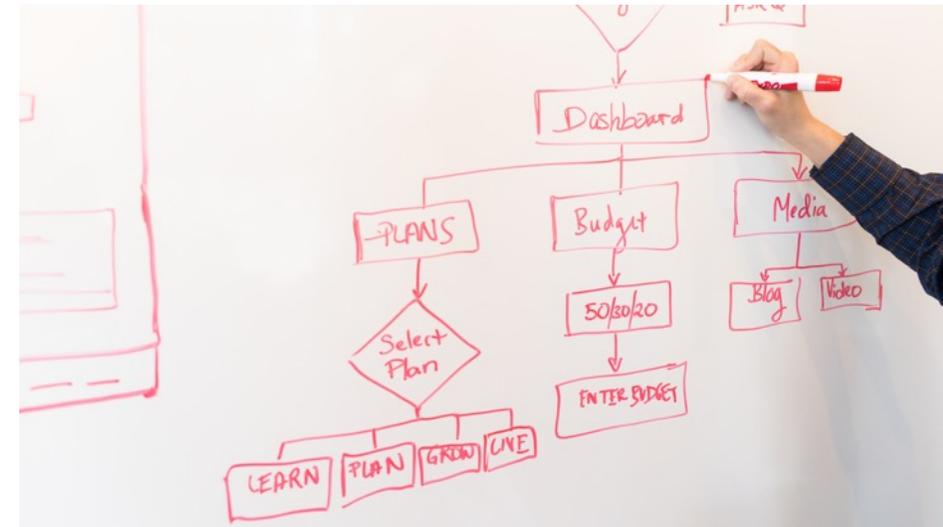
THE CHANGE MANAGEMENT CAUTIONARY TALE

Summary: Customer experienced the benefits of our change management process when a QOS fail-safe saved them from taking down their entire network.

Highlights: ITIL integration with our customer's processes are key

QOS red flagged a seemingly standard request for a network change that needed to pass through the Change Advisory Board before it went live. QOS engineers realized that the change would have restarted every networking device in this organization, across hundreds of locations, which would have taken the entire network down for a period of time. That is not something to do without proper consideration and advance planning by the senior engineering staff in both QOS and the customer IT organization.

In this case, a red light in the QOS change control process may have saved their customer thousands of dollars in unplanned outage costs.





REDUCE OPERATING COSTS

Summary: Customer realized it was overspending on aging communication infrastructure. IT management found that it could reap big reductions in its monthly recurring costs, while also expanding capacity and raising reliability, by replacing the legacy network with a state of the art Software Defined WAN (SD-WAN).

After a thorough evaluation of the leading alternatives, the company found that there was a very short list of managed service providers who have the technical and operational experience deploying and managing SD-WAN on such a large scale.

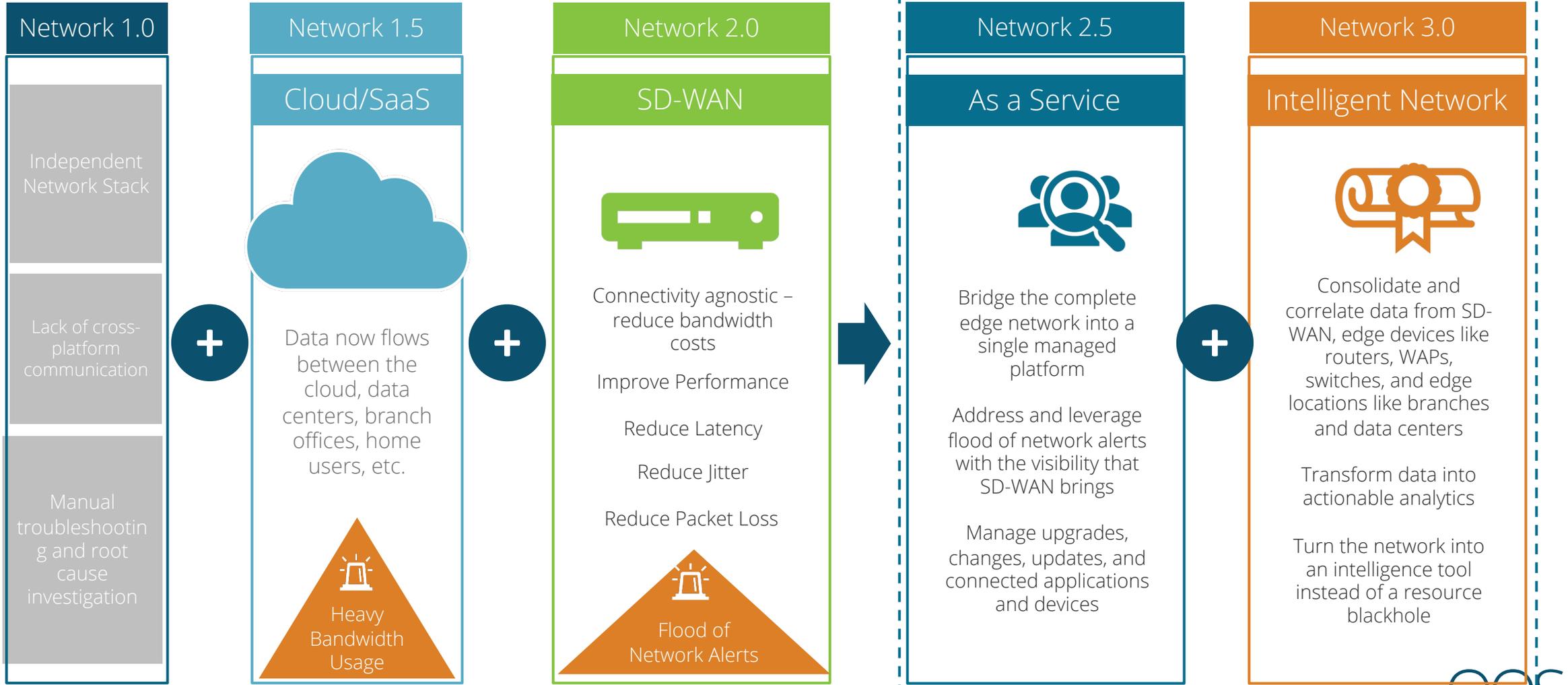
SD-WAN Details:

- 950+ stores
- Turning up 6-7 stores a day.
- 2 Redundant Data centers with High Availability Configuration
- 14 Distribution Centers with High Availability Configuration
- SD-WAN Edges, Ethernet Switches, WAPs & Controllers
- Azure Cloud Virtual SD-WAN instance

The new co-managed SD-WAN service from QOS Networks will provide higher performance, improved responsiveness and shortened time to remediate issues. This translates into higher network availability, better application performance and lower overall cost of operations, while facilitating transition to the Azure Cloud.



THE NETWORK SHIFT



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PROBLEMS WE SOLVE

It takes IT departments on average 6.2 hours to resolve a technical issue after its been reported.

According to Gartner data, about two-thirds of business leaders think their companies need to speed up their digital transformation or face losing ground to competitors.

83% of IT pros who say they don't have the WAN visibility they need to effectively troubleshoot problems



Complex Networks = Time & Resources

Deliver strategic support for things like capacity management, configuration management, troubleshooting and break fixes, assess network readiness before development, etc.



Non-Stop Network Changes

Working with QOS means continuous monitoring by a network team, ability to get line of sight into new releases and to test them before they go into effect, determine cybersecurity issues and potential fixes, expose network health issues, and validate configuration schemes.



Lack of Centralized Management

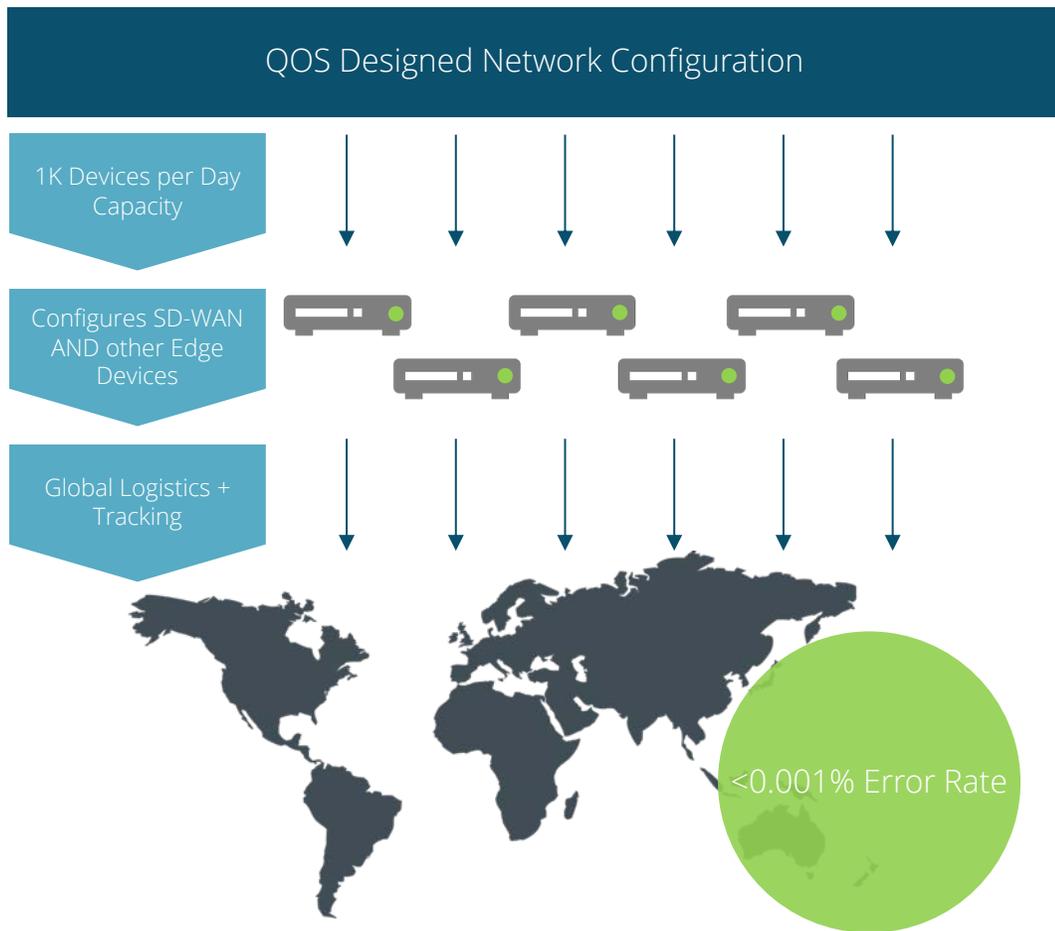
We handle continuous performance monitoring like jitter, packet loss, bandwidth, latency, link capacity.



Speed of Technology Change

Testing, testing, and testing again, is tedious but necessary and can challenge even the most prepared IT teams.

NETWORK DEPLOYMENT



The QOS inDeploy AI is the central point for initiating, configuring, and deploying network solutions to our customers. inDeploy is a tool designed from the ground-up to automate the processes behind deploying network hardware like SD-WAN devices including distribution facility processing, technical configurations, and procedural testing.

As the first of its kind in the market today, inDeploy is giving QOS the ability to make order processes so rapid, that we can process more than 1,000 devices in a single day.

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Deployment

inDeploy handles device configuration, orchestrates shipment fulfillment, and ensures timely deployment.



Shipping

By integrating QOS configuration servers with ServiceNow and shipping companies, QOS Networks has vastly improved its operational credibility for deployment and improved configuration capacity to over 1,000 device activations per day.



Tracking

inDeploy provides full visibility into every step of the process for all parties to ensure teams know when and where edge devices are in the deployment cycle.

YOUR CUSTOMER'S NETWORK TEAM

Working with QOS Networks means you get a team of experts who are dedicated to ensuring your onboarding, deployment, and ongoing management is seamless and above any other in the industry.



PM

Project Manager

Your dedicated project manager will run point on all rollout timelines, handle change requests, and report milestones



ND

Network Designer

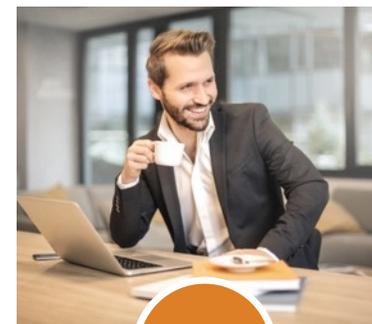
Our engineering team is second to none and will help design your network architecture, encompassing your custom needs



CS

Customer Success

With a dedicated customer success team, no matter what your request, issue, or need, our team is available to help



AM

Account Manager

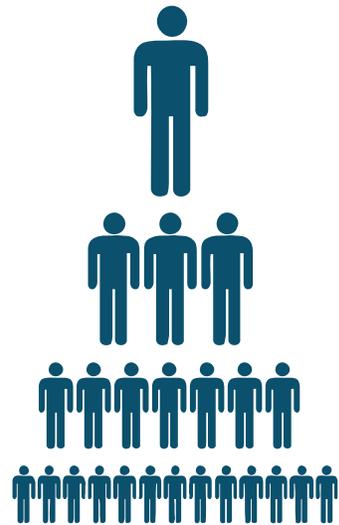
Adding a new location, acquiring a new company, or changing your network confirmation can easily go through your account team

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THE TEAM DYNAMIC OF A MANAGED OFFERING

QOS Team



Network Operations

The QOS NOC is global and available 24x7x365. During onboarding, the team will explain the devices onboarded to the IN Platform, the procedure for monitoring and management, how to get reporting, and all event correlation and response processes.

Customer Team



Ongoing

QOS will interface with your team throughout your managed services onboarding and after.

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ALERT TYPE EXAMPLES

We're monitoring across multiple platforms, and multiple data points that create a holistic view of the network.

We correlate data across these points to reduce MTTR and get faster root cause analysis

| SD-WAN | Circuit/Carrier | L2 Devices |
|---|--|---|
| <ul style="list-style-type: none">▪ Up/Down▪ Tunnel status▪ CPU/Memory/Storage▪ Route propagation▪ Gateway drops▪ HA Failover▪ DHCP trouble▪ VLAN advertisement▪ VRRP | <ul style="list-style-type: none">▪ Up/Down▪ Zero/No Traffic▪ Flapping▪ Bandwidth▪ Packet Loss▪ Jitter▪ Latency▪ Asymmetric Routing▪ Speed/Duplex mismatch | <ul style="list-style-type: none">▪ Device is Offline▪ Interface Up/Down▪ Signal strength▪ Radio interference▪ Bandwidth▪ SIM Activation/Reactivation▪ Unable to connect (WIFI) |

HOW WE STACK UP

| | Us | Them |
|---|----|------|
| Integrate with multiple market leading platforms so there are no single vendor lock-ins | ✓ | ✗ |
| Non black-box solution thanks to our ability to 'co-manage' with our customers | ✓ | ✗ |
| Customers report a 70% reduction in mean time-to-resolution of network outages | ✓ | ✗ |
| Real-time visibility and metrics into network status and performance | ✓ | ✗ |
| Global NOC Team supported by automated event alerts, analysis and correlation | ✓ | ✗ |
| Support carrier circuit monitoring and ticket management plus integrate into customer's ticket systems | ✓ | ✗ |
| Hi-availability configurations + cellular wireless failover & remote power cycling | ✓ | ✗ |
| Experience implementing and managing the top-rated, market leading SD-WAN solution. | ✓ | ✗ |
| Multiple security options, from built-in firewall to cloud-based security and SIEM integrations | ✓ | ✗ |
| Monitor multiple network device types, including switches, routers, cellular failover and wireless access | ✓ | ✗ |
| True zero-touch device configuration, installation and activation process that can scale globally | ✓ | ✗ |
| Track and manage configuration of every device in every location on the network | ✓ | ✗ |

Ready to get started? We are too!

Reach out to the team at



qosnet.com

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