Achieve Seamless Enterprise Connectivity While Boosting App Performance

3 Reasons Your Data Center, Cloud and Branch Sites Need VMware vRealize® Network Insight
Our Increasingly Connected Businesses

More than ever, today’s businesses rely on connectivity. Customers demand services 24/7. Traditional 9-5 working hours have all but vanished in the face of ultra-mobile and distributed workforces. Organizations are accelerating adoption of software-as-a-service (SaaS) solutions and public clouds. And there’s growing demand for real-time processing and responses from devices at the very edge of enterprise networks.

That makes it increasingly critical to ensure predictable application performance and reliability, along with secure, uninterrupted connectivity at all of your locations. Otherwise, problems inevitably arise. Approximately half of enterprises say poor application performance negatively impacts customer satisfaction, efficiency and productivity, according to IDG.

Impact of Poor Application Performance

Which of the following are most concerning for your organization?

- Customer dissatisfaction: 51%
- Lower efficiency: 49%
- Lower productivity: 48%
- Loss of revenue: 41%
- Damage to brand rep: 38%
- Missed opportunities: 36%
- Loss of customers: 34%
- Rising costs: 33%

SOURCE: IDG RESEARCH SERVICES, FEBRUARY 2017
SD-WAN Is Just the Beginning of Your Journey

The 2019 IT Outage Impact Study found that the typical organization experienced 10 brownouts (that's when infrastructure or software performs at a degraded level) or outright outages over the past three years. The number one reason? Network failure.

#1 reason for degraded application performance: network problems

Since you’ve already invested in reliable connectivity from your branch operations with VMware SD-WAN™ by VeloCloud®, you’ve already got easily-deployed, easy-to-operate networking operations at significantly reduced cost. Now, it’s possible to do even more across your entire environment.

In this ebook, we look at the challenges of ensuring ubiquitous connectivity in today’s distributed enterprise, even after deploying SD-WAN. We explore a fresh, new way of addressing data center to cloud to branch challenges. And we show how integrating your VMware SD-WAN deployment with intelligent network operations delivers greater value, connectivity and application performance.
You Can’t Fix What You Can’t See

When application response time slows, user productivity falters, too. Employees file trouble tickets, and the business-IT finger pointing begins. What’s the root cause? Is it in the application, server, network or desktop? Especially with cloud and branch offices, including banks, remote clinics and retail outlets, it’s often unclear. Given this, it shouldn’t be a surprise that time wasted troubleshooting issues across the network is the #2 challenge network professionals face, according to a recent survey by Sirkin Research.

Additionally, sources of data used to analyze potential problems are much more diverse, coming from a broad array of different devices: physical, virtual and in the cloud. These can be located anywhere: in the data center, at branch locations or (again) in the cloud. Organizations are using an average of 400 different data sources to feed their analytics, according to IDG. The same study found that the data volumes are growing at a startling rate: 63% each month.

Analyzing this data manually is complex, slow, costly and inefficient. And all this is getting even more complicated as more applications move to the cloud and to the branch. By 2020, 83% of enterprise workloads will be in the cloud, reports Forbes. And a Microsoft survey found that more than 80% of large companies globally are adopting IoT solutions.

So what’s quickly becoming an urgent enterprise requirement? End-to-end visibility across the network.

<table>
<thead>
<tr>
<th>Top Challenges Faced by Network Professionals</th>
<th>Is a Challenge or Major Challenge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenged to find time to work on strategic business initiatives</td>
<td>42.70%</td>
</tr>
<tr>
<td>Troubleshooting issues across the entire network time-consuming</td>
<td>41.80%</td>
</tr>
<tr>
<td>Inability to proactively identify network performance issues</td>
<td>37.50%</td>
</tr>
<tr>
<td>Poor visibility into performance across all fabrics of the network</td>
<td>35.20%</td>
</tr>
<tr>
<td>Poor end-to-end performance monitoring across network devices</td>
<td>34.80%</td>
</tr>
<tr>
<td>Inability to analyze historical captured data for root cause analysis</td>
<td>33.80%</td>
</tr>
</tbody>
</table>

SOURCE: Sirkin Research
Now Needed: A Fresh Approach

A new, comprehensive approach is the answer to greater visibility everywhere, from the data center to the cloud to the branch office. A software-defined approach that marries your existing SD-WAN deployment with intelligent networking operations technology. A solution that securely supports application growth, assures network agility and simplifies branch and end-point implementations. And at the same time, one that enables you to deliver high-performance, reliable access to cloud services, private data centers and SaaS-based enterprise applications.

With this new model, your IT staff can be the enabler of business value creation and the team optimizing business operations by seeing every network conversation with crystal-clear visibility. With this kind of global insight, you can consistently meet—and exceed—service delivery expectations.
There are three distinct reasons why you should integrate a software-defined network visibility and monitoring solution into your SD-WAN for end-to-end visibility.

**#1: You Can Optimize Application Performance, No Matter Where Your Applications Reside**

Suddenly, the performance of your branches is visible within the context of your entire infrastructure. Dashboards let you instantly see which applications are being accessed at each branch or site. And you get comprehensive flow and traffic analysis insight into everything, including applications and business services used by your branch sites. Think scheduling and inventory for corporate stores and retail franchises, billing for hospitals and their health clinics or client applications for financial institutions with local banks.

You can also set business-level application policies that work across your entire infrastructure. No more manually adjusting policies for each location.
#2: You Can Improve Operations, Giving NetOps Staff Time Back for Innovation

When they’re not chasing down root causes of problems, your network-operations (NetOps) staff can focus on what really matters to the business: innovating to drive user productivity and, ultimately, competitiveness.

With a software-defined monitoring and analysis solution, you get visibility at the site or branch level, and easy troubleshooting of connectivity and apps from the data center to the cloud to the branch, and back again.

This allows you to automatically monitor the health of your edge. And all of this is possible with zero-touch deployment.
#3: You Can Ensure Network Health While Streamlining Compliance

Because all of this is done in software, you accelerate rollouts of new networking technologies and devices. No more long lead times for hefty updates or upgrades that disrupt operations.

For businesses involved in mergers and acquisitions (M&A), this allows seamless integration with other networks. And you get help dealing with an increasingly complicated compliance landscape. Today, networking issues are front and center in M&A transactions because violating data protection rules is so financially damaging. Take the impact of the General Data Protection Regulation (GDPR). If your organization doesn’t—or can’t, because of a lack of transparency—comply with it, you can be fined up to EUR 20 million or 4% of your company’s annual global revenues. Compliance issues have foiled many compliance plans in the last three years, according to Baker McKenzie.

Ultimately, seamless connectivity results in both operational and capital expense savings. You don’t need to invest in new hardware, and your team spends less time on manual monitoring and analyzing data.

**SOURCE:** Baker McKenzie

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### How many transactions as a percentage of merger and acquisitions have failed as a result of compliance issues in the past three years?

<table>
<thead>
<tr>
<th>Region</th>
<th>Less than 5%</th>
<th>Between 5% and 25%</th>
<th>Between 25% and 50%</th>
<th>More than 50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin America</td>
<td>4%</td>
<td>26%</td>
<td>17%</td>
<td>52%</td>
</tr>
<tr>
<td>Middle East</td>
<td>13%</td>
<td>38%</td>
<td>50%</td>
<td>0%</td>
</tr>
<tr>
<td>Japan</td>
<td>13%</td>
<td>53%</td>
<td>34%</td>
<td>0%</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td>2%</td>
<td>26%</td>
<td>42%</td>
<td>30%</td>
</tr>
<tr>
<td>Africa</td>
<td>7%</td>
<td>64%</td>
<td>29%</td>
<td>0%</td>
</tr>
<tr>
<td>Europe</td>
<td>6%</td>
<td>38%</td>
<td>39%</td>
<td>18%</td>
</tr>
<tr>
<td>North America</td>
<td>2%</td>
<td>50%</td>
<td>38%</td>
<td>10%</td>
</tr>
</tbody>
</table>

**SOURCE:** Baker McKenzie
A Proven Solution from VMware

VMware vRealize® Network Insight integrated with VMware SD-WAN gives you all this—performance, operations and compliance benefits—and more., and more. Our proposition is that we can improve both your return on investment (ROI) and total cost of ownership (TCO).

Lower TCO

- **25+%** lower purchase cost*
- **80%** lower on-premises resources
- **No** care and feeding

Cost savings from reduction of effort for network flow analysis:

*$1,763,702

A Forrester Total Economic Impact™ Study of vRealize Network Insight

*Based on an assessment from a large media firm

50% improvement in OpEx*

*Based on an assessment from a large media firm

- **ROI 477%**
- **NPV $1.8 million**
- **Benefits PV $2.2 million**
- **Payback <3 months**

*Based on standard on-premise discount
How It Works

vRealize Network Insight with VeloCloud integration delivers end-to-end visibility and troubleshooting application performance monitoring and analytics from your data center to the cloud to the branch. Data collection is over HTTPS, SSH, SNMP & IPFIX, NetFlow & sFlow protocols.
Want to know more?
VMware offers a free assessment that includes fast standup and connection to all of your data sources and data collection so you can determine what your current environment costs. Our proposition: improving your ROI and TCO.

On Day 0, you enjoy
- Rapid standup and connection to all sources (including Cisco routers, SD-WAN, etc.)
- Application and tier discovery
- Application dependency mapping
- Instant data collection for immediate cost assessment

From Day 0, post-deployment link monitoring assures
- The health of your branches/edges, delivering visibility into flows and networking entities
- Delivery on the SLAs providers promised
- Rapid troubleshooting
- Simplified management and scaling

Day 2 monitoring of all apps, all flows of data, in and out of every branch, enables you to see
- Which apps are being accessed, by whom, and when
- The enterprise view of your network infrastructure, all the way down to the branch or site level, that allows you to automatically monitor all the flows of data in and out

Day N allows you to extend and troubleshoot
- Gaining consistent visibility across the data center, clouds and branches

Expand your network insights beyond SD-WAN.

Try a Quick Introduction to VMware Network Insight-Lightning Lab

Start Your vRealize Network Insight Cloud Trial