



How to Ensure **Optimal SaaS** and Cloud Application Performance

Best Practices for Cloud Application Performance Management

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New Roles for a Cloud-Focused IT Environment

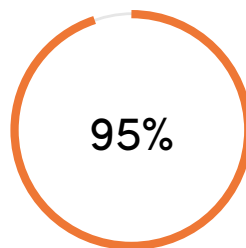


The ongoing pandemic has accelerated cloud adoption to a new level. According to [Gartner](#), over 95% of digital workloads will be deployed on cloud-native platforms by 2025, up from 30% in 2021. Accessing and integrating the myriad of cloud services and remaining productive across IT's employee base can be challenging. Why? Traditional methods of monitoring mission-critical applications in a dynamic cloud infrastructure environment require a new innovative thinking. Without a modern solution that improves the digital experience for remote workers, aligning corporate and business strategies remains a challenge for most CIOs. In a recent [McKinsey survey](#), 95% of CIOs indicated that most of the enterprise goals of the C-Suite depend on them.

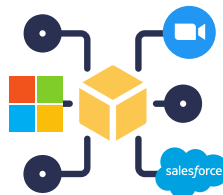
As the cloud becomes a permanent reality in the enterprise, IT professionals must adapt to a new set of expectations and requirements – driven by the following:

Rethinking IT as a Consumer, not an Owner/Operator

Instead of acquiring and operating on-site infrastructure and applications for the enterprise, IT professionals should expect to coordinate business services such as Microsoft 365, Salesforce, Zoom, etc. for employees and end-users. Their role will be to ensure their "customers" are getting the performance levels from vendors to speed communication, increase collaboration and accelerate individual and organizational productivity. This requirement has become much more pronounced over the years as a significant share of IT infrastructure and services go the way of the cloud.



Over 95% of digital workloads will be deployed on cloud-native platforms by 2025, up from 30% in 2021



IT professionals should expect to coordinate business services such as Microsoft 365, Salesforce, Zoom, etc. for employees and end-users



Using Insights from the Internet – Crowdsourced Monitoring

To assure service levels in a SaaS/Cloud dependent environment, IT will have to be able to monitor and troubleshoot infrastructure they cannot touch or own. For example, the end-to-end service delivery chain from their premises, through the various ISPs, to the application provider and back. That's the only way to effectively detect, isolate, and resolve issues such as outages and slowness affecting cloud application performance before negatively impacting any user digital experience. As such, IT professionals need to embrace the concept of the "Crowd."

A global community of customers shares SaaS and Cloud applications. So, it stands to reason that

monitoring these services could and should be done in a shared manner. Exoprise calls it [Crowd-Powered™ Monitoring](#). There are already examples of the crowd monitoring the Internet in informal ways through Twitter. But that's not enough – especially for mission-critical apps and services. Today's technologies enable IT organizations to monitor and aggregate data across all users of a SaaS service. The greater the number of monitoring points, the more accurately IT can detect and isolate specific problem spots that degrade service levels and user experience. This concept will be vital to delivering on service level expectations, and you can expect networking professionals to find interesting new ways to put it to work for their organizations.

Monitoring Cloud App Performance

– Common Misconceptions

[94% of organizations](#) use the cloud. However, IT teams still fall prey to a few common misconceptions – grounded in a general belief that once they move to the Cloud, IT no longer owns direct responsibility for service levels. This idea can put teams on a path to protracted outages and frustrated users.

"By 2025, **over 95% of new digital workloads will be deployed on cloud-native platforms**, up from 30% in 2021."

- Gartner



The fact is, that if your users can't access a cloud-based service, they are not going to call the service provider. Instead, they will contact the IT help desk (maybe you) directly, and then your team will be expected to fix whatever problem exists ASAP. Users don't care whether the problem is in infrastructure owned and operated by their IT department, the ISP, or the cloud service provider. But, of course, your team will take the heat if employees don't receive a good digital experience.

With that in mind, here are four common misconceptions to watch out for:

01. "I don't need to monitor. I have a guaranteed SLA from the provider."

A SaaS service provider can likely run their data centers with higher availability than most IT organizations, but they are not 100% reliable. Guarantees are outstanding, but if you aren't monitoring your SaaS service, how do you know that your SLA is being met? In addition, service level guarantees cover outages the provider can control, i.e., their networks, servers, and applications - not your infrastructure or the ISPs that connect you. You're on your own to monitor and manage those.

02. "I don't need my monitoring tools. So instead, I use the service provider dashboard."

Service health dashboards only cover the service provider's infrastructure, not the end-to-end service. Therefore, they provide generic information that may or may not be relevant to your users and may not be up to date. Remember, they are built to be general status communication tools, not real-time monitoring solutions.

03. "I didn't monitor my hosted application. So why monitor it now?"

Consuming apps from the cloud is not the same as consuming managed/ hosted services. Managed Service Providers (MSPs) and ISPs often run dedicated infrastructure for you and monitor those services on your behalf.

Those services often extend to provide monitoring and management of your on-premise infrastructure. So, while MSPs are offering value-added services around your cloud application, you still have to monitor the solution yourself.

On the other end of the spectrum, web monitoring solutions often run generic protocol tests from the providers' locations rather than within your network. Unfortunately, none of these solutions can provide active, end-to-end monitoring of service performance and user experience from behind your firewall to the service provider and back.

04. "I don't need to monitor. My users tell me when they are having problems."

This statement may be okay for less critical applications, but communication and collaboration apps like Outlook, Teams and Zoom are mission-critical for most organizations. If the service is down, so is your company. So, what happens when the users report a problem? Where do you start to look? Do you immediately get on hold with the service provider's support line? The problem is likely not even on their end. Speed to resolution is the key. You want to be notified before users are impacted, and when an issue is identified, you want to isolate and resolve it as quickly as possible.

Moving to the cloud doesn't mean your monitoring and management responsibilities go away, but it fundamentally changes engagement rules. You have to monitor and troubleshoot infrastructure you cannot touch – the end-to-end service delivery chain from your premises, through the various ISPs, to the application provider and back. Doing this lets you quickly detect, isolate, and resolve issues affecting cloud application performance before negatively impacting your users and your organization.



Using Internet Insights to Manage Your Cloud Experience

Internet Insights or Crowd-Sourced Monitoring. We talk about it a lot because we believe it is the key to effective monitoring and managing cloud-based application digital experience. With SaaS offerings, IT achieves significant capital and operational cost benefits by using turn-key solutions that require no data center management. However, in realizing these benefits, they also lose their deep application performance visibility with their traditional on-premise apps.

IT needs to view the SaaS and PaaS offerings they consume as distributed, global services that rely on a complex interconnected service delivery chain of Application Service providers, Internet Service providers, and their local infrastructure to enable them to work correctly. No single

monitoring point will ever be able to reliably tell you how well the service is operating end-to-end, much less help pinpoint problems in that service delivery chain outside your firewall. Even for organizations with many locations they can monitor, the number of potential service delivery paths will vastly outnumber their visibility points.

And while a single monitoring point isn't up to the task, not monitoring at all and hoping you don't have problems isn't a strategy either. IT is still ultimately responsible for the application performance and user experience. But how do you do that? What if you could access data from a vast array of other customer locations globally, in addition to your sites and scale your monitoring? In aggregate, that data would show performance

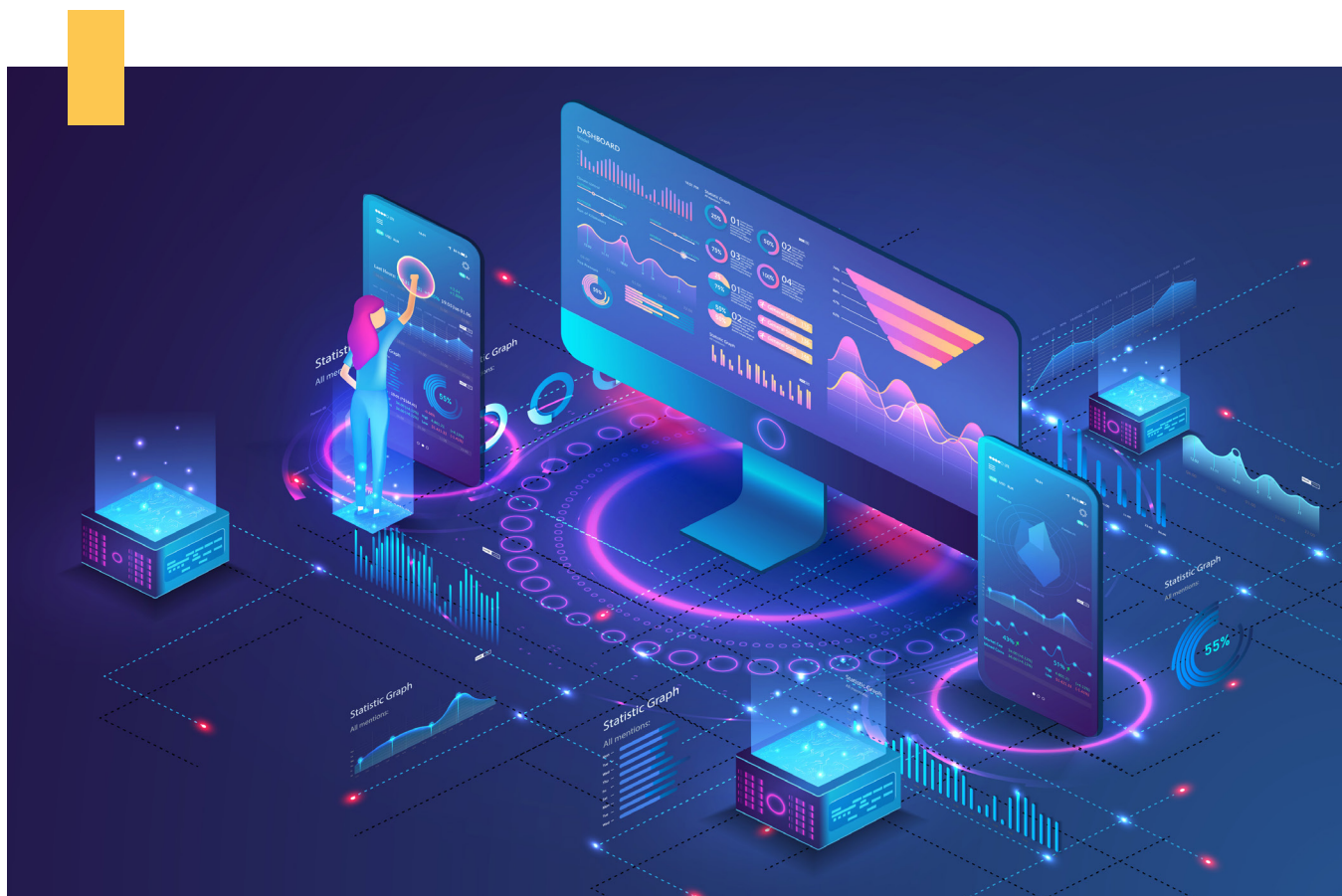
trends and service delivery problem points at the service provider, in the Internet fabric, or your network.

That global network of SaaS and PaaS customers? **That's the crowd**, and IT teams must find ways to harness and expose data from that crowd to regain the visibility into application performance they lost when going to the cloud. The potential of the crowd for IT is enormous and goes well beyond performance monitoring.

With the crowd's easy exchange of performance and configuration data, IT teams take much of the guesswork out of their management of cloud-based apps. Are you looking for best practices in deploying Workday? Don't wait for an analyst whitepaper. Instead, query and analyze

real data from the crowd of other Workday customers. Wondering what the impact will be for a change in your ADFS configuration? Run a hypothetical analysis against the data. As a result, IT decisions can be made more quickly and with greater confidence.

There has been a fundamental change in the roles and responsibilities of business IT, brought about by the irresistible benefits of cloud-based apps and services. This transformation will be as profound as the changes brought on by desktop computing, server virtualization, or tablets. Of course, there are numerous challenges along the way. Still, as new tools and practices evolve, IT teams find themselves being able to support and accelerate business objectives in ways unimaginable before the cloud.



Legacy Monitoring Solutions Leave Users Hanging in the Cloud

Given that IT organizations need to monitor apps, even in the cloud, the question becomes "how." Of course, most IT organizations will (and should) look first at the ones they currently use for their existing on-premise, legacy apps, and infrastructure. However, it may not be that simple.

Recently we conducted a study asking IT teams about their current and planned use of cloud apps and services within their organizations. One particular point that stood out is that **less than 20% of the respondents** felt that their existing tools were doing a good job managing their cloud-based apps. The rest were ambivalent about

their existing tools, with more than 20% feel that their tools aren't up to the task.

Why is this? The Systems Management software market is mature, and solutions from Microsoft, HP, CA, and BMC have been on the market for years. Their portfolios show a wide range of sophisticated tools to manage everything from software distribution to monitoring to IT workflow and help desk activities. Surely these tools should be able to manage cloud-based apps and services effectively.

As it turns out, they don't. Here's why.

Infrastructure Ownership and Access

Before the Cloud, IT's management responsibilities didn't extend beyond the walls of the building and, for larger organizations, beyond the periphery of their corporate area network. And the systems management tools were built and optimized with that basic assumption. As an administrator, I managed MY servers in MY datacenter on MY network. I had the luxury of having direct access to network, storage, and compute nodes that produced ample amounts of log files or SNMP messages. All I needed were tools that could tap into those data feeds, alert me when something happens that I care about, and maybe correlate logs from multiple systems so I could search for and identify trends.

But with the cloud, all that has changed, and much has gone away. Yes, if I run my apps on an IaaS provider like AWS or Azure, I can still access the app and even OS logs, but below the OS, I'm blind. I can't directly access hardware or any of the network nodes.

If I use SaaS apps, I don't even get this. They're a completely black box. There are no log files to access, no SNMP messages to listen to, and most likely not even a management API to the interface.

If your tools rely on these mechanisms, you're stuck.

The Convergence of Application Management and Network Operations

For many organizations, the IT team is segregated into three basic camps: desktop management, application management, and infrastructure operations.

The infrastructure team manages everything from the OS/VM down; to the servers and network. They also tend to be the ones who manage security and Active Directory.

The application team gets their machines from the ops team, installing, managing, and monitoring their apps. If users experience a problem, the application team uses their tools to look for reported errors from the app. If those errors point to network issues, they contact the ops team, who use their tools (which provide a lot of low-level information about the network but don't know anything about the applications running on the network) to try and hunt down the problem. For traditional on-premise apps, the user device, access network, and application likely reside on the same network, so the teams can usually find and fix whatever issue quickly between the apps and ops tools.

With cloud-based apps, everything changes. IT moves from infrastructure owner/operator to service consumer/coordinator. It's the application as a service that must be monitored and maintained, and that service is built on a complex web of networks, servers, and other services, most of which fall outside the organization's firewall.



An application admin has to have insight into the health of the application service and the networks and services (like Active Directory Federation Services) that are key to the delivery of that application service. So that wall between the apps and ops teams no longer works.

We see this a lot. For example, an IT team will get stuck trying to find a problem affecting SaaS app performance. Unfortunately, neither the application nor network admins have a full view of the service delivery chain, so they go back and forth pointing fingers and guessing haphazardly, trying to find the root cause.

We call this "chasing ghosts." You don't have time to chase ghosts.

The fact is that if your users can't access a cloud-based service, they are not going to call the service provider. They are going to call the IT help desk or maybe you.



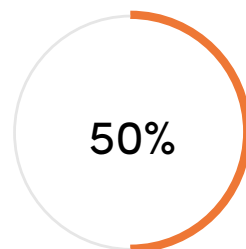
The Agility Mismatch

Have you ever stood up and deployed one of these traditional systems management solutions? The fact that there is a healthy industry of consultants and system integrators with official certifications and ISO-9000 compliant project plans tells you something. However, it's not for the faint of heart.

It's not that these tools are poorly engineered. Instead, they evolved into complexity as the sophistication grew for on-premise enterprise applications and infrastructure management exploded over the past decade. That same complexity explosion (and the drag it has put on IT agility) drives many organizations to the cloud. In the earlier survey, nearly 50% of respondents indicated that agility was a key driver for moving to the cloud, while less than 40% pointed to costs.

Application service level management is no longer about **"me."**

It's about **"we."** And because cloud apps and services are inherently global, distributed, and shared, so too should the task of monitoring.



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So, if your goal is agility, you must ensure your IT management tools are as agile as the apps and services you plan to manage with them. For example, if new apps and services come into your portfolio and are updated by the providers every week, a management tool stack that updates every 12 months doesn't do you much good.

It's time to look beyond the tools to those born in the cloud.

With the changes in the role of IT and the need to manage and monitor infrastructure outside the enterprise's four walls, network management tools must also change.

The "Consumerization of IT" has become a cliché. Still, you need only spend a few minutes in an app like Expensify or the admin consoles for Office 365, AWS, or Google to see that they are becoming much more like Twitter and Facebook and less like SAP. This is because we are all now conditioned to expect user interfaces that are simple, intelligent, and friendly.

Who, What and When – User and Workload Readiness

Cloud-based applications are a lot easier to use and deploy, but they still present some challenges, especially when it involves mission-critical services like email, collaboration, and communication. Here are a few things organizations should consider in their planning:

- **What is the total cost of ownership (TCO) of your existing on-premise environment vs. the cloud-based alternative? What are the projected cost savings in Year 1? Year 3? Year 5?**
- **What is the current utilization of your on-premise service? How much waste can be eliminated by moving to an on-demand, cloud-based service?**
- **Are your users ready? How do they use current features of the on-premise service?**
- **Which ones are best suited to take advantage of the advanced features that are likely available in a cloud-based service?**
- **How can you segment those users to assist in your migration planning?**
- **How can you ensure the best possible outcomes for all involved?**

It's important to consider these questions before starting your migration to determine where to start your implementation and to ensure early success.

Yet, most IT systems management software solutions still require much heavy lifting to deploy and use. We know these legacy solutions can't provide much visibility into cloud-based apps' performance and availability. Beyond that, many still subject IT to an amazing amount of effort to deploy and manage the software itself! IT teams won't put up with systems management and monitoring tools that require a team of consultants to stand up, especially when they are trying to simplify things by moving apps to the cloud. Instead, management tool providers must make their solutions easier to deploy and control – exactly like the cloud-based business apps and services they run their business on.

Performance Monitoring in the Cloud Era – It Takes a Village



As we've discussed above, the cloud fundamentally changes the requirements for monitoring performance. Instead of a dedicated app service completely controlled inside the four walls, IT teams now have to manage and maintain app service levels for users where everything is shared. So, for example, the data center it runs in; the servers, storage, databases; the ISP networks delivering the apps. Almost all of the service delivery chain is shared by the organization and many other companies using the app. As a result, there's no "one butt to kick" if problems exist in that shared infrastructure. Instead, multiple apps and network providers exist, so finding the right one to kick is a big challenge, resulting in lengthy outages and poor user experience.

With all these stakeholders, application service level management is no longer about "me." It's about "we." And because cloud apps and services are inherently global, distributed, and shared, so should the task of monitoring. By recognizing this and adopting tools and practices optimized to these characteristics, IT can not only address the challenges of managing cloud-based apps but open-up opportunities to increase their value and relevance to the business.

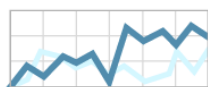
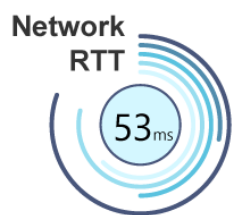
Three technology trends are fundamental to this transformation: Crowd Sourcing, Real-time Collaboration, and Big Data Analytics.

Benchmark App & SaaS Performance

Crowd sourcing, like Open Source, speeds development and improves quality by enabling hundreds or even thousands of developers to work on a piece of software simultaneously. Waze, Wikipedia, Kickstarter, and even CAPTCHA and Duolingo are examples of the power of crowds in action.

The common theme in all the above is the ability to quickly solve problems by dividing them and distributing them to a large, unmanaged group of individuals. So,

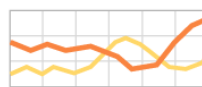
why not empower IT teams to do the same? As a user of Salesforce.com, for example, I'm inherently part of the global user community. It would be great if I could easily harness the power of that community, both passively (e.g., obtaining real user performance data from other customers) and actively (e.g., leveraging the crowd to test a DNS entry globally). This would allow me to scale my IT operational capacity as the cloud limitlessly scales my compute and storage capacity.



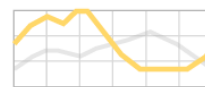
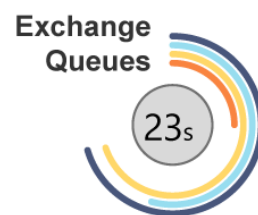
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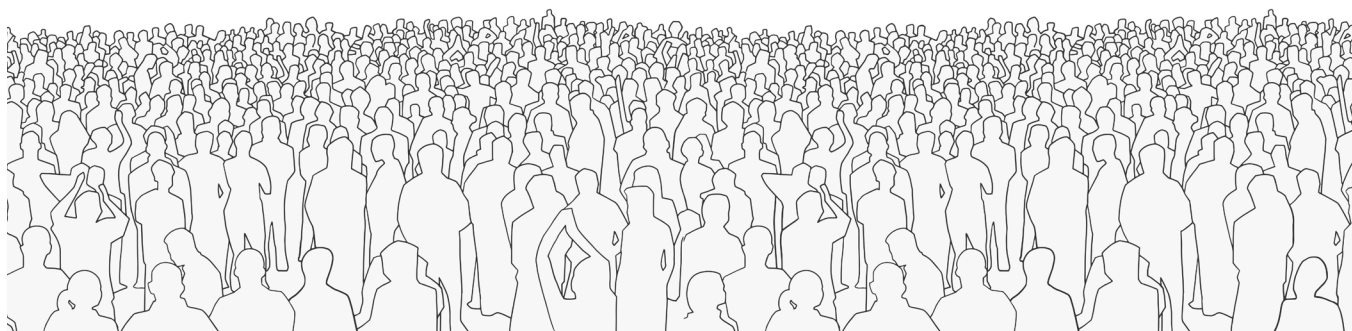
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Real-time Collaboration

To be effective, crowd collaboration must be done in real-time. Unfortunately, Facebook, Twitter, and Instagram have conditioned us to expect instantaneous many-to-many communication in our personal lives, pervading computing in the enterprise. Microsoft's [Delve](#), which blends Office, SharePoint, and Yammer, is an excellent example of where things are heading.



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Big Data Analytics

Big data analytics and business intelligence solutions have become essential tools for many financial, sales, and marketing organizations. Collecting the data is critical, but the real value comes from deriving actionable intelligence from it. IT will increasingly need to employ these solutions to help it detect, pinpoint, and resolve service delivery issues based on the real-time crowd data it collects. Splunk has been a leader for traditional on-premise applications, but more solutions are needed in the cloud.



Monitor Early and Monitor Often

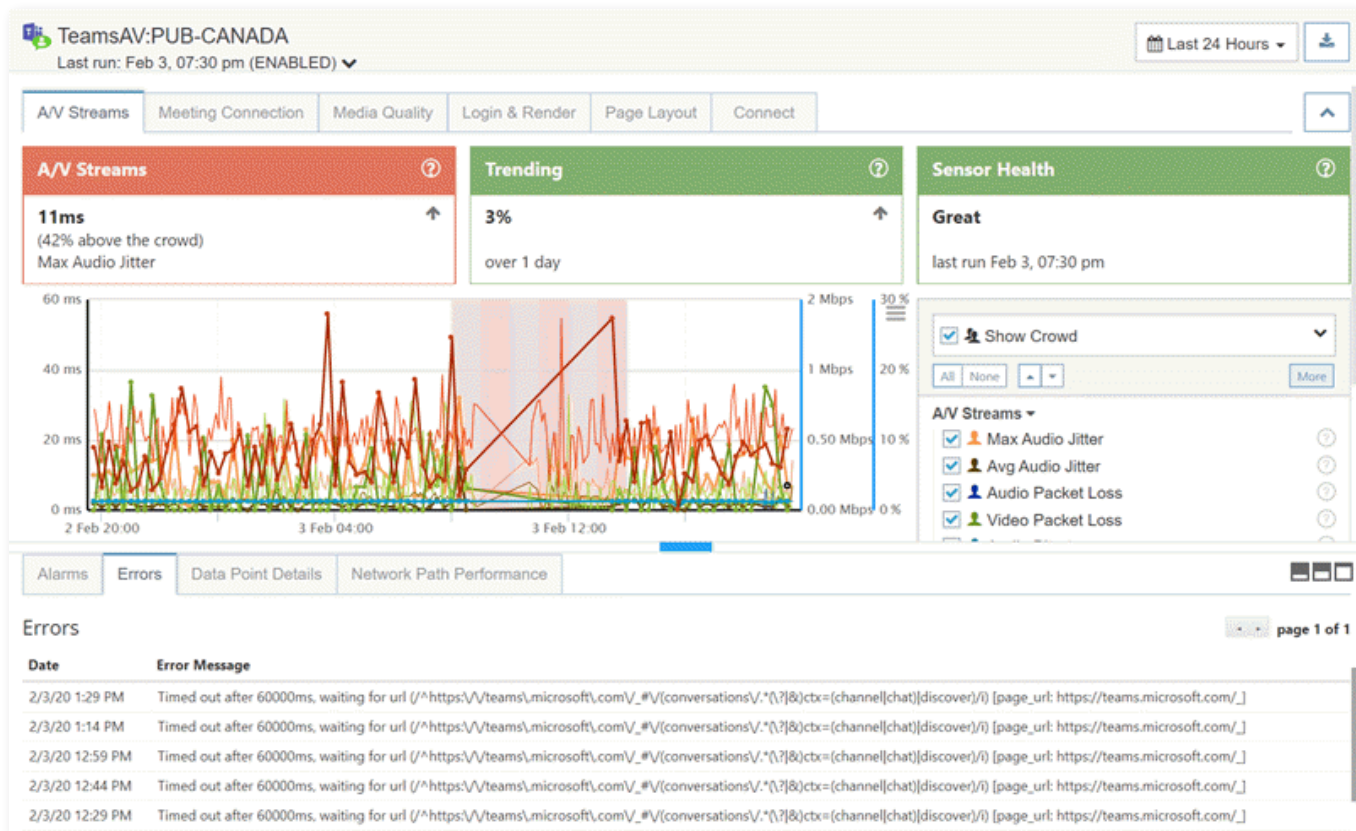


"Vote early and vote often." In the 1920s and 30s, when neither election technology nor oversight was as effective as today, and the likes of Al Capone were gaming the system, this phrase wasn't a joke. On the contrary, it was a best practice!

What does this have to do with cloud computing? We often see IT teams taking a "buy it and hope it works" strategy when adopting cloud-based apps. They migrate their entire user base to the cloud on faith, assuming they can worry about performance and availability issues later. After all, everybody in the company accesses the internet today without problems, so your cloud apps should work just fine, right?

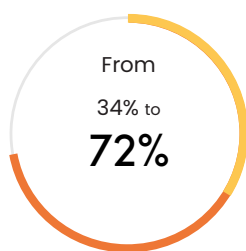
Well, maybe they don't.

If you think about it, your users frequently experience "outages" ranging from individual websites to the internet. As an admin, you haven't dealt with most of them because it isn't your job to ensure Bob in Marketing can access YouTube. Now, however, you do own availability for your enterprise cloud apps. So wouldn't you rather find out if those will have problems before you've gone past the point of no return and have everybody, including your five bosses, screaming at you because they can't access their email, docs, or the CRM system?



Early Outage Detection for Microsoft Teams

Contrary to what you may have thought, performance and availability monitoring isn't something you roll out at the tail end of your migration to the cloud. Still, something you get in place before you start migrating users so you can work out all the kinks in the service delivery chain between your points of access and the cloud apps before you have users depending on them. You probably already do this when you roll out a new on-premise application, and it's even more valuable with cloud apps.



A recent IBM survey shows that the cloud's strategic importance to decision-makers, such as CEOs, CMOs, CFOs, HR directors, and procurement executives, is poised to double from 34 percent to 72 percent, vaulting over their IT counterparts at 58 percent.

Here's an example.

One of our customers is a large electronics manufacturer with over 30 worldwide locations. As they recently looked to migrate to SharePoint Online, they were conscious that user experience might vary considerably across their sites due to differences in local infrastructure, ISP networks, and the Microsoft Office 365 datacenters serving each location.

The IT team determined that the best way to ensure success at full deployment was to begin performance monitoring when they began their SharePoint Online pilot before any actual production users were on the service. During this time, they could test from each location methodically, controlling network configurations and load to establish baseline performance expectations for each site and across multiple vantage points for their full global deployment. They were also able to diagnose and troubleshoot configuration problems, not just with the SharePoint Online service itself but with their supporting network infrastructure, including DNS and Active Directory Federation Services (ADFS).

Finally, they confirmed their organizational readiness to move forward with a production roll-out. The team demonstrated and measured expected availability and performance during the pilot. Reports generated by Exoprise CloudReady synthetics allowed them to communicate these results effectively to their business and IT decision-makers responsible for the SharePoint Online deployment.

Armed with these baseline availability and performance expectations measured by Exoprise CloudReady, the IT team can effectively monitor and detect anomalies in



SharePoint Online service delivery as they proceed with their production roll-out. They know what performance they should see at each location and are alarmed when/if performance deviates from those established thresholds.

They aren't simply hoping users are happy with their SharePoint Online experience. Instead, by leveraging performance monitoring from the beginning, the IT team has gone a long way to guaranteeing they are.

Let's see how synthetic transaction monitoring tools like CloudReady can be used to monitor popular enterprise apps such as Microsoft 365 and Salesforce.

***Your cloud apps are easy to deploy and use.
Shouldn't your management tools be too?***



Overview of Microsoft 365 and How We Monitor it

Microsoft 365 suite contains integrated collaboration applications and best-in-class productivity cloud services such as Teams, Outlook, SharePoint, OneDrive, Yammer, Azure AD, and more. The entire suite transforms how remote, hybrid workers manage their day-to-day activities and achieve more from any location. But monitoring all the Office 365 apps and ensuring a great digital experience for your end-users can be an operational challenge for ITOps. Why?

As discussed, traditional application monitoring tools don't see beyond their firewall. In addition, the service health dashboard from Microsoft only provides visibility into their network, meaning there is no complete end-to-end picture of the app service delivery model. As a result, end-users remain frustrated when Microsoft Teams has packet loss, jitter, and response time issues. And technology support teams remain in the dark without any network intelligence. To make matters worse, effective diagnosis of problems takes time when no meaningful and actionable insights into the end-user experience exist.

You Need Integrated Network Visibility for Microsoft 365

[Exoprise](#) is the leading Digital Experience Monitoring (DEM) solution for ALL of the Microsoft 365 suite. The solution combines proactive synthetic monitoring capabilities with CloudReady and complete endpoint real user monitoring (RUM) coverage using Service Watch. As an IT professional, you can quickly detect, diagnose, and pinpoint application performance problems -- from an endpoint device down to the service provider network, including everything in between. Furthermore, **Exoprise detects outages at least 30 mins to 2 hours before Microsoft reports it**, thus providing enough time for support teams to communicate with internal and external stakeholders. With crowd-sourced analytics, you can validate if an application degradation is within your tenant or with everyone else, thereby reducing Mean-Time-to-Respond (MTTR).



Microsoft 365 Application Performance Monitoring in Exoprise

Exoprise CloudReady synthetic monitoring tool offers eighteen sensors to monitor Office 365 applications such as Teams Audio Video, Exchange MAPI, Exchange Online, Email Graph, Outlook Web App, Azure AD, Microsoft Dynamics, Microsoft AD, O365 Portal, SharePoint, etc. Within five minutes, you can deploy these sensors to any Windows PC or virtual machine on a private site behind your firewall or to a public site (out in the cloud). Once deployed on any network topology (LAN, WAN, SD-WAN, MPLS, Wi-Fi), start measuring user experience against all Microsoft cloud apps from multiple vantage points.

Build customizable dashboards for different personas in the organization and provide monitoring insights for their respective teams. Depending on the role -- whether you're a network administrator, application owner, end-user computing professional, or a support desk analyst -- CloudReady provides real-time visibility into Microsoft 365 app performance. As a result, there are no communication gaps or unnecessary finger-pointing in the IT organization.

Enterprise Use Cases for Microsoft 365



Modernize Your Enterprise Deployment – When your business is ready to transition to Microsoft 365, CloudReady ensures the smooth delivery of cloud services for remote knowledge workers. Internal networks, proxies, SSO settings, configuration, and capacity changes happen all the time – either by your team or at Microsoft's end. Exoprise synthetic monitoring sensors automatically test, validate changes before and after, and optimize app performance, so your remote workforce stays ready and productive without service disruptions. In addition, there are no complex scripting requirements within the Exoprise platform, so you and your team can go to market faster and start monitoring at scale.



Proactive Monitoring of Office 365 Suite End-to-End – In today's dynamic IT environment, you need to stop reacting but start preventing application performance problems before employees reach out and submit tickets. Exoprise is the **ONLY vendor** that provides unmatched visibility into the entire Office 365 application portfolio and sends proactive notifications when mission-critical services such as Teams, Outlook, or SharePoint are unavailable. Once you receive alerts, it's time before network administrators can diagnose if the issues are within your corporate network or with Microsoft.



Troubleshoot Issues Anywhere – For businesses wanting to move to a work-from-anywhere, hybrid, or distributed work setting, identifying and remediating Office 365 issues that affect employee productivity is critical. Exoprise monitoring agents run on any Windows machine or VM and deploy in any topology (corporate office, home network). Using a combination of synthetics and real user monitoring, your team can advance its troubleshooting process and receive all the contextual data to make better-informed decisions. In addition, quantifiable experience scores reveal the accurate health of endpoint devices and SaaS applications from an end-user perspective.



Baseline Application Performance – During network upgrades, cloud migrations, or Microsoft 365 application configurations, it can be a challenge for the operations team to assess if the resulting changes in the system improved or degraded the application performance. From a user standpoint, you also want to quantify if the user experience scores went up, down, or remained the same. Exoprise crowd-sourced analytics assists application owners and network administrators see how their Office 365 tenant compares to others by instantly benchmarking application and network performance from multiple global locations and the Internet.

Salesforce Web Monitoring for Your Remote Workforce



Thousands of customers use the world's largest CRM daily to fulfill organizational objectives. Salesforce applications and business workflows are available in multiple departments such as sales, marketing, finance, customer success, and information technology. However, unlike Microsoft 365, Salesforce requires extensive configuration, API integration, and customization, which introduces website latency and affects the end-user digital experience. In addition, Salesforce deploys each company's application environment to a specific data

center location, thus impacting a user's CRM access over different networks.

As a result, continuous monitoring of the SaaS service is essential for smooth business operations and ensuring the success of your remote knowledge workers. So how can IT professionals troubleshoot Salesforce availability and performance when the application is down or inaccessible? Here are some of the best practices.

Proactive Monitoring of Salesforce Availability

With Exoprise, companies can proactively monitor the health of Salesforce 24*7 from offices and any employee location. After successfully deploying the Salesforce Web Sensor in CloudReady, immediately start witnessing end-to-end key metrics for network connectivity, hop-by-hop trace, and overall page performance. The synthetic monitoring tool continuously tests and monitors for any outages affecting the page response time, time to first

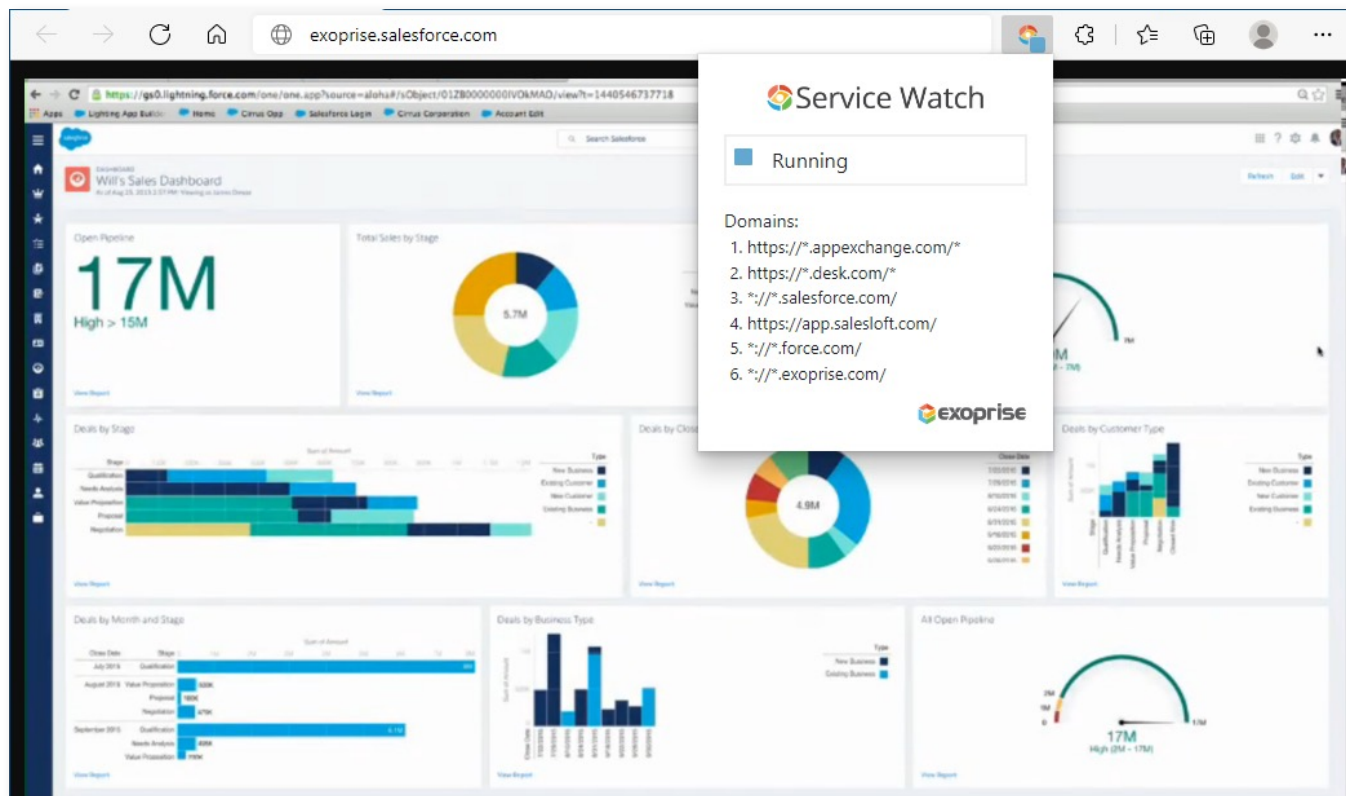
byte, server connection time, DNS lookup time, etc., from around the globe. With these proactive insights, gain an in-depth understanding of how Salesforce is performing from multiple sites and optimize your network performance accordingly. Compare the CRM performance at your site with other locations using built-in crowd-sourced analytics and benchmarks in CloudReady.

Real User Monitoring of Salesforce End-User Experience

Imagine a sales employee who works remotely enters the Salesforce URL in their browser (Google Chrome or Microsoft Edge). The request goes through their home network to the application server. But the server takes too long to process the request and send the response back. So, the employee keeps waiting for the browser to render the page entirely. Consequently, frustration increases, productivity suffers, and sales can't close deals in time.

When end-users complain about Salesforce slowness, Exoprise Service Watch Browser-based RUM tool accurately pinpoints the problems within the LAN, WAN, DNS, ISP, proxy, or the application server. The best way to detect web performance problems with the Salesforce lightning service is to deploy the browser extension and configure specific domains to monitor.





Salesforce Monitoring with Service Watch Browser Addon

After successfully installing the browser plugin, Service Watch captures session performance data from an individual browser and uploads it to the Exoprise server for aggregation and comparison. Critical data metrics (load time, round trip time, web experience score, and resource time), browser type, and location help understand how an end-user experiences a given Salesforce page. IT administrators can use this information to detect service bottlenecks, diagnose problems, and optimize the Salesforce web experience. Additionally, if you use Okta as the SSO provider for Salesforce, Service Watch will use those credentials to access and monitor the CRM service.





You Moved to the Cloud. Now What?

Cloud-based apps and services will continue transforming enterprise IT as much as the introduction of the PC, the internet, virtualization, and intelligent smart mobile devices. For most enterprises, software and infrastructure as a service (SaaS and IaaS) free IT department from the never-ending and seemingly impossible task of building and maintaining the infrastructure required to run their business apps, supporting the ever-increasing business demands for mobility, device support, disaster recovery, security, and reliability.

The cloud service provider deals with all that complexity, and with their scale and sophistication, they generally do it better and at a lower cost than any individual IT team. This relief is a huge win for IT, which **can focus instead on assembling and managing application portfolios that maximize the productivity of their users.**

These shifts change your roles and responsibilities significantly, but they don't change everything. You still own availability and performance for apps in the cloud, and you still need to manage service levels and user experience. Service level dashboards are a piece of the puzzle. Still, dashboards alone fall short of the level of visibility and proactive notification that enterprises need to make the cloud everything it can be.

Most legacy systems and monitoring tools have significant limitations in managing cloud-based apps and services. For example, suppose your apps are moving to the cloud. In that case, you also need to look to new tools that are fully optimized to monitor and manage cloud app performance – leveraging the inherent shared, distributed nature of cloud services – before, during, and after migration to the cloud.

Thankfully, Exoprise is there!

Get Started with Exoprise Today

There are massive benefits to combining synthetics and real user monitoring. When employees encounter problems with SaaS applications and call their support line, they don't want to hear – The site is up and running at my end!

Workers need better assurance than that. When time is critical for companies trying to stay competitive and go to the market first, they need to prioritize employee experience. So, where should an organization start?

Free Trial

Get the best of both worlds in one single Exoprise platform and start a *free 15-day trial*. DEM offers excellent employee experiences and valuable business outcomes.



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