riverbed®

Best-in-Class SaaS Performance

Overcome SaaS performance challenges to deliver superior user experiences and business outcomes
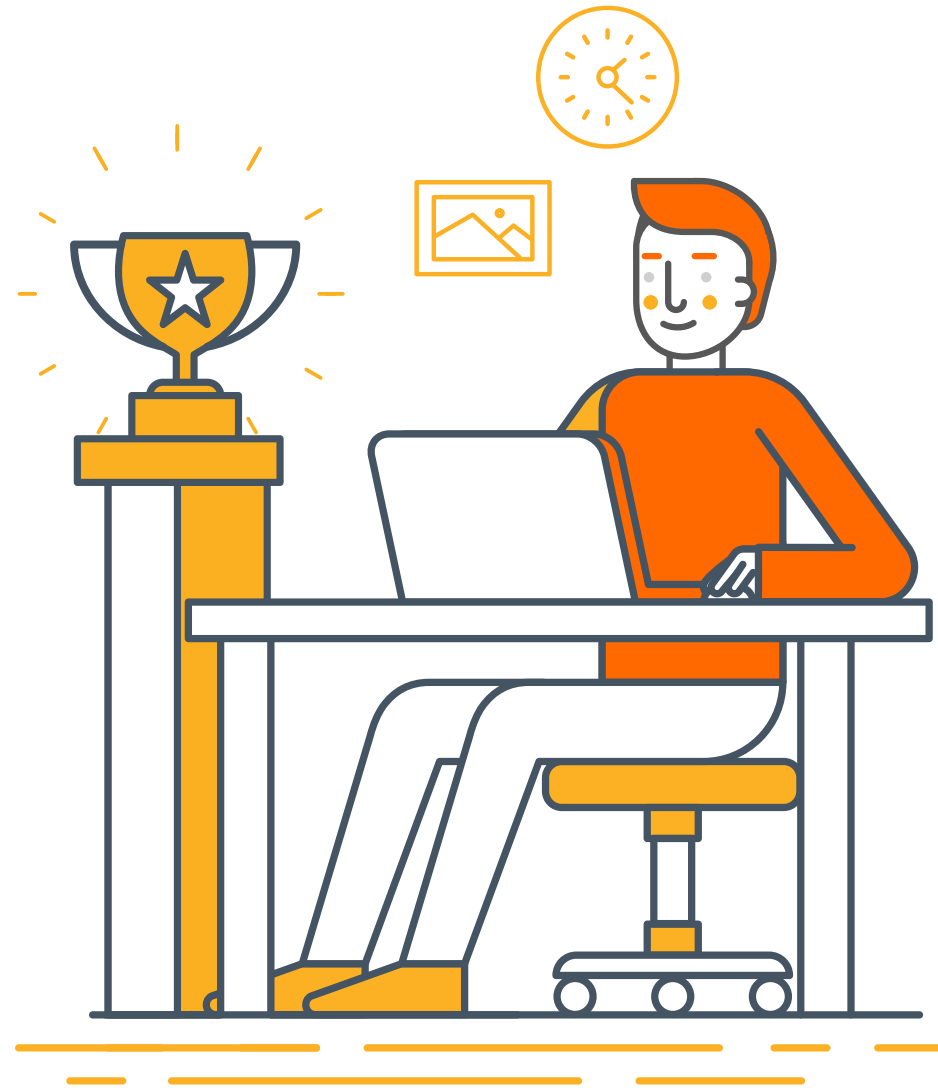
Table of Contents

SaaS

SaaS is Here to Stay

Since the acronym SaaS, short for Software as a Service, first appeared in 1985, adoption of this software delivery model has been nothing short of spectacular. Gartner predicts that by the end of 2020, SaaS revenue figures will reach $111 billion and will account for a majority proportion of public cloud service revenues forecasted to reach $331 billion by 2022[1].

For businesses of all sizes, SaaS just makes sense. Every organization wants to lower hardware costs, scale efficiently, and deploy the latest, greatest software faster. For SMBs, SaaS levels the playing field, giving them access to applications and infrastructure they couldn't afford to support in the past. For enterprises, SaaS enables digital business transformation and addresses the needs of a modern, globally distributed workforce.

With literally thousands of applications covering every conceivable business function now available via SaaS, there's no question that SaaS is here to stay. Now, it's up to IT operations teams, along with their SaaS vendors, to ensure these applications perform flawlessly.

73%
of companies will move 80%+ of applications to SaaS by 2020[2]

80%
of software providers will have migrated to a subscription-based business model by 2020[3]

36
is the number of cloud-based services the average person uses every single day[4]

Percent of enterprises that currently use or expect to use (within next 24 months) these SaaS apps[5]
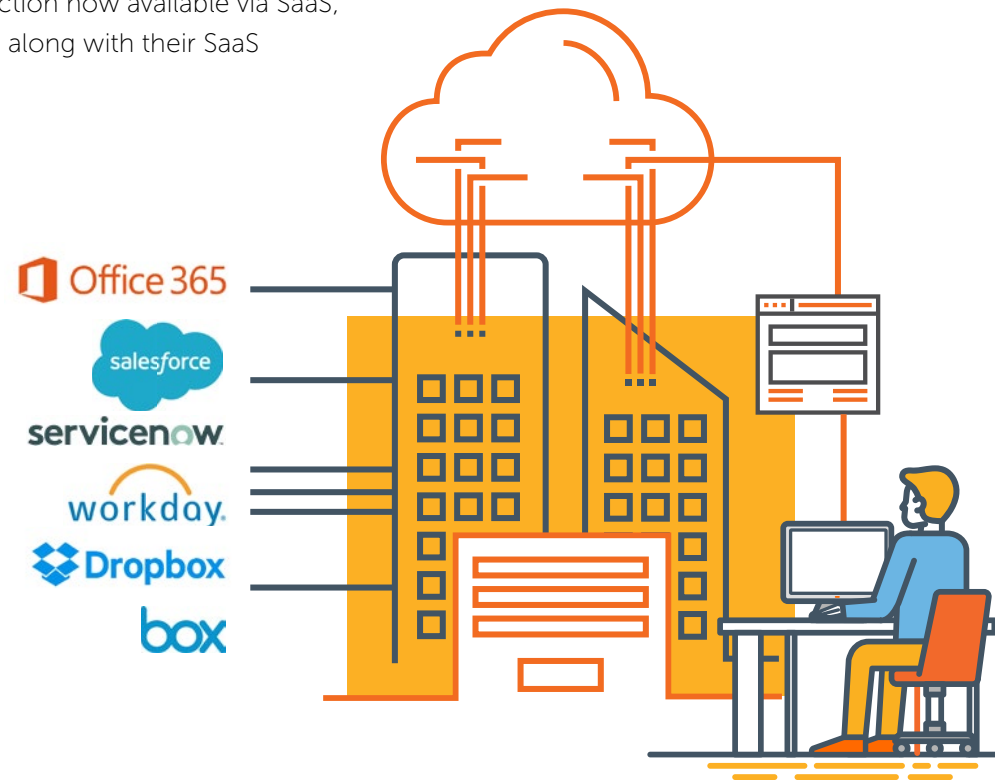
94% Microsoft Office 365
69% Salesforce
51% ServiceNow
48% Workday
47% Dropbox
27% Box

The Pain Behind the Gain

While SaaS has revolutionized the way applications are delivered and managed, many organizations struggle with persistent or periodic performance issues, especially for widely-used, enterprise-grade SaaS applications such as Microsoft Office 365, Salesforce, ServiceNow, Box and others. There are three main reasons why:
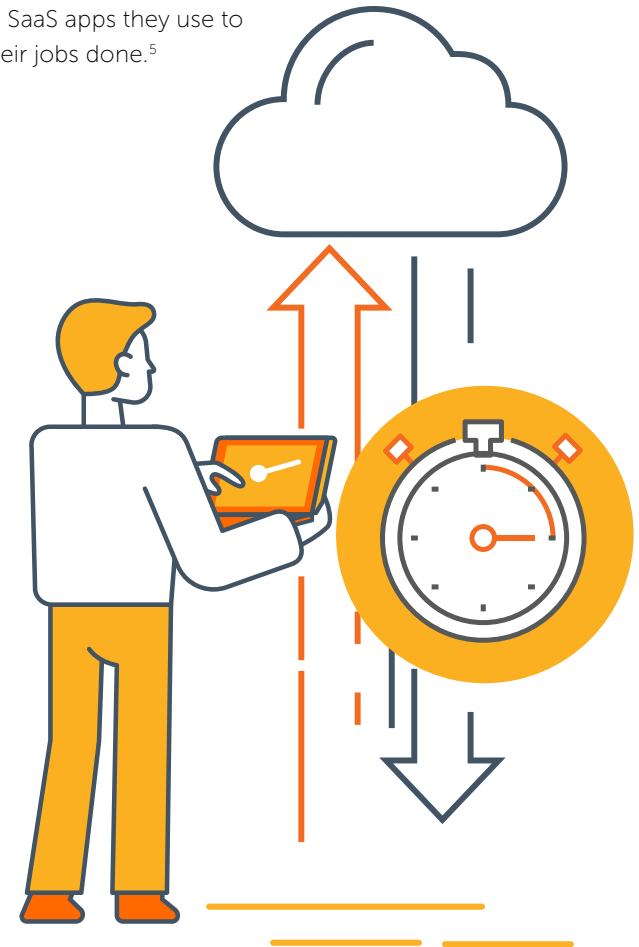
1. Excessive latency

When it comes to application performance, geographic proximity matters. Latency, or the time it takes for data to travel between two connected points, is the number one factor affecting user experience. The longer the distance, the higher the latency. Unfortunately, SaaS apps operate in the cloud, far away from users who are increasingly remote and mobile. In addition, most SaaS apps are delivered over the public Internet, which is known for higher and less predictable latency due to sometimes very indirect routing and heavy congestion. SaaS applications are also highly distributed and chatty. They call on multiple systems simultaneously to perform a single task or job, requiring constant communication with hundreds, even thousands of compute servers located all over the world. This makes SaaS apps extremely susceptible to excessive latency.

42%
of enterprises report that at least half distributed/international workers suffer consistently poor experience of the SaaS apps they use to get their jobs done.[5]

Common causes of high latency:
1. Distance between source and destination
2. Amount of data sent or received exceeds maximum throughput rate
3. Chatty application protocols
4. Network congestion/bottlenecks
5. Ineffective or non-existent quality of service (QoS)
6. Misconfigured or suboptimal routing protocols
7. Problematic in-line devices (e.g., firewalls, network load balancers, etc.)

2. Hybrid IT complexity

Every SaaS app that is introduced into an IT environment adds another layer of complexity to an already complex mix of application types, network connections, and end-user devices. Gone are the days when all applications used to be housed in enterprise data centers and delivered over a private network to users in fixed locations. Today's applications are deployed over hybrid and software-defined networks – MPLS, Internet, Wi-Fi, cellular – that connect data centers, branches, and public and private clouds. Users are distributed and mobile, accessing services from a wide variety of company-issued and personal devices including laptops, tablets, even smartphones. This complexity results in:

- Suboptimal use of enterprise networks and cloud resources
- Difficulty identifying and troubleshooting performance issues
- New concerns for enforcing global security and control policies
- Hidden risks, constraints and costs to support SaaS applications
- Poor user experiences that impact employee productivity and business outcomes

75%

of midsize and large organizations will have adopted a multi-cloud or hybrid IT strategy by 2021[6]

4.8

the average number of private and public clouds used by companies to run applications and test out new services[7]

76%

of organizations believe that the complexity of the IT landscape is the biggest barrier to productivity among IT operations teams[8]

96%

of organizations believe the cloud is failing to deliver on expectations because of security and compliance issues[9]

3. Lack of visibility

Organizations rely on their IT teams to ensure application service levels and a positive digital experience for all users. And while IT teams have developed best practices over the years for monitoring and managing on-premises applications, they face new challenges when attempting to do the same for SaaS apps – the toughest being lack of visibility.

Without visibility, IT teams can't control which apps are being used, who is using them, and what data is being generated and shared within cloud environments. And with no visibility into the SaaS provider's application or infrastructure, it's difficult to quickly find and fix performance issues. While there are plenty of monitoring tools in the market, including tools offered by SaaS providers, they don't provide that end-to-end view that's critical to achieving a "five-star" user experience.
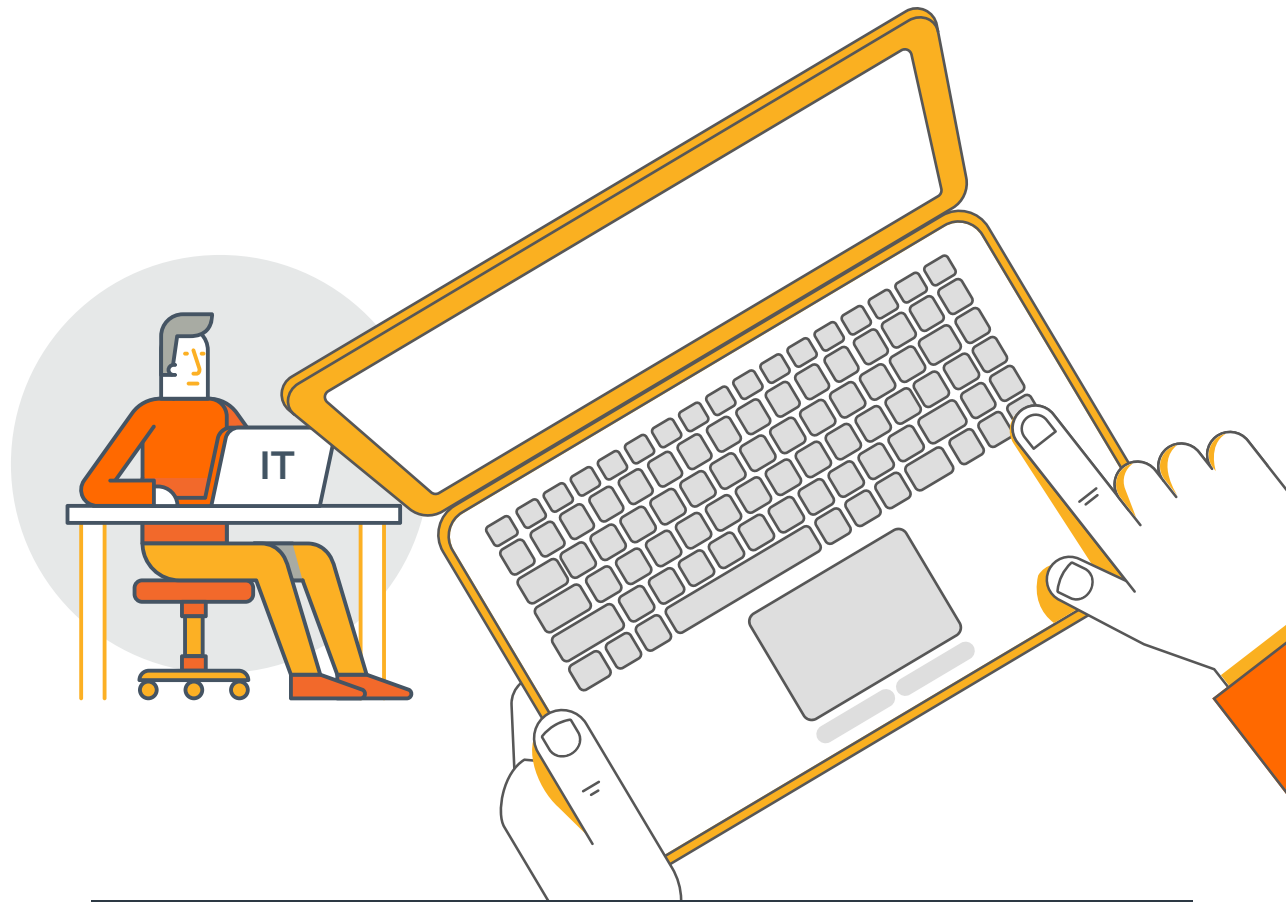
80%
of business users who expect cloud environments to perform the same or better than on-premises environments even though IT has less control over these environments[11]

92%
of organizations find it challenging to manage the performance of cloud environments[11]

60%
of enterprises are concerned about ceding control with SaaS[12]

Secret SaaS
With a couple of clicks and a company credit card, employees can subscribe to SaaS services without the IT department's knowledge. Secret SaaS, or shadow IT, can lead to damaging data breaches, regulatory compliance issues, and a whole lot of wasted time and money. Yet, only 28% of IT leaders have tools in place to better understand and manage SaaS usage[10].

15-22x
more cloud apps running in a typical workplace than have been authorized by the IT department[13]

The Cost of Poor SaaS Performance

SaaS apps are now the lifeblood of most enterprises. They essentially power critical functions such as sales, customer service, marketing, finance, and human resources and facilitate the communication and collaboration that every employee needs to get work done. When SaaS applications fail, are slow, or are otherwise unreliable, the entire organization's productivity and revenue-generating activity tanks. For this reason, IT teams bear the ultimate responsibility for SaaS app performance and user satisfaction.

That's not to say that SaaS providers aren't impacted, too. According to TechTarget's State of SaaS Performance report, poor application performance costs the average SaaS company $209,693 annually in SLA penalties, personnel resources, and customer churn.

$1.25 - $2.5B
the amount Fortune 1000 companies pay in annual unplanned application downtime costs[14]

45
the annual working hour deficit when applications do not perform as expected just two percent of the time[16]

$100k
conservatively, the average per hour cost of application downtime in just productivity and data loss[15]

48%
of users are less likely to use an application again if they're unhappy with the its performance[17]

HUMAN RESOURCES

MARKETING

CUSTOMER SERVICE

SALES

FINANCE

Get Proactive on Solving SaaS Challenges

With Riverbed, IT teams don't have to stand by helplessly when SaaS performance problems occur. They can proactively address end-to-end performance of SaaS applications for all end users and fully deliver the expected business benefits of cloud and SaaS models.

Make SaaS applications feel local

Riverbed delivers the only cloud-based SaaS acceleration service, purpose-built for today's dynamic workforce to ensure consistent performance of leading SaaS applications for anyone, anywhere.

- Accelerates SaaS app performance by up to 10x
- Reduces bandwidth utilization by up to 99%
- Reduces application protocol chattiness by up to 98%

Conquer hybrid cloud complexity

Find the right balance between cost, reliability, and performance for a diverse mix of application traffic, including SaaS, running over hybrid networks. Riverbed SD-WAN makes this possible with application-aware, policy-based management and dynamic path steering.

- Ensures the most efficient and secure application delivery
- Lowers costs by eliminating backhaul through data centers
- Streamlines IT service deployment for new or remote locations

Remove blind spots and reclaim control

Only Riverbed provides visibility within and between on-premises, virtual, and cloud environments all the way to the end user for every type of application or device, sanctioned or not by IT.

- Speeds up troubleshooting and issue resolution
- Tracks SaaS adoption, usage and performance
- Holds service providers accountable to SLAs
- Assesses the business impact and costs of SaaS apps

The Riverbed Difference

Riverbed delivers the only cloud-based SaaS acceleration service, purpose-built for today's dynamic workforce to ensure consistent performance of leading SaaS applications regardless of network latency, bandwidth constraints, or application contention—all without requiring any changes to the SaaS provider's infrastructure.

SaaS Accelerator, together with Riverbed's digital networking and digital experience management solutions, enables organizations to maximize the performance of SaaS applications for greater workforce productivity, more successful cloud adoption, and better business outcomes.

To learn more about Riverbed's SaaS Performance solutions visit www.riverbed.com/accelerate.

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