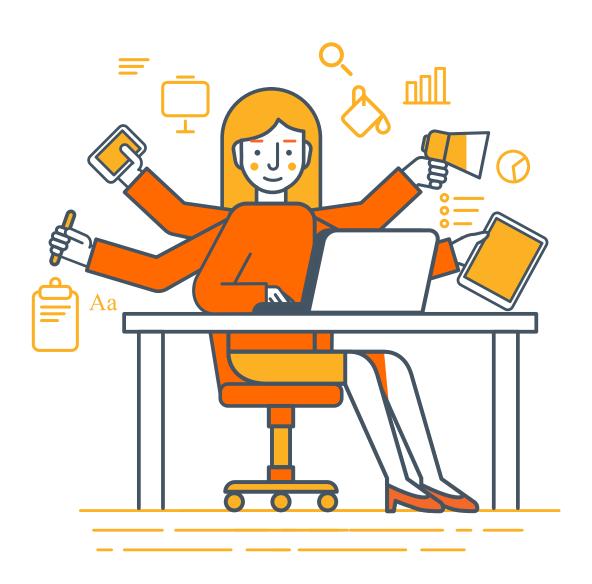
## riverbed

The Need for Fast,
Consistent,
Reliable SaaS

How to Maximize Your Enterprise Investment in Microsoft Office 365



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# From the Data Center to the Cloud

Office 365 supports new and innovative ways of working by linking tools to boost collaboration and productivity. It's no wonder that Office 365 adoption has skyrocketed, making it the most popular SaaS business application.

Yet when performance slows, so does collaboration and workforce productivity. How can IT departments manage this migration to the cloud while still ensuring consistently high performance for their increasingly mobile workforce?

## 180 million

Office 365 users globally, with approximately 3 million new users added each month<sup>1</sup>

94%

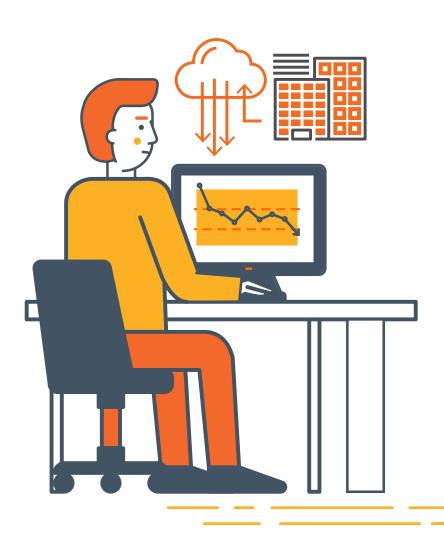
of users rate SaaS performance as important to their overall productivity<sup>2</sup>

### 69%

of enterprises say migrating to Office 365 has improved their productivity<sup>3</sup>

## 50%

Through 2020, at least 50% of all globalscale deployments of Microsoft Office 365 will experience network-related performance problems<sup>4</sup>



## Blaming the Network

When moving services to the cloud, data centers are no longer local, so the end user's experience can suffer. In addition, given today's dynamic workforce, there is increasing unpredictability for 0365 performance brough about by always-changing networks and latency. A congested or high-latency Internet connection between the user and the cloud service will mean sluggish application delivery that puts a damper on user productivity and ultimately threatens application usage. When problems do occur, the burden of troubleshooting tickets and putting out fires are felt by end users and IT staff alike.

50% Of globally distributed enterprises say their biggest concern with O365 is inconsistent application performance.

Of globally distributed enterprises say their biggest concern with O365 is response latency for users at scale (including International users)

Reported networking problems, while a further 22% reported performance problems where networking was a possible cause<sup>5</sup>

Application issues are first reported by end users rather than by IT staff (18%) or other sources, such as vendors or social media (20%) $^6$ 

Of respondents said most or all distributed and international workers' connections to SaaS applications are backhauled through the data center which can also create latency issues<sup>7</sup>

### Outlook, Sharepoint and Teams

Have the most significant network bandwidth needs

# Why Does Performance Really Suffer?



## Workforces that are more global and mobile than in the past

The length and quality of network paths between users and the Office 365 cloud can be very different, and unpredictable for IT teams. For mobile workers, the network path or latency may change several times during the day.



## Added distance in the network path when SaaS traffic is backhauled

The practice of routing traffic to the data center and then to the Internet improves security but contributes to latency.



#### Large file transfers

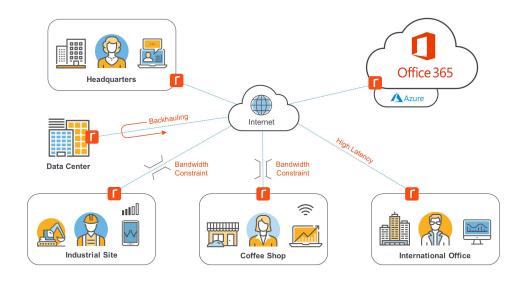
Large file transfers associated with SharePoint, OneDrive, and Exchange can lead to bandwidth constraints and slowdowns.



#### **End-user devices themselves:**

Health and performance of the end-user device can contribute to slowdowns and necessitate upgrades and hardware refreshes. These factors are exacerbated by an inability to identify where problems reside. Is the issue in Microsoft's environment? The last mile? The user's device?

#### **Factors Contributing to Poor Workforce Productivity**



## How to Drive Workforce Productivity with Microsoft Office 365



#### PLAN

Start with Microsoft tools to model bandwidth. You can either input data on specific usage patterns (number and size of emails send and received per user per day) or apply Microsoft defaults which are conservative. Use additional tools to factor in latency, packet loss, and network reliability, which can seriously degrade overall performance and user experience.

Baseline the end user experience before migration so that you can ensure performance does not degrade. Select Office 365 geos that minimize the average distance to users and use WAN optimization techniques when migrating data from on-premise instances.



#### **ACCELERATE**

Latency and some bandwidth constraints are expected even with direct Internet access since the organization may be remote from the O365 geo, user-network connections are more dynamic, or bandwidth costs may be high for anticipated digital traffic (like in the Middle East). In that case, you can accelerate performance by securely optimizing and accelerating the traffic that goes across your network.

Streamline application data transmission to ensure that mobile workers are as efficient as possible no matter where they are—the office, client site, or corner coffee shop.



#### **MONITOR**

Complement Microsoft with tools that provide individual user metrics with big picture end user monitoring solutions to ensure workforce productivity and collaboration is not impacted by slow performance. These should capture the last mile, allow you to view by organization, department, office location or application, and measure application performance as the user experiences the application rendering on his or her screen.

Provide deep network instrumentation using network performance monitoring tools (NPM) for capacity planning and management.

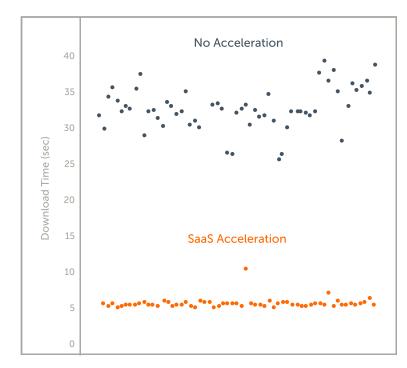
## Accelerate Microsoft Office 365 with Riverbed

Delivered as a service, distributed enterprises can now maximize their significant investment in Office 365 by increasing the performance for users anywhere by 8x or more, improving employee and customer satisfacion, accelerating time to market and time to pipeline, and positively impacting overall business performance. This solution can be deployed in minutes and allows you to see, fix, and report to multiple stakeholders on problems before they impact users. You can also avoid finger pointing by using Riverbed to determine the source of delaywhether it is in the device, your network or Microsoft's environmentand act to resolve slowdowns quickly.



Learn more about our solution for Office 365 and how you can improve workforce productivity.

#### Office 365 Performance with and without SaaS Acceleration



Riverbed can deliver fast, predicable access to files stored in the Office 365 cloud to boost employee productivity and collaboration.

<sup>&</sup>lt;sup>1</sup>https://www.petri.com/office-365-soars-155-million-active-users

<sup>&</sup>lt;sup>2</sup>Bob Laliberte and Adam DeMattia, Enterprise Strategy Group, The Impact of Poor SaaS Performance on Globally Distributed Enterprises, May 2019

<sup>&</sup>lt;sup>3</sup> Wakefield Research, State of Office 365 Monitoring, May 2019

<sup>&</sup>lt;sup>4</sup> Neil Rickard, and Andrew Lerner, Gartner Research Note, Network Design Best Practices for Office, 22 March 2018

<sup>5</sup> ibid

 $<sup>^{</sup>m 6}$  Wakefield Research, State of Office 365 Monitoring, May 2019

<sup>&</sup>lt;sup>7</sup>Bob Laliberte and Adam DeMattia, Enterprise Strategy Group, The Impact of Poor SaaS Performance on Globally Distributed Enterprises, May 2019