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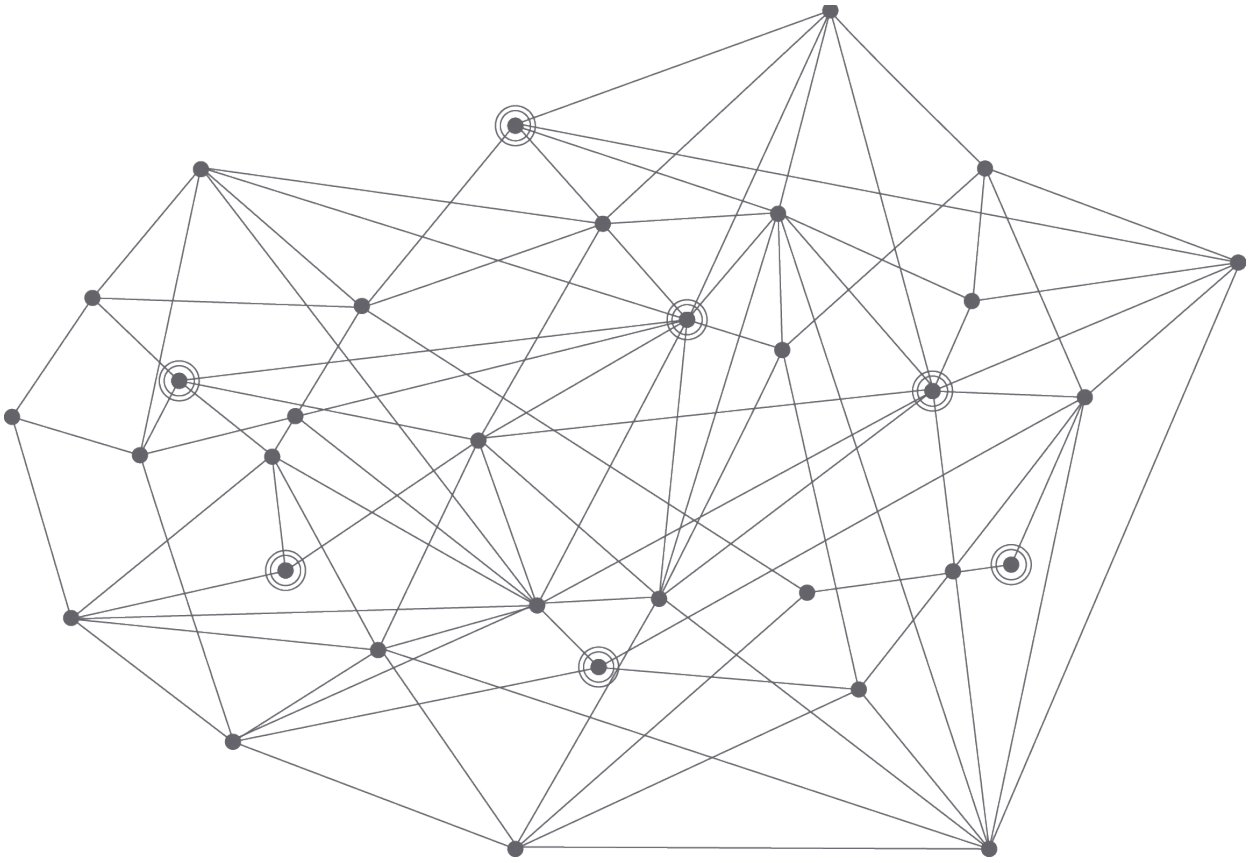

10 STEPS TO USER EXPERIENCE SUCCESS: MICROSOFT OFFICE 365

WHITEPAPER

AppNeta
Performance in Production

More and more business applications are moving to the cloud and taking their clients with them. By 2017, Gartner estimates that 33% of all users will be on cloud-based business office systems like Office 365. Are you considering such a migration? If so, you aren't alone. Large and small businesses alike are taking part in the transition from critical on-premises applications to cloud-based SaaS applications. There are some compelling reasons. Cloud applications offer improved efficiency, greater ease of use and better access to user data, all while being more cost-effective than traditional on-premises applications. SaaS applications offer tremendous benefits but can be complex and can introduce challenges your team is unfamiliar with. These cloud challenges can lead to a poor user experience and a potential business slowdown or shutdown. This guide will help you understand, plan and optimize your migration to combat these challenges and deliver a successful user experience in the cloud.

1. Communicate the Value of Office 365

Communicating the value of Office 365 to your organization, before beginning the migration, is a challenge in itself. There are a lot of potential cons to combat, such as recurring subscription fees, less flexibility in configurations and customizations, SharePoint and Exchange capacity limits on emails sent and received, and data security concerns in the cloud. Though there are cons, there are also compelling pros that outweigh them. Office 365 has recurring monthly fees, but overall it is more cost-effective than an on-premises version. Even though there are capacity limitations with Exchange in the cloud, similar capacity limits exist for Exchange on-premises. There are also associated hidden costs of running servers, storage and backup on-premises. Additionally, there are many benefits to moving to the cloud, including cost, updates, maintenance, accessibility, mobility, collaboration and communication, scalability, security and stability.

2. Understand and Ensure the Strength of Your Connections

Before beginning your migration, you need to ensure the foundation you plan to run Office 365 on is robust and can withstand the connectivity and bandwidth necessary to deliver a critical application to your target end users. Consider these basics to understand if your foundation and connections are solid:

Bandwidth and Connectivity

- Is the Office 365 service accessible? Before migrating to Office 365, ensure you have quick access to servers through all layers of network security to ensure they are accessible to all users at all locations.
- Are your network provider and Internet Service Provider (ISP) delivering what you need and what you pay for? Is your ISP meeting the performance service-level agreements (SLAs) tied to existing applications? Ensure you get what you paid for by viewing how much bandwidth is in use and how much is available at any given time.
- Additionally, to ensure a successful end-user experience for any SaaS application running on the network, you should have visibility into the end-to-end network performance to identify congestion and network faults.

Data Loss, Latency and Round Trip Time

- Do you currently experience any data loss? Any level of data loss can make your application hard to use, but more than 4% data loss could render the app completely unusable. Make sure to get data

loss in check before transitioning Office to the cloud to ensure you don't have a lot of angry colleagues at your desk after launch.

- Is your latency at or below 40ms across the continental US for your existing SaaS apps? What about round-trip time (RTT)? One figure to manage closely for optimal SaaS user experience is the latency, or one-way time from your office to a given SaaS provider. Another to consider is RTT, the amount of time needed for your connection to go from your office to the SaaS provider and back. Once you ensure latency is below 40ms, be sure to choose a host location closest to the majority of your end users. Additionally, ensure RTT is roughly double your latency. Any increase from two times latency indicates performance issues with the responding server.

3. Understand Who Consumes What

Laying the groundwork for Office 365 includes getting a clear view of who does what on your network. Are there users still on old Outlook clients? These older clients could introduce new challenges to your migration. What special considerations do you have to keep in mind for those users? More importantly, outside of your outdated on-premises Office clients, you need to understand who is using which existing third-party SaaS applications, and why.

4. Understand Existing SaaS and Cloud Application Performance

Once you have identified what applications are in use across your organization and which ones are critical, you need to understand how these apps are currently performing. Do they have enough bandwidth or do they struggle to compete for bandwidth with other less-critical applications?

5. Minimize Office 365 Migration Impact on Your Critical Applications

As much as you want your Office 365 migration to be successful and high-performing, you have to consider the performance of other existing critical applications. Do you have enough bandwidth for all of your business-critical SaaS applications? As your workforce relies on a smooth Office 365 transition, they also rely on other SaaS applications that may be just as critical to their particular department's needs. On average, a medium to large business utilizes 300 to 400 SaaS applications. IDC forecasted that 80% of new technology will be purchased by non-IT business managers for their teams. From HR to marketing, finance to sales, departments across organizations are deploying and relying on business-critical SaaS applications. Having a view into what you are running, and classifying the critical business applications before migration, can ensure a good user experience for not only Office 365 but other business-critical applications as well.

6. Plan for Email Archive Migration

When migrating to Office 365, email archives are often an afterthought. They shouldn't be. Most people underestimate how complicated it is to migrate or even maintain existing email archives. Problems include archive tools that are not compatible with Office 365, wasting money migrating archives to the cloud and delayed user access to the archives.

The good news is you have some options when tackling these problems. When your existing archives do not work well with Office 365, you can keep them on-premises and maintain a hybrid environment. If you don't want to spend a lot of money migrating your archives because there is just too much useless data, find a smart migration tool that will help you do an intelligent migration that only takes business-critical data. The delay your workforce experiences in accessing their email archives depends on your email archive approach—to migrate or not? How long can your workforce go without their archives? That answer will dictate your email archive approach during migration. If you need quick access, migrating to Office 365 may be your best bet. If your Microsoft Azure instance and Office 365 are in the same data center, migrate to Azure first, then to Office 365.

7. Run a Lab Test (But Remember Its Limitations)

Many organizations decide to set up a lab environment with a test Office 365 migration. Unfortunately, a test environment cannot mimic a production environment with the same Internet connections, traffic, mailbox corruption and servers with layers of policies and proxies applied to them. Remember, lab testing is just a test. If you do a test to run through the steps in the migration, don't expect the same results or timeline for the actual migration in production.

8. Confirm Adoption

Once your migration is over and Office 365 is up and running, there are a few more steps to consider for optimal user performance. Has everyone adopted the new application? Who is using it and who isn't? Application monitoring tools can give you a view into which applications are being used, and by which departments and users. Your monitoring tool should provide statistics like how many users are using each service, how much capacity they are using and which departments have adopted the app. That information can help encourage collaboration among in-house teams to get adoption rates up if needed.

9. Explore User Experience in the Cloud

You've deployed and migrated to Office 365. You also have a great sense of who has adopted it and who hasn't, but you don't know why adoption for certain users or departments has been slow. Maybe there is a technical reason why certain departments are not adopting Office 365 as readily as others.

For example, Office 365 may be accessible by your finance team, but their user experience may be poor due to performance issues. As a result, their adoption rate is low. Their finance SaaS applications may not able to run in parallel with Office 365 without encountering performance issues. Alternatively, maybe it's a network issue at the finance team's remote office.

To understand the dynamics of what's going on from the user's perspective across different applications, departments and offices, you need an application performance tool that gives you visibility into not only the applications but the end user's experience across multiple locations.

10. Prepare for the Road Ahead

You are now up and running with Office 365 and have guaranteed a great user experience for your entire

organization. Now what? SaaS applications can be complex and feel out of your control. You don't have control over the infrastructure, application performance or updates. Keep issues at bay and take back control by proactively and continuously monitoring applications in the background. Set up alerts when certain thresholds for connectivity, available bandwidth and packet loss are reached, so you can take action before performance is impacted.

Once you have an understanding of which applications are in use by your organization, and in what locations, you can set up synthetic web tests. Run synthetic tests for your critical SaaS applications, Office 365 and others, to ensure continued optimal user experience and to proactively identify when performance will falter. Finally, set up alerts for Apdex score, the industry standard in user satisfaction, for specific milestones that differentiate between areas of an application that perform differently, giving you a comprehensive performance view of the entire application.

Ultimately, your goal should be complete visibility that empowers your organization to get the most out of your strategic cloud investments. Ideally, that will come with happy users, fewer service tickets and—best of all—peace of mind.

ABOUT APPNETA

AppNeta is the only application performance monitoring (APM) company to provide solutions for all applications—applications you develop internally, business-critical SaaS applications you use and the networks that deliver them. AppNeta's SaaS-based solutions give Development, DevOps and IT Operations teams essential performance data to see across their web, mobile and cloud-delivered application environments as well as pinpoint tough performance bottlenecks. With AppNeta, customers have all of the performance data they need to assure continual and exceptional delivery of business-critical applications and end-user experience. For more information, visit **www.appneta.com.**

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