How hybrid IT can support enterprise mobility

How can you easily integrate document solutions across desktops and the cloud to better meet business demands?

In our first white paper, “A delicate balance: The competing needs of IT and users in a mobile world,” we discussed how the emergence of a highly mobile workforce has made IT management infinitely more complex. Personal devices have invaded many workplaces and coopted enterprise networks, and some workers are using them to transmit and store sensitive company documents. In the second white paper, “Define your data for better document security,” we suggest ways for you to mitigate risk to content and documents in a mobile world.

In this paper, we explore the IT management environment. How can you integrate document solutions across desktops, mobile apps, and the cloud to better meet business demands, without creating so much complexity that it causes IT to suffer?

Lockdown isn’t the answer

Workers love the productivity ecosystem that has sprung up around the ways they work in a mobile world. When employees encounter a problem that can’t be easily solved with in-house IT, the first place they look is online or in an app store. Moments later, their problems are solved—but IT’s problems are only beginning.

For example, when a traveling sales rep becomes frustrated with his inability to access contracts while on the road with an iPad, chances are he’ll quickly realize that he could save a lot of time, close more deals, and satisfy his customers better if he simply saves contracts to a personal cloud-based storage folder. It’s easy for employees to use third-party cloud services to quickly and cheaply meet their technology needs without waiting for anyone’s approval.

While IT’s ideal solution might be to ban this type of workaround entirely, it might not be easy to do. Attempts to cut off this kind of access could lead to employee dissatisfaction, and understandably so. Everyone—including enterprise leaders—can work with greater speed and agility when they have access to software-as-a-service (SaaS) solutions that facilitate mobile working.

IT must be friendly to employees’ mobility needs

Given that hybrid IT—the mix of traditional, on-premises software and third-party cloud services—is here to stay for the foreseeable future, you need to find a solution that can satisfy employees’ needs to work more effectively. From employees’ perspective, an ideal document productivity solution would:

• Seamlessly integrate mobile apps with traditional, on-premises software that can use the full computing power of a PC, so they can perform compute-intensive tasks on a desktop but still access critical functionality on a mobile device.

• Enable them to have multiple applications open at once, efficiently switch back and forth, and quickly perform cross-app functions such as copy and paste—something not easily done on a tablet or smartphone.

• Provide the same intuitive user experience on all platforms and operating systems that IT supports, not just on the most popular ones.

• Sync documents across devices via the cloud using enterprise-level security, letting them work on multiple devices but helping IT to mitigate security risk and eliminate data leakage.

In short, employees would like to have all the functionality currently available, with none of the constraints that IT needs to secure and manage enterprise information.
Hybrid IT isn't easy to manage

The obvious answer to the discrepancy between knowledge workers' needs and IT's needs is to move toward a hybrid IT model. And that is, indeed, where many enterprises are headed. But integrating cloud services with on-premises applications is complicated on many levels. First, it's hard to manage deployment and licensing. IT departments are accustomed to managing desktop software with certain tools—such as SCCM and Active Directory—that ease administration by letting them manage multiple users at a time. But most SaaS solutions can't be managed with the same enterprise tools, so IT shops that want to make cloud services available to the enterprise face a dramatic increase in management complexity. They need cloud services that also have desktop versions and can be managed using the same proven, familiar admin tools they use to manage on-premises software every day.

Second, security becomes complicated because so many layers of security—previously managed by IT—are now out of IT's hands. The app, the network, and even the third-party service provider's facility are managed by the SaaS vendor, and the industry lacks widely adopted, independent security certifications that can give IT some peace of mind.

Third, cloud services are increasingly distributed and less directly managed by IT. You need the ability to test software with limited groups prior to deployment, phase releases to a few users, roll back to previous versions if necessary, and avoid deployment at critical times such as new product launches. Cloud-only solutions that can't be managed with existing enterprise tools don't offer that level of control, leaving the enterprise to accept the decisions of a vendor that simply can't accommodate every customer's unique needs.

Why not use cloud services only?

Given the challenges of managing SaaS alongside desktop software—and the fact that workers are clamoring for the benefits the cloud delivers—why not dump on-premises software in favor of a full-cloud environment?

Even if pure SaaS could give users all the functionality they need, it would still fall short of IT's standards. IT's mission is not only to enable the enterprise workforce with the tools it needs, but also to protect the enterprise from security breaches and damaging downtime.

A full cloud approach to document productivity is problematic for IT for the following reasons:

- The lack of central management over cloud solutions may threaten the enterprise's ability to remain in compliance with government regulations.
- Even when compliance isn't a legal concern, it's a competitive concern—SaaS solutions enable sensitive data to flow outside the firewall too easily.
- Backup and disaster recovery need to remain in the hands of the IT department, not in the hands of a third-party provider that may or may not have the same security priorities as the enterprise.
- IT needs input over the timing and nature of software updates and the ability to roll back to previous versions when they better suit IT's needs.
- Some cloud solutions are narrowly focused consumer needs, not enterprise needs. Others are designed for the enterprise, but do not integrate with the entire document ecosystem, which includes traditional on-premise applications, or are less clear in their focus and priority.
- Third-party app providers may lack clear road maps to give IT the confidence it needs in the future of their solutions.
- Cloud-based apps abound because they're relatively easy to build and deliver. That means you would have to spend a lot of time vetting all of the different options—and it's hard to separate the competent solutions from the fly-by-night ones.
A document solution must be IT-friendly, too

Nearly all of the solution characteristics that workers need are at odds with what IT traditionally wants. Despite these tensions, enterprises need to find a solution that simultaneously creates a positive experience for business and for IT. From IT’s perspective, the ideal document productivity solution would make it easy to manage traditional, centralized license deployments and updates on the desktop alongside per user, cross-device cloud deployments. The solution should address the following areas.

Security
- Integrate with single sign-on capabilities so that users can have access to both on-premises and cloud-based software by logging in once to a central authentication system.
- Offer easy authorization of individual users and groups so that you can centrally manage permissions to all apps and services within the enterprise.
- Enable enterprise governance over files stored in the cloud so that you can sync them across devices, apply security, and prevent deletion to comply with retention policies.

Management efficiency
- Enable you to roll out pilots to limited groups so that the enterprise doesn’t get locked into a SaaS solution that might not serve its needs.
- Provide central deployment, configuration, and updates using the same proven, familiar management tools that you are accustomed to using.
- Enable customizable in-product messaging (IPM) so you can communicate in-context information about maintenance, training, and help desk support directly to the right users at the right times.
- Give you the control you need to address and resolve availability or reliability problems—or trust that the SaaS provider will resolve them quickly and effectively when the problems occur outside of the enterprise’s domain.

Visibility and insight
- Offer dashboard reporting that can monitor user activity across desktops and services to enable user and license management.
- Provide valuable insight into usage across the organization.
- Enable better business and budget decisions.
- Let you monitor the network for usage anomalies that might indicate security breaches (for example, the same login being used on a desktop service and a cloud service in two different locations).

Conclusion

In theory, a hybrid approach to document productivity can give users the flexibility they need to be most effective in their jobs. But this kind of freedom can mean a security and administrative nightmare for IT, because the vast majority of SaaS solutions are not made with your needs in mind.

You can—and should—insist on a solution that enables the new mobile habits of workers while still affording IT the right amount of control to protect and manage the enterprise. Cloud management should not entail a totally separate set of IT management tools and processes, nor should it be impossible to manage alongside on-premises software. Rather, managing SaaS solutions in the enterprise should be a simple extension of desktop management.

The reality today is that such solutions are rare. But in the future, we foresee document solutions that can share common services and are device-, location- and OS-agnostic for users. Vendors will provide service offerings to complement, rather than replace, traditional applications and the broader business productivity ecosystem. And mobile workers and IT will both feel that they finally have the tools they need to work effectively.