

# Reducing IT Friction in the Government Workplace

A new study reveals how virtual digital workspaces could significantly boost government workforce productivity.

BY FEDSCOOP STAFF

American workers have grown increasingly accustomed to accessing information and ordering goods and services online, anywhere and anytime, using their smartphones, tablets and home computers.

At work, however, routine digital detours and roadblocks can put a daily dent in productivity. This is especially true for government IT users, according to [a new study published by FedScoop](#). The study of federal IT users and managers, and those in industry who support them, found that federal workers encounter more IT friction on the job than their industry counterparts — and suffer greater loss of productivity as a result.

What's the cause of that friction? There are several factors, but the one federal workers mention most is difficulty accessing applications they need every day — and getting those applications to work properly on the devices they use at work.

The annual costs of that friction — and the opportunity to boost productivity with solutions as simple as workspace virtualization — are significant.

Half of government IT users who don't have access to virtualized digital workspaces believe that if they did, they could each gain four or more hours of productivity per week, according to the study. This equates to more than 200 hours per year, per employee, of improved productivity.

With more than 90 percent of federal workers — over 1.6 million — engaged in professional, administrative,

technical, clerical and other white-collar work, at an annual payroll topping \$140 billion, according to [2015 government figures](#), even a fraction of that potential gain would yield billions of dollars in improved performance.

## WHAT'S THE PROBLEM?

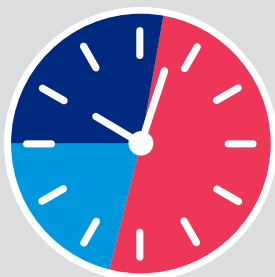
Government agencies admittedly must maintain a unique blend of regulatory and security speed bumps that naturally slow down federal information workers compared to their private sector peers.

But relatively easy-to-solve technology issues also hamper government employees, and readily available suggested and proven solutions that don't require expensive equipment upgrades could quickly improve productivity and reduce IT friction. Government IT users polled in FedScoop's new [report](#) make this apparent.

Among the biggest IT factors impeding government workers:

- Work-issued devices don't adequately support the applications they need (82 percent).
- Device and other constraints prevent access to all the apps they need (64 percent).
- Multiple password requirements for each device and application hamper access to information and apps (58 percent).
- Applications are not optimized for mobile devices (56 percent).

## DIGITAL WORKSPACES COULD IMPROVE PRODUCTIVITY BY 4+ HOURS PER WEEK



**28%**  
1 hour per week

**21%**  
1-3 hours per week

**51%**  
4+ hours per week

4+ hours per week equates to more than 200 hours per year, per user, in increased productivity.

## TOP FACTORS CONTRIBUTING TO IT FRICTION AT WORK



**82%**

Work-issued devices don't support the apps they need



**58%**

Multiple password requirements hinder access to apps and info



**64%**

Can't get access to all the apps they need



**56%**

Applications aren't optimized for mobile devices

Half of government IT users in the study say they experience moderate-to-high levels of friction using smartphones and tablets to access the information they use for work — and a third reported similar levels of friction using desktops and laptops at work. That's twice what their industry counterparts reported in the study.

All that friction not only slows down the government's workforce; it also adds to the workloads of IT staff, who sooner or later must give employees a jump start.

The study found that friction also has led to another problem for agencies and their IT managers. Three-quarters of users (74 percent) said they rely on personal tablets, and half (51 percent) use personal smartphones for work — but only 35 percent of IT managers support these personal mobile devices. The gap in support for workers' personal devices creates new layers of security risk for IT managers, who must set up additional controls to safeguard their networks.

### ADDRESS THE UNDERLYING FRICTION

If there's a root cause behind all this friction, it's because government agencies — and enterprises generally — have approached IT management from a “device-centric, rather than a user-centric, perspective,” says Robert Ruelas, vice president of end-user computing at VMware.

That is, IT departments have tended to focus on configuring devices and applications to work securely on their networks ahead of users' needs, at a time when users now prefer to use the apps and devices that work best for them.

One way to reduce the friction users experience on the job is to virtualize their digital work environments, so users can access and use applications independent of the device they're using, the operating systems they depend on or their location.

“Instead of managing the apps on users' devices, you move towards managing the applications for a user virtually,” Ruelas says. “Those applications could be dependent on a version of Windows, or they could be dependent on special hardware. But when we take advantage of the basic tenets of virtualization, which allow you to decouple the application from the OS, and also from the device, you can put that workspace in a secure data center and give users access to it, either remotely or from your workplace.”

Virtualized workspaces also give users the ability to log in once and be able to access every application in the environment. That's an important issue. Two in three users (64 percent) and half of managers (52 percent) in the FedScoop study ranked single sign-on to all applications on their devices among the top three things that would make government IT users more productive.

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— Robert Ruelas, VMware  
Vice President of End-User Computing

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### ADDITIONAL BENEFITS OF VIRTUALIZED WORKSPACES

Virtualizing workspaces also brings agencies' IT operations a host of other long-term benefits:

- 1. Reduce equipment costs.** Because virtual workspaces can operate on lighter-duty computing devices, agencies no longer need to invest in high-end workstations, desktops, laptops and multiple devices for individual users.
- 2. Improve security controls.** By reducing the number of devices issued to employees, IT managers can also reduce the number of usernames and passwords associated with all of those devices, and the potential security breaches that can arise from lost or stolen devices. More importantly, by putting virtual workspaces in the data center, agencies can introduce additional layers of centrally managed access and security controls, or request additional levels of authentication to re-validate users to ensure they are who they say they are.
- 3. Ease user access.** Virtual workspaces make it easier to create conditional access for users, which can recognize whether a user is logging in from an iOS, Android or other device, and automatically fit the application form to that device.
- 4. Increase ability to isolate agency data.** Virtualized workspaces also make it easier to keep agency data securely in your data center, and not on users' devices. Because the data is viewed and processed in the virtual digital workspace, there's less risk the data will fall into the wrong hands if an employee's device is lost or becomes compromised.
- 5. Lower application maintenance costs.** Moving users to virtual digital workspaces also makes it easy to automate application deployments and updates. This not only reduces IT workloads and management costs — from the help desk all the way to completing FISMA reports — and gives lean IT departments more of their time back; it also reduces duplicative licensing and software maintenance costs that add up over time.



## NETWORK ISSUES **HINDER** GOVERNMENT PRODUCTIVITY



Network Availability

Network Speeds/Latency



Lack of Wi-Fi Network Reliability

### IMPROVED NETWORK PERFORMANCE

Virtual digital workspaces can also help improve network performance, according to Ruelas. When users' virtual desktops and data live in the same data center, there is no need to transmit that data out and back to the user's devices, which reduces unnecessary traffic and latency over agencies' networks, he says.

This resonates with users and IT managers. Two-thirds of government survey respondents identified network-related issues as a key source of friction when accessing information for work, compared with only one-third of industry IT users. The top three network-related friction factors for government users include network availability, network speeds and latency and lack of Wi-Fi network reliability.

Ruelas pointed to network improvements and equipment savings at one of VMware's global automotive manufacturing customers — comparable in scale to many federal agencies — where company engineers transfer very large data files to graphics-intensive workstations costing up to \$20,000.

"When we virtualize these workstations, we do a couple of things: We virtualize them and put them in the data center; and we put the data in the data center as well. When the user or engineer logs into their virtual desktop, they've got immediate access to those files. There's no need to actually transfer those files from the network or from a centralized location into your individual workstation," he said.

"The beauty also is that engineer is usually only using that workstation three hours a day. When that workstation is not in use, it's of no value to anyone else. When we put it in the

## Nearly 6 in 10 government IT managers

believe a digital workspace that serves up a standardized IT environment, regardless of device or location, would make users more productive.

data center as a virtual desktop, one agent or engineer is using that desktop for two hours; then the next engineer can access it for the next couple of hours, so you're driving much higher utilization factors in terms of that engineering workstation operating as a virtual desktop. It's like putting up to 25 engineers on a server versus 25 different workstations that you would buy, and have to maintain," he explained. There are also savings by standardizing the virtualized operating systems.

"What we've found is that you can get...at least 60 percent capital expenditure savings, but the other benefit is that it's also not going to overload your network with files being transferred to 25 different engineers," he said. And because it's a virtual desktop or workstation, "you press a button and you're updating the latest OS on all of those workstations."

Virtualization also streamlines the work of moving applications and data to the cloud, regardless of whether those assets are stored on a private cloud within an agency's own data center, or in a secure government cloud located off premises, Ruelas said. It also eases the job of moving those assets from one cloud or data center to another, or to multiple clouds, he said.

IT managers see the value of virtual digital workspaces, according to FedScoop's [research](#). Nearly 6 in 10 government IT managers believe a digital workspace that serves up a standardized IT environment, regardless of device or location, would make users more productive.

"The reality is most IT leaders right now are struggling with pent-up demand. The consumer environment that we all live in is impacting what we believe is possible for digital workspaces, and there's a huge gap between what [workers can do on their personal devices] and what IT can actually deliver," he said. "I think the IT leadership knows what they can do, but the challenge is being able to do it."

For more on how Virtualized Workspaces can help your IT operation, go to...

<https://www.vmware.com/it-priorities/empower-digital-workspace.html>

[Download](#) the full Government Workforce Productivity Report.

