

# Making Telework a Reality in the Federal Government with VMware Horizon View

## AT A GLANCE

The VMware® Federal Secure Desktop™ solution, built on VMware Horizon View™ and partner products, provides a fully validated solution for federal agencies to help adopt the telework initiatives mandated by the Federal Telework Enhancement Act of 2010. The solution is custom-built to meet the stringent security and scalability requirements of federal agencies, while reducing operational expenses and accelerating agency implementation of the Digital Government Strategy.

## KEY BENEFITS

- Compliance with the Federal Telework Enhancement Act of 2010
- Reduced real estate costs
- Improved employee satisfaction and work-life balance
- Continuity of operations
- Reduced or eliminated commute time and costs
- Accelerated Digital Government Strategy implementation

The Telework Enhancement Act (Public Law 111-292) was signed into law in December 2010—ever since then telecommuting or telework has gained momentum as a strategic organizational program, in all levels of government. The 2013 *Status of Telework in the Federal Government* report illustrates a growing government-wide commitment to incorporate telework as a standard practice, as agencies continue to refine and improve its implementation.

According to the 2013 report on telework status:

- The number of employees deemed eligible for teleworking increased by 49 percent since 2011 to 1,020,034 employees.
- The number of employees with telework agreements increased by 84 percent since 2011 to 267,227 employees.

These numbers show a growing adoption of telework as a standard employment practice. The VMware Federal Secure Desktop solution, built on VMware Horizon View, helps federal agencies implement and comply with the Federal Telework Enhancement Act. The solution is prevalidated with all the required components, including VMware and partner products, to help agencies accelerate their implementation.

## Delivering Secure Desktops and Applications

The Federal Secure Desktop solution provides resiliency, security, and access to applications anytime, anywhere, from any device, removing employee dependency on physical systems. Applications and desktops reside in the datacenter, which significantly enhances their security and availability. With the Federal Secure Desktop solution, government agencies can quickly ramp up their teleworking workforce, allowing users to work from anywhere, all the while increasing infrastructure security with built-in management and monitoring components.

### Connection Sequence

- User connects to View Connection Server and authenticates via Https
- When a PCoIP desktop is selected, the PCoIP protocol goes to the Security Server
- If the PCoIP session is on behalf of an authenticated user it is forwarded to the correct desktop
- Support for RSA SecurID and SmartCards

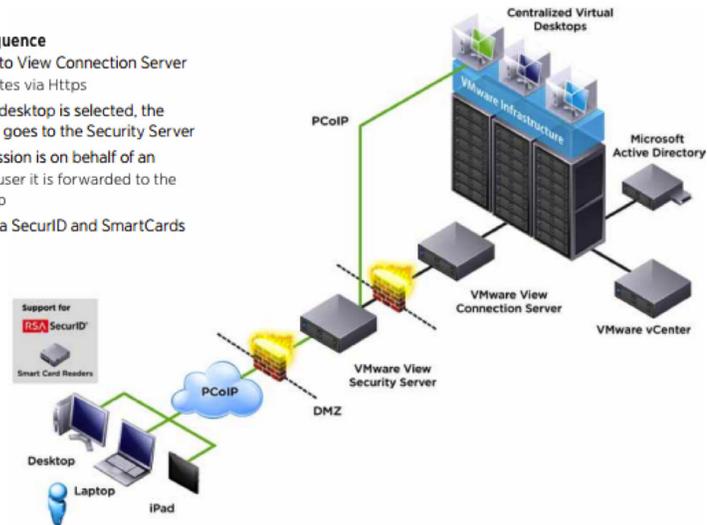


Figure 1: Federal Secure Desktop Connection Sequence

## The VMware Federal Secure Desktop Solution Is Telework Ready

- Supports enhanced mobility, and allows secure anywhere, anytime access from any device for all desktops and applications
- Supports all federal standards and regulations governing telework, including access mechanisms like Personal Identity Verification (PIV), Department of Defense Common Access Cards (CAC), and SIPRNet Hardware Token access cards
- Certified to Common Criteria EAL 4+ for VMware vSphere®
- Enhances organization COOP plans and improves employee productivity

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*“VMware Horizon View enables IT to centralize software management, reduce hardware support, and speed application deployment, so that wherever a government employee logs in to the system around the world, he or she gains fast, secure access to a common set of critical resources.”*

– Devin Henderson,  
Project Systems Architect  
supporting a U.S. Federal  
Defense Agency

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With built-in Secure Sockets Layer (SSL) encryption, the Federal Secure Desktop solution offers federal IT organizations strong network security to protect sensitive data. SSL tunneling ensures that all connections are completely encrypted. The solution also supports the use of traditional virtual private network (VPN) solutions, and can integrate with an agency's existing VPN solution. Furthermore, the solution is fully validated with federal Personal Identity Verification (PIV) access cards, Department of Defense Common Access Cards (CAC), and RSA SecureID, providing the added security of two-factor authentication for access control.

By locating desktops and applications in the datacenter, an agency can also manage their environment more efficiently by rapidly creating and maintaining desktop images from a single parent image. The solution also helps IT agencies to scale on demand, and control costs by reducing the infrastructure footprint required.

## Beyond Legislation

The Federal Secure Desktop solution, in addition to helping agencies comply with legislative mandates, also provides the following benefits:

### Reduced Real Estate Costs

Teleworking helps federal agencies reduce their operational expenses directly by reducing the real estate costs required for their employees. It is estimated that by implementing full-time teleworking, an agency can save \$10,000 per employee each year. Partial teleworking, as practiced by many federal agencies, allows agencies to significantly reduce their office footprint, thus saving on real estate, power, and cooling costs. The General Services Administration, for example, has created open workspaces and a system where 80 percent of the workspaces are unassigned, thus increasing its office capacity from 2,500 to 4,400 people.

### Continuity of Operations (COOP)

Federal agencies are in the process of improving their COOP plans to ensure that essential federal functions continue during emergency situations. With the VMware Federal Secure Desktop solution, an agency can get a head start in ensuring that the availability of desktop and applications services for end users is never affected by any disaster, natural or otherwise. By hosting critical services in the datacenter, an agency can allow users to access their desktops and applications from anywhere, anytime. Since the solution has COOP and BCDR built in, it serves as an everyday testbed for COOP, eliminating the need for agencies to test the infrastructure for disaster recovery frequently.

### Increased Employee Productivity

One of the key benefits of telework is the increase in employee morale, retention, and productivity. The Congressional Budget Office estimated that the entire five-year cost of implementing telework throughout the federal government is less than a third of the cost of lost productivity from a single-day shutdown of offices in Washington D.C. In addition to helping agencies save money, telecommuting allows employees to save commute costs, which can help their personal finances. The flexibility of telework provides greater work-life balance, and helps keep employee morale high, which increases productivity.

### Enhanced Security

One of the biggest challenges in adopting telework is security. Agencies must ensure that their data stays secure even when accessed from outside the physical security perimeter of their building. The VMware Federal Secure Desktop solution keeps all data, including desktops and applications, inside the agency datacenter, with view-only access to employees from any device. The solution uses PC over IP (PCoIP), a FIPS 140-2 certified protocol, to deliver a high-performance desktop experience for teleworkers, even over high-latency and low-bandwidth connections. PCoIP is an adaptive protocol that provides

## Federal Telework – Quick Facts

- Federal Telework Enhancement Act signed into law December 2010
- 32 percent of all U.S. federal government employees are eligible to telework\*
- \$383 million savings in reduced employee turnover\*
- \$570 million savings in reduced absenteeism\*
- \$1.5 billion savings in office costs
- \$2.9 billion savings in productivity gains\*

\* Source: 2012 Status of Telework in Government

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*“Work is what you do,  
not where you are.”*

– Martha Johnson,  
Administrator of the General  
Services Administration

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the best experience for employees, no matter which device they use. With this setup, the data never leaves the datacenter, and with the integrated management and monitoring components in the solution, access can be controlled and monitored with very granular policies that suit the agency's requirements.

## Policy Enforcement

As agencies implement the telework program, employees are added and removed per their roles and responsibilities. Creating a robust policy framework to manage remote workers in the program is crucial to ensuring the program's success. With the VMware Federal Secure Desktop solution support for Online Certificate Status Protocol (OCSP), Certificate Revocation List (CRL) updates, and centralized Active Directory policy management and control, an agency can update or revoke teleworker access to network resources, thus providing a critical management component to enforcing telework access policies.

The solution also supports comprehensive auditing and information control for the entire infrastructure, enhancing agency compliance with regulations.

## Summary

The VMware Federal Secure Desktop solution delivers a comprehensive solution for the teleworking requirements of federal agencies. The solution helps government agencies quickly implement the Federal Telework Enhancement Act of 2010 while accelerating time-to-value in realizing a multitude of benefits. These include increased employee productivity, enhanced security, reduced real estate costs, and compliance with continuity of operations.

## Learn More

For additional information on how VMware can help your organization achieve compliance with the Federal Telework Enhancement Act, or to purchase VMware products, call 877-4-VMWARE (outside of North America dial 650-427-5000), or visit [www.vmware.com/products](http://www.vmware.com/products) or search online for an authorized reseller.

