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Desktop-as-a-Service (DaaS) for Government:

How to Centralize IT & Apps for State, Local, and Federal Government

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Introduction: Revolutionizing Government IT

DRIVERS FOR DAAS IN GOVERNMENT

Technology continues to transform government, from local to state and federal. Throughout every constituent, agencies are working toward fully digitalizing systems and workspaces both for federal employees and citizens accessing government services, and for good reason.

By making organizational changes and embracing digital transformation, the government has the power to improve services, achieve cost savings, and significantly improve quality of life for citizens. Not to mention, digitalization makes it possible for the government to provide services that meet today's ever-evolving expectations of citizens and businesses; even during times of budget constraints and complexity challenges (McKinsey&Company). [1]
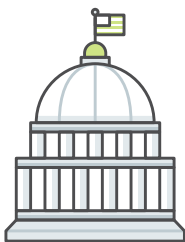
$80
The federal government invests more than $80 billion on information technology (IT) annually (GAO.)[2]

$1trillion
Using modern technology, government digitalization has the potential to generate over $1 trillion globally each year (McKinsey&Company).[1]

As a result of the growing reliance on digital solutions, the government is moving from traditional on-premise-based IT hosting solutions to consolidated, commercial and private cloud deployments. The U.S. Federal CIO's Cloud Computing Strategy, commonly referred to as "Cloud Smart," plays a pivotal role in modernizing federal information technology. Government agencies are looking to become more agile and transition from on-prem solutions that require physical storage resources to cloud-based applications that leverage private cloud infrastructure. However, data security and compliance risks are a heavy burden, so selectivity is important when it comes technology vendors.

Government agencies are evaluating an ever-growing menu of services that include IaaS, PaaS, and SaaS capabilities to improve customer-facing services, accessibility, and cybersecurity. Desktop as a Service allows government IT providers to leverage a cloud-hosted solution for managed desktop and application delivery.

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Obstacles to digital transformation within federal agencies

TRANSFORMATION COMES WITH COMPLICATIONS

Government-specific technology challenges may differ slightly from local to state and federal, but they have shared links. Cyberthreats, procurement, and acquiring new technology are all difficulties agencies face in the digital world (GovLoop).[3]
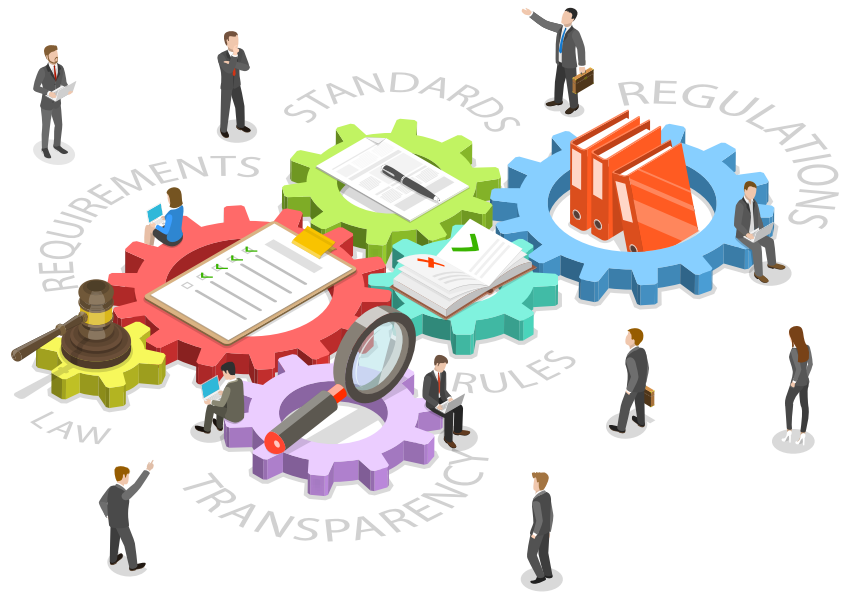

Government is being impacted by the demands of end users and citizens as significantly as other industries. The pressure to make government services digital is on, from putting claim processes online to standing up websites for a multitude of departments (Deloitte).[4]

Cloud services are no exception, and they're critical for successful digital transformation within government. Both citizens and employees become frustrated quickly with delays in easy access to applications, information, and services, calling on the government to adapt. Cloud strategy is its own challenge; choosing the right service and deployment models, data ownership, and management are continual obstacles.

The always-on, digital world is creating the need for the government to make it easy for end users to consume resources. Federal employees need seamless access to their desktops and applications, and DaaS is the simplest way forward without placing additional strain on government IT teams with limited capacity for managing traditional on-premise virtual desktop infrastructure. DaaS allows government IT providers to leverage a cloud-hosted solution for managed desktop and application delivery.

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COMPARING DAAS VERSUS VDI: DIFFERENCES AND POTENTIAL DEAL BREAKERS

Traditional VDI   Xi Frame
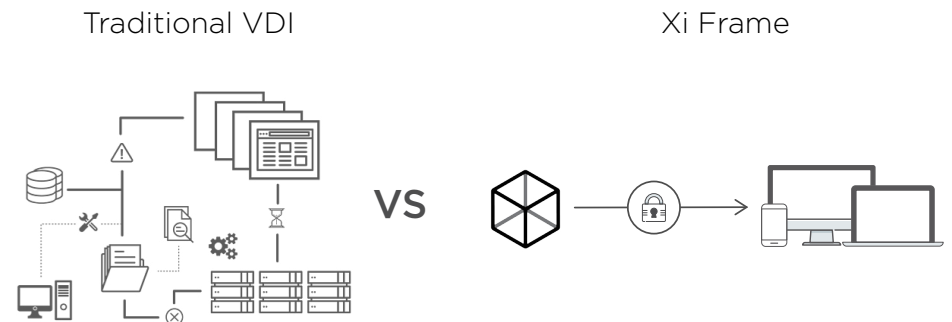
When it comes to desktop virtualization, there are two options in the government space: virtual desktop infrastructure or DaaS. Traditional on-premises VDI can be complex, and often overwhelming for government IT teams with limited training and upskilling budgets. It's also CAPEX heavy, and software issues, hardware failure, and any other unexpected troubleshooting problems have to be fixed in-house, which can be stressful and expensive if expertise is lacking or new equipment needs to be purchased, depending on the necessary remediation.

Traditional VDI was designed to deliver capabilities on-premises where network conditions are well-known and fairly easy to control. This also presents government IT shops with challenges in terms of deploying desktop services to distant users where network conditions are less than favorable.

Overall, traditional VDI creates the burdens of:
• Large upfront capital expenditures
• High-touch administration requirements
• Long integration cycles
• Recurring hardware refresh needs

On the contrary, DaaS offers an on-demand, pay-as-you-go model that is easier for government agencies to consume. As opposed to VDI, the entire solution management and maintenance can be outsourced to an experienced partner in VDI, leaving IT team and agency decision makers to focus on their use cases. The provider manages the platform, which consists of the stack, maintenance, and hardware

The Value of Desktop as a Service in Government

The need to simplify operations and find solutions that can accommodate the demands of digitalization in government is a looming pressure, in conjunction with providing a better end user experience for citizens and government workers alike.

By providing a fully managed, turn-key DaaS solution, government CIOs and IT leaders will no longer face large capital expenditures; they can leverage DaaS as a 100% OpEx-based, metered service. Agency IT teams can reduce complexity and refocus their energies on their people: the most valuable resource that can positively impact government initiatives. Further, DaaS enables the ability to leverage modern solutions that deliver advanced capabilities to nearly any location on earth. Our recommendation for a DaaS solution that resolves government-specific technology challenges: Nutanix Xi Frame for Government.

When government agencies opt for DaaS as opposed to VDI, CIOs and IT leaders are empowered to offer end user computing easily. Administrators can provide workstations without hardware setup. Plus, any system administrators can easily test hardware and software profiles (TechRepublic).[5]

HOW NUTANIX XI FRAME FITS INTO GOVERNMENT, FROM LOCAL TO STATE AND FEDERAL

| FEATURES	BENEFITS
• End-point security: implemented as an integral part of our solution, Nutanix Frame allows customers to turn any end point into a near zero client device.	• Test drive the platform in demo environment before making a purchasing decision.
• Platform security: We focus on the most stringent controls for our platform service and allow customers to complete transparency into the configuration and operation of their desktops/apps.	• Subscription-based without huge upfront CAPEX costs to upgrade. • Xi Frame allows administrators the ability to scale to the needs of your agency, measured in minutes and hours, not days/months/years, providing the ultimate in scalability.
• VM security: each VM is returned to it's original known good state after every single user session.	
• Performance of H.264 protocol.	
• Ability to lockdown only apps that employees need to use and eliminates potential security risks.	
• Native integration with cloud storage providers.	

Xi Frame

Fast Facts:

• In August 2016, Xi Frame achieved SOC 2 certification. Nutanix runs regular penetration tests and works with third-party security specialists, as well as our infrastructure partners, like AWS and Microsoft Azure, to keep systems safe and secure.

• Xi Frame is FedRAMP Ready. The FedRAMP PMO has reviewed and approved a Readiness Assessment Report (RAR), documenting Xi Frame's ability to meet FedRAMP security requirements.

DaaS the Nutanix Way: Xi Frame for Government

XI FRAME GIVES YOU THE POWER TO:

✓ Work from anywhere.

✓ Lower costs by getting rid of on-premise server equipment.

✓ Collaborate just by sharing a link.

✓ Eliminate expensive workstations and wait times for machines.

✓ Configure and troubleshoot employee devices from a single dashboard.
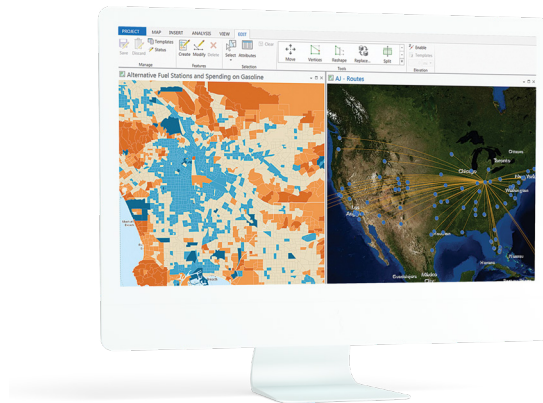
Xi Frame is the only true pay-as-you-go end-user computing cloud platform that charges customers for what they use, and nothing more. Unlike a traditional, fixed-cost VDI model, Xi Frame eliminates the frustration of provisioning resources for peak capacity that usually go unused.

Not to mention, when it comes to government, budgets, administrators, and strategies are always changing. Xi Frame is the only cloud agnostic solution on the market, which frees government agencies from vendor lock-in. With Nutanix Xi Frame for Government, agencies can enjoy the same benefits and seamless collaboration as they scale and potentially change providers.

It's worth noting that many DaaS solutions offer basic systems that only include standard Windows software, which requires the IT department to supply and configure anything users may need to do their jobs. This is not the case with Xi Frame; Windows apps run unmodified, allowing the same installation experience as on a PC. The Xi Frame system then automatically detects new applications for onboarding. A few clicks publishes onboarded apps to our elastic cloud.

The Nutanix approach to DaaS is about simplicity. We make technology easy to adopt and ensure testing is thorough. As an added bonus, our large partner ecosystem can accommodate customers globally throughout our channel.

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What Makes Nutanix Xi Frame Different From Other EUC/DaaS Vendors?

|	
Born and built for the public cloud	We built Xi Frame from scratch for the cloud age. The platform includes everything needed to deliver standalone applications or back-end integrated (identity, network, storage) applications. There's no need to access Amazon Web Services (AWS) or Microsoft Azure interfaces in order to use the Xi Frame service, removing the complexity. However, customers have the option to bring their own IaaS billing account.
True multi-cloud	Xi Frame is IaaS provider-agnostic, leveraging the worldwide coverage of both AWS and Azure cloud regions. You can run workloads in any region on AWS and Azure public cloud, AWS GovCloud, Azure Government, and AWS C2S.
Powerful GPU and CPU options	Xi Frame supports burstable CPUs, fixed CPUs, single Graphics Processor Unit (GPU) instances, quad GPU instances, and even elastic GPUs.
Dedicated instances and cost control	While competitors might use Windows terminal services, where multiple users must share a single operating system and virtual machine (VM), Xi Frame provides a dedicated VM to each user. This ensures consistent, top-notch performance, which means no "noisy neighbors."
Frame Super Admin	The Xi Frame Super Admin interface provides Independent Software Vendors (ISVs), Original Equipment Manufacturers (OEMs), Managed Service Provider (MSPs) and enterprises with the capability to manage multiple accounts across regions, change account settings, clone systems, and much more.
Familiar and simple from any browser	Run applications and desktop environments in Microsoft Edge, Safari, Firefox, Chrome, and other browsers. No plug-ins, downloads, receivers, or agents are required.
Streaming of apps and delivery of a desktop in the same service	Customers can access the remote Windows desktop interface (desktop mode), or stream one or multiple applications to any device (application mode). Administrators always use the same console on the same Xi Frame platform to manage both applications and desktops, with full control over user access to either desktops or applications.
Flexible licensing	In order to support the variety of use cases and integrations needed by customers, we provide plenty of pricing options, including per-user subscriptions and usage/utility based licensing. Customers usually use our IaaS subscription for one bill with competitive pricing, but we also support BYO subscriptions for AWS and Azure, making it easy to provision resources into a customer's own IaaS account.
Putting the focus on ISVs and businesses	A Xi Frame Platform account has unique capabilities suited for ISVs, OEMs, and MSPs. Xi Frame for Business is best-suited for enterprises, government agencies, and education customers. The code base remains the same; what's different is the different licensing and service functions to address specific use-cases.

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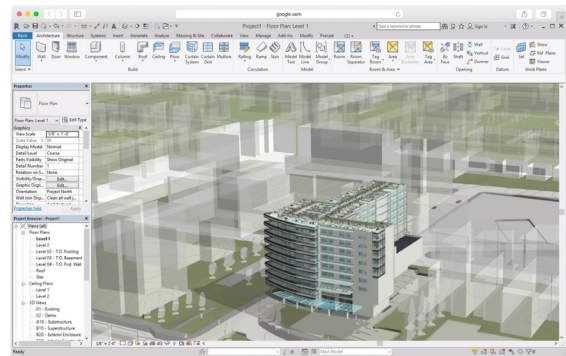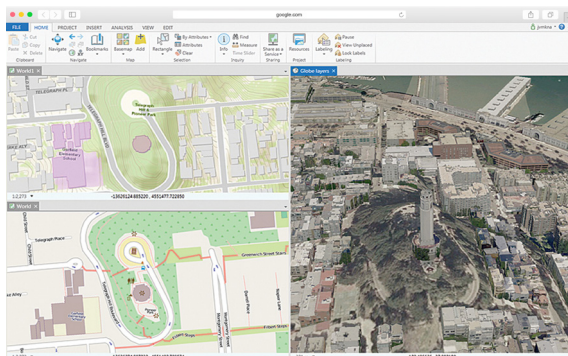
Conclusion: What You Really Need to Know About DaaS

To put it simply, DaaS is a clear winner for government agencies who are looking to increase operational efficiencies by offloading complex, non-differentiated traditional desktop services. Though there are numerous DaaS providers available, Nutanix Xi Frame is the only multi-cloud/hybrid offering in the digital workspaces segment and is the most suitable solution for accommodating the fluid needs of the government.

If you're a CIO or IT decision maker for a government agency, here's what you need to know:

1.DaaS provides the most simple desktop virtualization consumption model.

2.DaaS is a cost-effective approach to desktop virtualization.

3.Due to a flexible, convenient consumption and delivery model, Nutanix Xi Frame is the most fitting option for government agencies seeking DaaS services.

To see Nutanix Frame in action, take a test drive! Itching to check it out now? Get started at https://www.nutanix.com/products/frame/.

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Nutanix makes infrastructure invisible, elevating IT to focus on the applications and services that power their business. The Nutanix enterprise cloud platform leverages web-scale engineering and consumer-grade design to natively converge compute, virtualization and storage into a resilient, software-defined solution with rich machine intelligence. The result is predictable performance, cloud-like infrastructure consumption, robust security, and seamless application mobility for a broad range of enterprise applications. Learn more at www.nutanix.com or follow us on Twitter@nutanix.