



# VDI and Beyond: Addressing Top IT Challenges to Drive Agility and Growth

Citrix XenDesktop with FlexCast mobilizes  
the modern workforce

App and Desktop virtualization can be a powerful driver of business transformation, making it possible to deliver the apps, desktops and data people depend on whenever they need them, on whatever device best supports their productivity. But app and desktop virtualization is far from a one-size-fits-all solution—there are many ways to meet users' needs, each with its own costs and benefits. To realize the full value of app and desktop virtualization, you need the flexibility to deliver virtual apps and desktops using a variety of methods to balance user requirements, cost and manageability in the right way for each use case in your organization.

A comprehensive app and desktop virtualization solution, Citrix® XenDesktop® with FlexCast® technology enable enterprise IT to deliver Windows-as-a-Service— always-on, highly secure and seamlessly mobile. From simple VDI to advanced app delivery, IT gets the flexibility to support today's complex workforce — easily and securely. XenDesktop, including the full power of Citrix XenApp®, flexes with your needs, whether your priority is to mobilize Windows apps, take a more strategic approach to desktop refresh, or enable self-service desktops and apps on BYO laptops and tablets. At the core of this solution is FlexCast technology that provides a rich set of capabilities across a broad range of use cases. These FlexCast use cases are uniquely provided by XenDesktop with XenApp. No other solution can precisely deliver the right experience while optimizing IT resources.

This paper explores a collection of compelling FlexCast use cases to highlight how XenDesktop can drive a modern, mobile workforce toward greater agility and productivity, one project at a time.

### **IT can deliver FlexCast technology to empower the entire workforce**

App and desktop virtualization allow IT to address a broad range of business priorities, from empowering workers across remote and branch locations to mobilizing Windows apps on any device. But just as there's more than one use case in the enterprise, there's more to app and desktop virtualization than VDI—it takes a broad, flexible solution to solve each business challenge in the right way. XenDesktop, with the integrated power of XenApp, uniquely combines a range of virtualization and management technologies at the touch of a button so you can address each scenario more cost-efficiently while meeting specific user requirements for mobility, security, performance, flexibility and personalization.

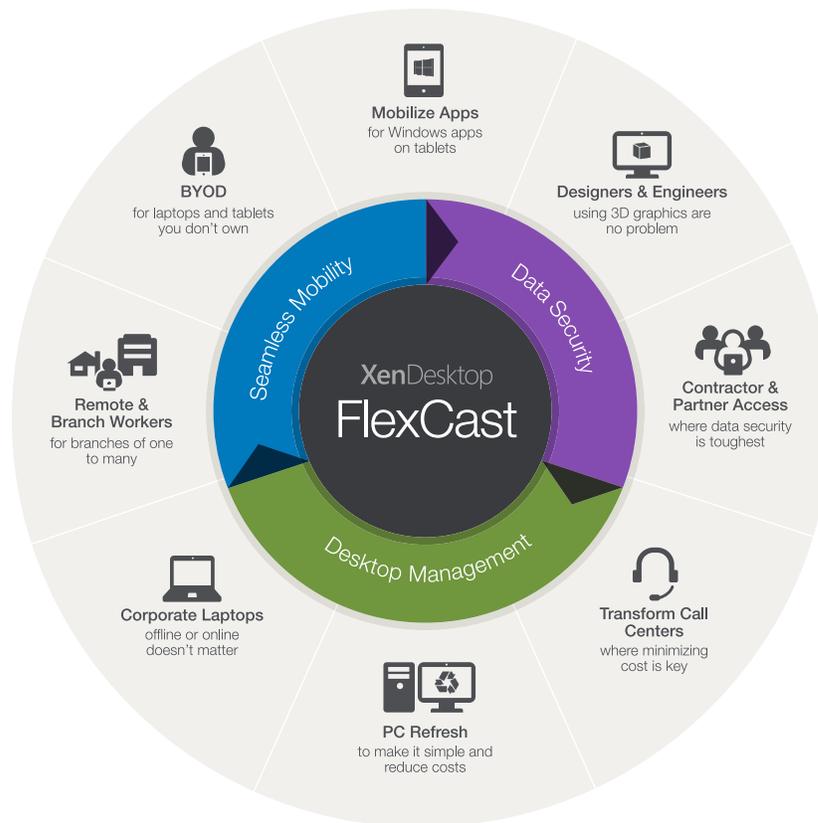


Figure 1: XenDesktop with FlexCast technology addresses today's top use cases for Windows-as-a-Service

IT needs a solution that can match the needs of a diverse workforce and provide each user with the individual, personalized app or desktop that aligns to their specific business needs and work style. XenDesktop leverages FlexCast technology to address today's top IT use case scenarios by providing IT with prescriptive guidance for key FlexCast use cases. The XenDesktop solution includes the full power of XenApp and Citrix NetScaler®, from a networking perspective. Citrix NetScaler and Citrix NetScaler Access Gateway optimize the delivery of virtual apps and desktops while ensuring performance, availability and security SLAs. The following examples explore select FlexCast use cases and showcase how XenDesktop can address even the most complex user scenarios:

### Mobilize Windows apps on tablets

Tablets are rapidly gaining popularity in the enterprise, enabling convenient mobile productivity for all types of users, from engineers to doctors to salespeople. However, Windows-based apps are typically optimized for a full-size screen and rely on right-click inputs for full functionality. For tablets to fulfill their potential, they need to be able to provide the full functionality of these apps through touch-screen inputs that yield a satisfying user experience. With XenDesktop including XenApp app virtualization technology, it all works the way it should.

XenDesktop lets IT deliver seamless, secure access to desktops, apps and data on mobile devices anywhere, over any network connection. XenDesktop includes HDX Mobile optimizations that transform Windows apps for use on tablets, translating multi-touch gestures, finger swipes and inertia scrolling into smooth navigation and scrolling commands. Users gain the ability to work with dropdown boxes, enlarged controls and automatic keyboard pop-up when touching a text field—without the need for source code changes.

For people on-the-go, access to the right app at the right moment—on the tablet in their hand, with no need to deliver a complete desktop to the tablet—can make all the difference. This scenario is best supported with Windows apps hosted on a XenApp server in the datacenter and delivered to the tablet. With XenApp, IT can make that distinction and meet specific needs as a mobile user navigates through a variety of locations and uses multiple devices through the day.

### **Deliver virtual 3D graphics apps for designers and engineers**

To keep pace with fast-moving competition, design firms and manufacturing companies need to accelerate time to market by enabling global collaboration. Sharing large design files via FTP, email and similar ad hoc methods has become impractical and risky and fails to reflect changes in real-time; in industries like these, yesterday's data is simply too old.

With XenDesktop 3D Pro technology, designers and engineers can access centralized 3D graphics workstations, apps and design data from anywhere in the world, in real-time, on any device they choose—and even use tablets to take designs right to the manufacturing floor. Data remains in the datacenter at all times, helping IT maintain security and control over intellectual property even as their workforce and computing environment become more mobile, distributed and diverse.

### **Provide contractor and partner access where data security is toughest**

Contractors, partners and other third-party contingent workers need access to Enterprise apps and data to be productive—but you don't want to allow just anyone onto your network, and you'd like to avoid the expense of a large fleet of loaner laptops.

With XenDesktop, contingent workers can access virtual desktops and apps using thin clients or their own laptops, without having to join your network. Access can be granted in moments at the beginning of the project, then turned off and recycled just as quickly on its completion. Data remains within the datacenter and never resides on the thin client or personal laptop, helping the organization maintain strict data security and compliance.

### **Simplify PC refresh and reduce costs**

Traditional, costly PC refresh cycles are quickly becoming a thing of the past. Instead of replacing computers every three years or so, IT can extend their useful lifetimes by using XenDesktop to shift processing to the datacenter. Existing PCs can also be replaced with inexpensive thin clients to reduce both capital and operating expenses. IT gains a simpler way to ensure an up-to-date computing experience for all users while leveraging the security benefits of a centralized app and desktop virtualization architecture.

PC refresh use cases can span many requirements. For some, a locked down desktop with personalization applied at login can be extremely cost-effective with no need to persist the environment beyond a login. For other users, full personalization may be required, including the ability to install their own apps that persist beyond a reboot. Even for the most compute hungry users, FlexCast technology allows administrators to deliver any type of app and desktop as a service.

### **Allow BYOD for laptops and tablets**

Personal devices are flowing into every organization as people seek the freedom to work their way. It's too late to bar executives, salespeople, doctors, knowledge workers and other high-value employees from using the devices of their choice, and it would be counterproductive to do so anyway. Instead, you need to find a way to deal with the ad hoc BYOD that already exists in your environment.

XenDesktop with XenApp provides a simple way to support BYOD without adding complexity or sacrificing security. People can access their desktops, apps and data on any device they choose without having to join the corporate network. Citrix DesktopPlayer™ for Mac lets users run Windows desktops on a MacBook laptop—even while offline. IT gains a single point to manage access control and limit actions based on both user identity and the endpoint device, providing better application security, data protection and compliance management.

Core to delivering Windows-as-a-Service for BYOD is a seamless login process that leads the user to an enterprise StoreFront, where users select the apps or desktop they want to use, leaving them one touch away from launching apps as simply as they do any native app on iOS, Android, Blackberry, Mac, Linux or Windows.

### **Empower mobile and branch workers**

To support mobile employees and those working in branch locations, you need a way to provide access to desktops, apps and data without opening risky holes in your corporate network. XenDesktop with Citrix NetScaler Gateway™ lets IT provide these users with seamless, secure access to their virtual desktops, apps and data—even on their own BYO devices—without having to join your corporate network. NetScaler allows any network connection to be used, including a local Internet provider, eliminating the need for costly leased lines. IT can easily provision, maintain and support virtual desktops and apps from a single, central point, while capturing large savings in networking fees.

XenDesktop integrates with CloudBridge™, a Citrix networking technology that optimizes web traffic for Citrix ICA® connections, caches video traffic, and prioritizes remote traffic to ensure a high performance experience. As a result, branch offices can support many more workers on whatever connections they have. Many organizations deploying to branch offices skip private connections altogether. They simply leverage local internet service providers and route all remote traffic through NetScaler load balancers and the NetScaler gateway ICA® proxy for ultimate security.

### **Support corporate laptops—both online and offline**

Corporate laptops pose significant challenges for IT. As people move on and off the corporate network at will, how do you ensure that all updates and patches are applied, and that data is being backed up? How do you support and service these devices as they travel far and wide?

XenDesktop provides a complete, effective solution for corporate laptops. IT can deliver images even while users are offline, using centralized management to apply patches and updates in the background. A failed or lost device can easily be replaced—the user simply moves to another laptop or any other device for instant access to hosted desktops, apps and data. Meanwhile, full encryption on the endpoint ensures that even a lost laptop won't compromise security. As a result, people using corporate laptops can achieve full, unrestricted productivity wherever they work—even offline.

### **Transform call centers to minimize costs**

Large-scale call centers can pose significant operational challenges: how do you maintain adequate staffing for peak periods without overstaffing—and overprovisioning PCs and office real estate—for the less busy times in between? App and desktop virtualization offers a way to ensure adequate coverage throughout the day while minimizing costs. Instead of maintaining peak staffing on-site, organizations can enable dozens, hundreds or even thousands of part-time call center operators to work remotely on a schedule tailored to actual demand.

A common use case for application and desktop virtualization, XenDesktop transforms call centers into lean, decentralized organizations that are highly scalable and cost efficient. Operators can be provided with standard, locked-down virtual desktops that include only the two or three apps their work requires, computer telephony integration (CTI), VoIP and video for training. A range of more complex desktops can also be provided as needed, just as easily. Each app and desktop delivery method is available to meet business requirements, from locked-down, RDS-based desktops, to fully personalized and persistent VDI-based desktops, to a locally executed desktop with seamless, secure app delivery.

### **App and desktop virtualization solution checklist**

As you evaluate app and desktop virtualization solutions, make sure the one you choose provides the full set of capabilities required to support every use case in your organization—now and in the future—for long-term business value.

- Deliver apps or complete desktops in the most cost-efficient way possible for each use case
- Provide highly secure, seamless remote access to apps and desktops
- Optimize Windows apps for tablets and other mobile devices
- Deliver the full power of seamless, personalized virtual desktops—even offline
- Leverage the low-cost scale of XenApp to deliver the lowest cost virtual apps and desktops

## Conclusion

Providing the flexibility to address any desktop virtualization use case in the right way, XenDesktop with FlexCast technology simplifies adoption by allowing you to set your own priorities and agenda. Instead of segmenting users or seeking use cases that fit vendor-driven criteria, you can choose the project with the greatest immediate need and get started easily. The solution's versatility enables you to meet current needs while future-proofing your app and desktop virtualization strategy. As you gain experience and confidence with XenApp and XenDesktop, you can extend the same infrastructure to address additional challenges and use cases, each with its own optimal delivery method, cost model and user experience.

## Additional Resources

[Citrix XenDesktop FlexCast use cases](#)

[Citrix XenDesktop](#)

[Citrix XenApp](#)

**Corporate Headquarters**  
Fort Lauderdale, FL, USA

**Silicon Valley Headquarters**  
Santa Clara, CA, USA

**EMEA Headquarters**  
Schaffhausen, Switzerland

**India Development Center**  
Bangalore, India

**Online Division Headquarters**  
Santa Barbara, CA, USA

**Pacific Headquarters**  
Hong Kong, China

**Latin America Headquarters**  
Coral Gables, FL, USA

**UK Development Center**  
Chalfont, United Kingdom



### About Citrix

Citrix (NASDAQ:CTXS) is a leader in mobile workspaces, providing virtualization, mobility management, networking and cloud services to enable new ways to work better. Citrix solutions power business mobility through secure, personal workspaces that provide people with instant access to apps, desktops, data and communications on any device, over any network and cloud. This year Citrix is celebrating 25 years of innovation, making IT simpler and people more productive. With annual revenue in 2013 of \$2.9 billion, Citrix solutions are in use at more than 330,000 organizations and by over 100 million users globally. Learn more at [www.citrix.com](http://www.citrix.com).

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