

Five customers deliver virtual desktops and apps to empower a modern workforce

Using Citrix XenDesktop with FlexCast technology to deliver the right experience to every user.

Application and desktop virtualization allows IT to address a broad range of business priorities from empowering workers across remote and branch locations to mobilizing Windows apps on any device. At the same time, an all-at-once, one-size-fits-all implementation is neither realistic nor desirable for most enterprises. IT's plans for app and desktop virtualization need to align with corporate budgets and priorities, and provide the right desktop in the right way for each user.

A comprehensive app and desktop virtualization solution, Citrix XenDesktop with FlexCast technology enables enterprise IT to deliver Windows as a Service in the right way for each use case. Whether your priority is to mobilize Windows apps, modernize your approach to desktop refresh, or enable self-service apps and desktops on BYO laptops and tablets, XenDesktop provides the flexibility to address key use cases first, then move on to additional use cases as projects are budgeted. IT gains the benefits of security and centralization while cost-effectively delivering the right kind of virtual desktop experience to each user—all through a single solution.

This paper highlights the experiences of five real-world Citrix customers and discusses the resulting business benefits, with use cases including:

- Mobilize Windows apps on tablets
- Deliver virtual 3D graphics apps for designers and engineers
- Provide contractor and partner access where data security is toughest
- Transform call centers to minimize costs
- Simplify PC refresh and reduce costs
- Support corporate laptops—both online and offline
- Empower remote and branch workers
- Allow BYOD for laptops and tablets

Delivering the right apps and desktops the right way to every user

Application and desktop virtualization can deliver a broad range of business value for the enterprise. Freeing people to work in more places, on more devices can help the organization recruit and retain the best candidates and empower them to do their best work. By securely providing access to apps and data for employees anywhere in the world, IT can accelerate the benefits of outsourcing, branch expansion, acquisition, reorganization and other strategies for growth. At the same time, a broad implementation seeking to address every user in the enterprise is beyond the strategic scope and budget of most IT organizations. Instead, IT needs a way to address the most urgent business needs first, then expand the implementation project-by-project as new priorities are defined and budgeted. IT also needs the flexibility to solve each business challenge in the right way for each use case in the organization, from simple VDI to advanced app delivery—easily and securely.

Additional Citrix products complete and extend the solution to address additional needs now and in the future. The Citrix Receiver universal client delivers a consistent experience on PCs, Mac computers, tablets, smartphones and thin clients, and provides self-service access for all of a user's Windows, web and SaaS applications, secured through single sign-on and two-factor authentication. An enterprise app store, delivered through CloudGateway, presents people with a consumer-like experience for choosing and self-provisioning any application in the enterprise portfolio similar to the Apple App Store or Android Marketplace.

Citrix XenMobile, a complete enterprise mobility management solution, complements and extends XenDesktop with capabilities including mobile device management (MDM), secure mobile email, secure file and data sharing, and mobile application management functionality. Citrix ShareFile, an enterprise data sync and sharing service, meets the needs of a growing mobile workforce to securely collaborate and share data—across all of their devices—with colleagues, customers and third parties. From a network perspective, Citrix NetScaler and Citrix NetScaler Access Gateway optimize the delivery of all web applications, cloud-based services, virtual desktops, enterprise business apps and mobile services. Citrix AppDNA application management software accelerates virtualization projects by providing clear insight into how applications will function in the new environment, enabling more-accurate estimates of project time, cost and resources.

Key use cases for Citrix XenDesktop with FlexCast

At the core of XenDesktop, FlexCast technology provides a rich set of capabilities across a broad range of use cases. These use cases, also called FlexCast services, precisely deliver the right experience while optimizing IT resources.

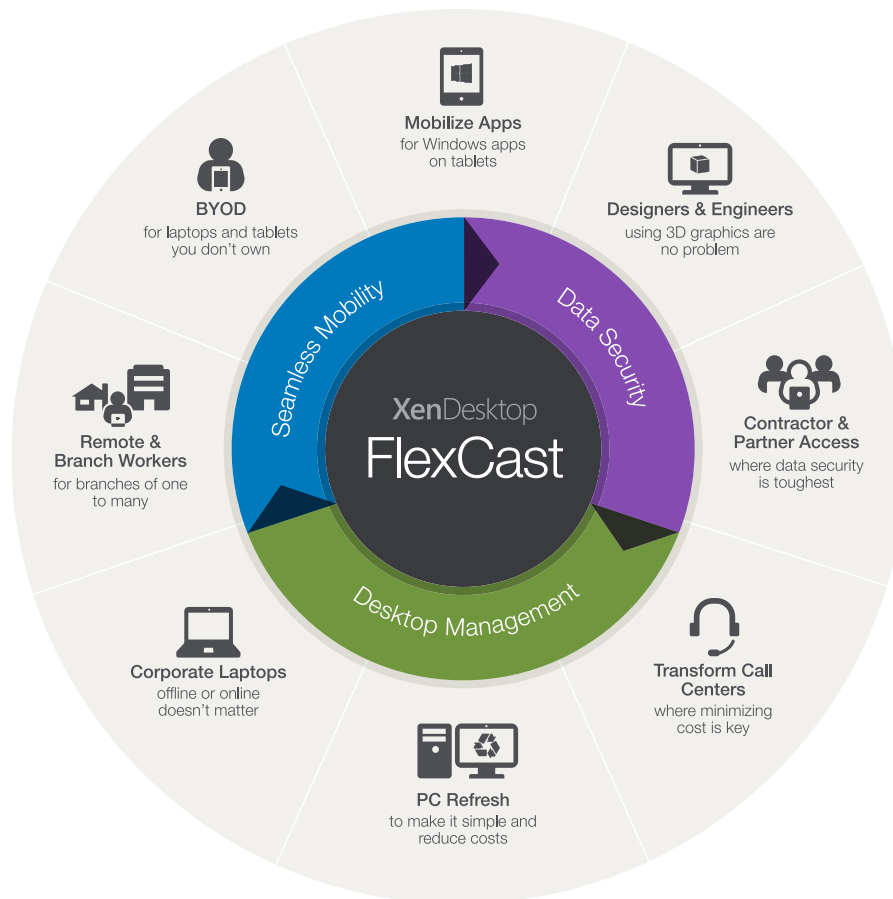


Figure 1. XenDesktop with FlexCast technology—top use cases for desktop virtualization

The following use cases illustrate the value of the Citrix app and desktop virtualization solution powered by XenDesktop with FlexCast technology for addressing important business priorities.

Mobilize Windows apps on tablets

Windows-based apps are typically optimized for a full-size screen and rely on right-click inputs for full functionality, limiting their utility on the tablets being adopted in large numbers by users of all types. XenDesktop ensures that Windows apps function as they should on mobile devices. HDX Mobile optimizations translate multi-touch gestures, finger swipes and inertia into smooth navigation and scrolling commands. Users can work with drop-down boxes, enlarged controls and automatic keyboard pop-up when touching a text field—without the need for source code changes.

Deliver virtual 3D graphics apps for designers and engineers

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 your apps and data to be productive. With XenDesktop, you can allow contingent workers to access virtual desktops and apps using thin clients or their own laptops, without having to allow them into your network. Access can be granted or turned off in moments, and data never leaves the datacenter, helping you maintain strict data security and compliance.

Transform call centers to minimize costs

XenDesktop helps large-scale call centers maintain adequate staffing for peak periods without overstaffing and overprovisioning for less busy times by enabling part-time call center operators to work remotely on a schedule tailored to actual demand. Operators are provided with standard, locked-down virtual desktops that include only the apps their work requires, computer telephony integration (CTI), VoIP and video for training. IT can selectively apply delivery methods from locked-down hosted-shared desktops, to fully personalized and persistent VDI-based desktops, to a locally executed desktop with seamless, secure app delivery.

Simplify PC refresh and reduce costs

Instead of having to buy new computers every three years or so, you can extend the useful lifetime of existing endpoints, or switch to inexpensive thin clients, by using XenDesktop to shift processing to the datacenter. IT gains a simpler way to ensure an up-to-date computing experience for all users while leveraging the security benefits of a centralized desktop virtualization architecture.

Support corporate laptops—both online and offline

XenDesktop enables you to support corporate laptops and ensure that all updates and patches are applied, and that data is being backed up, even as people move on and off the corporate network. 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, while full encryption on the endpoint ensures that even a lost laptop won't compromise security.

Empower mobile and branch workers

With XenDesktop and NetScaler Gateway, IT can provide mobile employees and those working in branch locations with seamless, secure access to their virtual desktops, apps and data—even on their own BYO devices—without having to join your corporate network. Any network connection can be used, eliminating the need for costly leased lines. IT can easily provision, maintain and support virtual desktops and apps from a single, central point.

Allow BYOD for laptops and tablets

XenDesktop 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.

Customers address top business priorities with XenDesktop

Case study 1 – Savvis increases business agility through faster, more-efficient IT processes

Part of CenturyLink, Inc., since July 2011, Savvis is a global leader in cloud infrastructure and hosted IT solutions for enterprise companies, operating more than 50 datacenters throughout the United States, Canada, Europe and Asia. A rising tide of consumer devices entering the enterprise workforce was only one of the company's challenges; Savvis also faced an impending Windows 7 refresh project involving a daunting list of applications, including critical legacy and homegrown systems. Savvis launched a private cloud initiative to enhance the security and manageability of its increasingly diverse desktop infrastructure while simplifying upgrade processes and minimizing user downtime.

Solution

Savvis uses XenDesktop and FlexCast to deliver Windows 7 virtual desktops to both internal employees and remote users on all types of client devices. The company has already implemented pooled VDI and dedicated VDI hosted shared desktop models, and will soon deliver developer and sandbox VDI desktops as well. Citrix XenApp application virtualization software, included with XenDesktop, is used to deliver hosted and streamed applications. HDX technology makes it possible to provide a virtual desktop experience that rivals that of a physical desktop. Because XenDesktop runs seamlessly on multiple hypervisor platforms, Savvis has been able to leverage its existing infrastructure, which includes both XenServer and ESX.

Benefits

Beyond accelerating its Windows 7 migration project, the Savvis private cloud helps the company provide solutions quickly and efficiently to keep its business agile while enhancing the security and manageability of its desktop and application infrastructure. New cloud services can be made available on any device people choose to use, for optimal flexibility and mobility. As a result, Savvis is better able to meet the internal needs of its operations, network and department teams, and can package the same solutions for its enterprise customers. New, purpose-built virtual desktops can be created and delivered quickly to support specific user types, from line-of-business teleworkers and client support engineers to developers and network engineers. As the company contemplates future upgrades such as Windows 8, its private cloud infrastructure will ensure a smooth and successful migration.

Savvis

Industry

Telecommunications

Challenges

- Address worker demand for consumerization
- Accelerate and simplify Windows 7 migration
- Deliver new solutions more quickly to internal and remote users

Use Cases

- Remote and branch workers
- Mobilize apps

Solution

- XenDesktop with FlexCast and HDX technology
- XenApp
- XenServer and VMware ESX

Benefits

- Anywhere, any device access to applications and desktops delivered as cloud services
- Rapid provisioning of specialized virtual desktops to support specific user and client needs
- Fast, efficient Windows 7 upgrade

Case study 2 – Kindred Healthcare integrates business acquisitions quickly and securely

Kindred Healthcare, Inc., a top-125 private employer in the United States, is a Fortune 500 healthcare services company based in Louisville, Kentucky, with annual revenues of \$6 billion and approximately 76,000 employees in 46 states. As of June 30, 2012, Kindred, through its subsidiaries, provided healthcare services in 2,154 locations, including 118 long-term acute care hospitals, six inpatient rehabilitation hospitals, 224 nursing and rehabilitation centers, 27 sub-acute units, 52 hospice and home care locations, 102 inpatient rehabilitation units (hospital-based) and a contract rehabilitation services business, RehabCare, which serves 1,625 non-affiliated facilities. Ranked as one of Fortune magazine's Most Admired Healthcare Companies for four years in a row, Kindred's mission is to promote healing, provide hope, preserve dignity and produce value for each patient, resident, family member, customer, employee and shareholder served.

Solution

Kindred uses XenDesktop and XenApp to deliver virtual desktops and applications as cloud services. These resources include SAP ERP, a Meditech electronic medical records system and business applications such as financial reporting, accounts payable, time collection, payroll, benefits and email. By providing access to virtualized desktops and applications rather than actually integrating the networks of integrated companies with its own, Kindred ensures that its systems remain isolated from any threats, such as malware or outdated security patches, which may be present in the other environment.

Benefits

Care providers as well as back-office employees throughout Kindred can now access virtual desktops from any location, on any device—including their own personal smartphones and tablets as well as Mac and Windows clients—to support the business and its patients. Employees of newly acquired companies can be provided with day-one access to Kindred's full portfolio of cloud services without the need for hands-on migration by Kindred's IT staff, ensuring uninterrupted productivity and maximizing the value of the acquisition. For patients, this seamless computing experience translates into continuity of care, even if they move among different facilities and subsidiaries in the Kindred organization.

“XenDesktop and XenApp allowed Kindred to join together many organizations, large and small, with a rapidly responding and flexible integration strategy while safeguarding the integrity of our core network and systems.”

John Vorreiter
Senior Director of Technical Services
Kindred Healthcare

Kindred Healthcare

Industry
Healthcare

Challenges

- Support growth by bringing acquired companies into a unified computing environment quickly and cost-effectively
- Ensure a seamless healthcare experience as patients move among facilities and divisions

Use Cases

- Remote and branch workers
- Mobilize apps
- Contractor and partner access
- BYOD

Solution

- XenDesktop with FlexCast and HDX technology
- XenApp
- Apple iPad tablets
- Apple iPhone smartphones
- Android-based smartphones
- Windows and Mac laptops

Benefits

- Faster integration of acquired organizations
- Virtual desktops and applications delivered as cloud services to thousands of new users on a broad range of devices
- Seamless continuity of care for patients

Case study 3 – The Co-Operative Group attracts a more competitive workforce

Owned and controlled by its 7 million members, The Co-operative Group—the U.K.'s largest consumer co-operative—makes a priority of providing greater flexibility and agility for its 100,000 plus employees. A commitment to employee-friendly work practices such as telework, consumerization and mobility improves both satisfaction and productivity while helping attract younger workers who can contribute to the group's growth and competitive advantage. As part of its commitment to social values, the Co-operative Group also works to improve sustainability by reducing carbon emissions.

Solution

The Co-operative Group uses a private cloud powered by Citrix solutions to support distribution centers, branch offices, mobile workers and business partner personnel throughout the U.K. The shift from physical desktops to standardized, centrally managed virtual desktops has made it possible for workers to access applications and desktops as cloud services from anywhere, on any device. Many traditional PCs have been replaced with low-power thin clients running virtual desktops.

Benefits

Co-operative Group employees can now work from any location on any device, leading the company to explore the business benefits of mobile devices and BYOD initiatives. Workloads can also be shifted easily from location to location to meet the dynamic needs of the Co-operative Group's diversified family of businesses. In addition to reducing the cost of desktop support, the replacement of 3,000 physical desktops with low-power thin client devices will yield £1.53 million in savings per year in desktop PC upgrade costs, while lower server, storage and desktop PC energy bills will generate £459,000 in savings per year.

The Co-operative Group

Industry

Consumer goods and services

Challenges

- Provide a better work-life balance for 123,000 employees
- Meet sustainability goals by reducing carbon emissions
- Reduce costs to increase profitability

Use Cases

- Remote and branch workers
- Mobilize apps
- Contractor and partner access
- PC refresh

Solution

- XenDesktop with FlexCast and HDX technology
- XenApp
- XenServer

Benefits

- Greater work flexibility, improving employee satisfaction and productivity while reducing costs
- Millions saved on hardware, licensing, support and energy
- Reduced carbon footprint

Case study 4 – Suncorp ensures uninterrupted business continuity

With over 15,000 employees and 9 million customers, Suncorp is one of Australia's largest diversified financial services groups. The company's insurance business depends on its ability to respond to its customers' needs quickly and effectively in any emergency. Suncorp's private cloud initiative is designed to enable its users to work anywhere, on any device.

Solution

Citrix private cloud technology helps free Suncorp employees from the constraints of company-issued PCs and office space, allowing people to work and collaborate with greater flexibility to achieve optimal productivity. FlexCast technology enables Suncorp to deploy the right desktop virtualization model for each type of user: approximately 70 percent of Suncorp employees works from a standard hosted shared desktop and 30 percent have persistent, dedicated VDI.

Benefits

The Suncorp private cloud has empowered its workforce with an extremely high level of choice, flexibility and mobility. The company has moved to new premises where hot-desking and flexible workspaces improve office space utilization and reduce real estate costs. When floods and Cyclone Yasi led to a 2011 "summer of disasters" for Queensland, Australia, and even closed some of Suncorp's own Brisbane offices, a BYOD program made it possible for employees to process claims quickly, without interruption, to speed recovery for more than 70 towns, 200,000 people and countless businesses. Meanwhile, virtualization and BYOD enabled the company to cancel a planned refresh of its corporate desktops, since workers could enjoy a high-quality computing experience on existing computers or their own consumer devices. As Suncorp's business continues to grow, a multi-tenant implementation of XenDesktop enables the firm to maintain separation of acquired business units and subsidiaries as well as secure access to business-critical applications.

Suncorp

Industry

Financial services

Challenges

- Respond quickly to customer needs in any circumstances
- Attract, develop and retain top talent and give them a great place to work
- Reduce real estate costs

Use Cases

- Mobilize apps
- Contractor and partner access
- BYOD
- PC refresh

Solution

- XenDesktop with FlexCast and HDX technology
- Citrix Access Gateway

Benefits

- Greater work flexibility, improving employee satisfaction and productivity
- Office space utilization increased through flexible workstyles
- Significant saving through the cancelation of a planned corporate desktop refresh, which desktop virtualization and BYO has made unnecessary
- Reduction in costs to manage desktop fleet
- Business continuity to ensure prompt response to customer needs in any circumstances

Case study 5 – HDFC Bank expands its market reach quickly and cost-effectively

A pioneer and leader in consumer finance in India, HDFC serves more than 15 million customers through more than 2,600 branches. With the Indian economy growing at a robust rate, HDFC adds more than 300,000 customers each month, making business scalability a top priority. In addition to growing its IT infrastructure, the bank needs to speed time-to-market for both new application functionality and new physical branches in order to fuel competitive advantage. Many of its new locations are in remote, rural areas with lower potential revenue per customer than in urban areas, so costs must be kept low to maintain healthy margins.

Solution

Virtualization plays a key role in helping HDFC grow its IT infrastructure quickly and cost-effectively while keeping it manageable. The bank has used XenDesktop and XenApp to consolidate its infrastructure and centralize management, deployment and administration; the Citrix NetScaler application delivery controller enables it to make desktops and applications available as a cloud service to users worldwide.

Benefits

The HDFC private cloud has reduced the time needed to provision infrastructure for a new branch from 10 days to three days, accelerating time-to-revenue by a full week. The bank can also deliver applications and desktops to remote areas without the need for a full PC, reducing costs for endpoint hardware and maintenance. A high-definition computing experience helps the bank provide faster service for customers, building their confidence and differentiating HDFC from its competitors. By cost-effectively extending its market reach into villages where few people have previously had bank accounts, HDFC is expanding its customer base while bringing millions of traditionally underserved people into the Indian economic system.

HDFC

Industry

Financial services

Challenges

- Accelerate new branch openings
- Reduce operational costs in remote areas
- Improve the manageability of a large and growing IT infrastructure
- Decrease time to roll out new business initiatives

Use Cases

- Remote and branch workers
- Mobilize apps

Solution

- XenDesktop
- XenApp
- NetScaler

Benefits

- Reduce launch time for new branches from 10 to 3 days
- Deliver complete banking applications as services on low-cost endpoint devices
- Lower operating costs to maintain profitability in areas with narrow margins

Conclusion

As these customer examples show, Citrix solutions help organizations of all kinds realize the full value of desktop virtualization through a project-by-project approach based on key business priorities. IT can easily and efficiently create the ideal virtual desktop for each use case in the organization, enabling people to access the applications their work depends on anywhere, on any device. On an individual level, this unprecedented flexibility and mobility improve productivity and satisfaction; for the organization, the ability to deploy people and solutions more quickly provides the business agility demanded by today's competitive markets. By implementing Citrix desktop virtualization solutions, IT gains a highly efficient platform to create and deliver managed business solutions, as well as the ability to manage even the most diverse and complex computing environment efficiently and cost-effectively.

Additional Resources

[VDI and Beyond: Addressing Top IT Challenges to Drive Agility and Growth](#)

[Top Use Cases for Desktop Virtualization](#)

[XenDesktop with FlexCast Technology](#)

[XenDesktop Overview](#)



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 the cloud company that enables mobile workstyles—empowering people to work and collaborate from anywhere, easily and securely. With market-leading solutions for mobility, desktop virtualization, cloud networking, cloud platforms, collaboration and data sharing, Citrix helps organizations achieve the speed and agility necessary to succeed in a mobile and dynamic world. Citrix products are in use at more than 260,000 organizations and by over 100 million users globally. Annual revenue in 2012 was \$2.59 billion. Learn more at www.citrix.com.

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