CITRIX® PARTNER Citrix Ready

AppSense®

AppSense User Virtualization

Extending the value of Citrix and forming a strategic component of the Citrix Desktop Transformation Model (DTM)

Contents

CITRIX® PARTNER Citrix Ready

AppSense®

Introduction – What is User Virtualization?

User Virtualization ushers in a new era for IT with the first complete solution to unlock and manage the user layer of the desktop; independent from devices, operating systems, and applications. For the first time, IT now only need manage a single instance of the user, eliminating the arduous task of running multiple unique user configurations. Given that most users now have at least three different devices (desktop, laptop, smartphone/tablet PC), managing these unique instances across your entire employee base is a staggering challenge.

User Virtualization is a proven solution that profoundly simplifies the management of today's mobile workers, migrations, and the exploding number of user devices. Isolating the user layer lets IT precisely administer users without impairing their experience. Thousands of users can be easily managed with policy templates, and automatically reconfigured by device, location, or application. The user experience remains secure, predictable, and personalized, with scalable infrastructure and unrivalled reliability. Out-dated lockdown policies meant to constrain users are no longer necessary. IT can give users the freedom to use whichever devices suit them, and deploy a user-specific desktop to any device in any location at any time.

Virtualizing user-specific settings, applications, data and permissions can enable IT to standardize the corporate build, automate desktop delivery, or migrate users to new desktop operating systems and delivery mechanisms - all while ensuring the user experience is seamless, personal, predictable and easily manageable.

Solutions span all Citrix Flexcast™ delivery technologies, providing a comprehensive infrastructure to manage all aspects of the user across virtual, physical or published desktops and applications.

The Citrix Desktop Transformation Model: Accelerating the virtual desktop revolution

According to many industry analysts, 50 million new 'virtual desktops' will enter the corporate workplace over the next three years. While the benefits of desktop virtualization are clear: reduced operations costs, improved flexibility and agility and greater control over the desktop – the key question many organizations have is: "How do I get started?"

The Citrix Desktop Transformation Model (DTM) is designed to help customers get from "wow to how" and quickly realize the many benefits of desktop virtualization. Citrix has worked closely with customers and partners - in this case AppSense User Virtualization - to develop the first industry-endorsed, repeatable method for transforming desktop computing from today's device-centric, distributed management paradigm, to a more user-centric, virtualized model.

The new model combines the collective experience of thousands of customers and partners across every industry segment that have successfully rolled out millions of virtual desktops and applications to their end users.

Citrix Desktop Transformation and AppSense User Virtualization

AppSense shares a user-centric view of desktop virtualization with Citrix and as the leading user virtualization solution, is recommended (link to Citrix Ready Case Study on AppSense) to automatically configure and personalize Citrix XenDesktop environments. Citrix and AppSense have thousands of joint customers (link to Case Studies) around the world.

When used as part of your Citrix Desktop Transformation Project, AppSense User Virtualization provides:

Simplified user migration	Users can easily migrate to new Citrix virtual desktops (streamed, published or virtualized) from existing physical desktops without interruption.
Multi-Platform support	Use any combination of physical and Citrix desktops (streamed, published or virtualized) across your company while preserving a seamless user experience, regardless of platform the user selects.
Multi-OS support	Move users seamlessly back and forth from Windows XP to Windows 7 desktops
Multi-App Delivery Support	Deliver applications seamlessly using a combination of locally delivered, Citrix streamed or published, or Microsoft App-V delivery technologies.
Granular User Control	Fine tune the desktop experience while enforcing corporate access and security policies. Reduce logon times by 50% or more. Selectively Implement unique desktop enhancements based on user, application, scenario, or policy.

Centrally Managed – Optimally Delivered – Transformed Service

AppSense helps you plan, integrate and deploy virtualized desktop solutions more quickly, with less risk, and with higher user acceptance – making it easier to transform desktop computing environments. User acceptance is the #1 obstacle in new desktop technology rollouts – users ask for more powerful and versatile desktop solutions with no compromise in the desktop experience.

Post implementation, when combined with Citrix XenDesktop, AppSense User Virtualization provides:

- Personalization of complex environments such as multi-OS platform and delivery mechanism environments, where roaming profiles and Citrix User Profile Management are not supported
- A 'follow-me personality', with consistent look and feel across all delivery mechanisms, including both Citrix FlexCastTM and physical desktops
- Virtual desktop configuration to set up a desktop based on user or device context

Through FlexCastTM technology, Citrix XenDesktop delivers corporate desktops and applications to all user types in the organization. AppSense extends this by providing a fully personalized and configured desktop experience for all user types - even in the most complex desktop environments. This means that all user-related information can be applied to any desktop, regardless of which Citrix FlexCastTM technology is used to deliver the desktop, or which operating system is being delivered.

The addition of User Virtualization to a Citrix XenDesktop implementation ensures full user adoption through independent management of the user environment. Joint AppSense and Citrix customers have proven that when used together, IT can quickly scale up their virtual desktop rollout with no impact to the user experience. User Virtualization addresses not just profile settings, but also the initial configuration of a desktop, including applying user installed applications, and providing a true follow-me personality across all desktops, with full, proven enterprise scalability and end-to-end visibility.

Componentization of the desktop

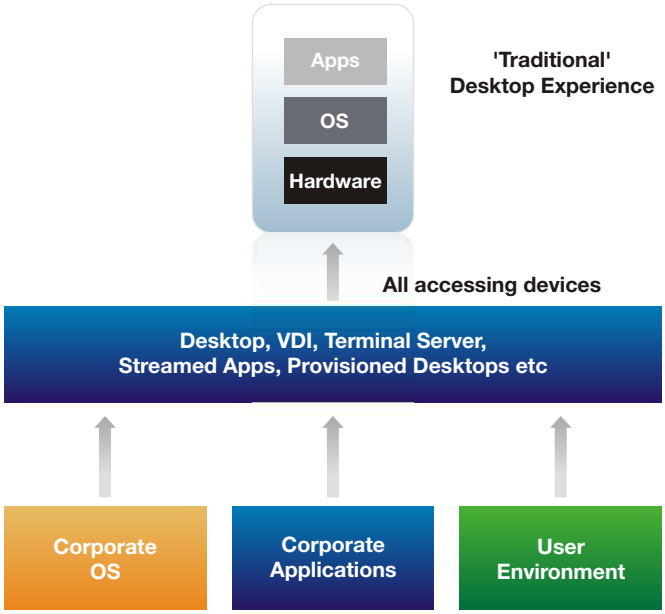
Over the last couple of years we have seen a change in the build and delivery of the corporate desktop. Organizations are moving away from a local, monolithic desktop build and using virtualization technology to separate the desktop into manageable, virtual components. According to leading analysts, it is predicted that over the next two years 85% of all corporate desktops will be heterogeneous in nature, consisting of multiple technologies used to deliver OS and applications. In essence, corporate desktops are moving from a single stack on a single device, to a utility based service accessible from any device.

The benefits are clear; standardize your operating system and applications and realize the benefits of reduced operating and support costs, while enjoying a more flexible and agile IT infrastructure. But what about the user? The user is, by nature, a non-standardized entity with certain expectations. For users to feel comfortable in their working environment, it must conform to their preferred way of working, whether that is look and feel, feature set, usability, performance or familiarity. Essentially, this heterogeneous environment must be dynamically configured and personalized for each individual user in order for them to:

1. Accept the desktop transformation change.
2. Be more productive, or at least as productive as they had been previously.

AppSense solves user complexity by satisfying three essential requirements:

- DECOUPLE: isolate the user layer and all user-specific information from applications, operating systems, and devices.
- MANAGE: Centrally store and manage all aspects of the user, including user-based corporate policy, personalization settings, user rights, and user-introduced applications.
- DEPLOY: Share each unique user instance on-demand with any device in any location and delivered by any method.



User Demands on IT forces desktop componentization

User demand is changing the way that corporate IT departments work. Previously users were forced to work the way the IT department wanted. Now, however, more demanding requests from 'User 2.0' mean that they have much more influence over corporate policies.

It is not uncommon now for employees to bring their own devices to the workplace, and this equipment is often of higher quality than an organization could provide. As such, IT departments have to evolve their policies to cater for the users own devices.

In addition, the locations and times at which the user choses to access their corporate desktop, applications and information are diversifying. Users are able to work at times and from locations convenient to them. In order to assure that the user experiences a consistent and compliant desktop across multiple devices, and in differing contexts, the user personality must be held independently and applied on-demand, taking into account both the device itself and the user context. This is user virtualization.

Application Virtualization

Application virtualization technologies, such as Citrix Streaming and Microsoft App-V, are becoming increasingly prevalent within organizations as their cost-saving attributes are proven. Application virtualization creates a self-contained world where the application can execute independent of the underlying operating system by encapsulating all of the software binaries and supporting files, application configuration, and policy & personalization settings.

The driving factors behind the increasing adoption of application virtualization are Microsoft Windows 7 migrations and Office 2010 upgrades which are acting as catalysts for the introduction of new technology into organizations and are leading more IT departments to deliver applications as virtual packages.

Organizations looking to adopt application virtualization as part of their desktop transformation plans must also consider the user component of the desktop. For example, in the case of Microsoft Word being delivered virtually, it would share no policy or personalization with other applications, virtual or native. Where an organization has users who have Microsoft Word installed locally (e.g. laptop users) and also use virtualized instances (say on their desktops in the office), items such as recently accessed files, custom dictionaries, toolbar layout, templates, mapped drives and printers and plug-ins would not be shared, resulting in a poor user experience and subsequent support costs.

Best practices show that for optimal user acceptance and IT management of the application, organizations must first virtualize the existing locally installed user information. This should then be reapplied to the new, virtualized application to ensure seamless migration and configuration. The user element of the application will then remain separate and available via multiple delivery mechanisms, e.g. offline or from the cloud.

Multiple Platforms

Windows XP has reached its 10 year anniversary. It is a platform that organizations have invested in substantially and will need to plan extensively to migrate away from. When considering the cost of migrating users to new platforms these organizations will need to consider and plan for key elements including their applications, user data, system configuration, personality and policy.

Many organizations are choosing to deal with these migrations by running multiple platforms simultaneously; including by providing users with virtualized desktops (XenDesktop) while leaving their physical ones untouched or by leveraging Citrix XenApp as a low cost option. Both scenarios create a need for organizations to provide a consistent and seamless user experience between the various platforms within their environment.

User Virtualization First

Before any changes to an operating system or application set are made, the user's data, personality and policy must first be abstracted, allowing the user data to be managed as a separate layer. Once virtualized, the individual user's data can be reapplied to any new platform, OS version, or delivery mechanism required. This allows for easy portability from one Windows version to another, regardless of the underlying platform, and enables the desktop migration experience to evolve to a more rapid and agile update to the operating system and application components of the virtualized desktop with no impact to end user experience.

As technology continues to evolve and transition to the cloud, and end user complexity to proliferate, user virtualization will become more critical. It will be essential that single user personalities remain consistent regardless of the computing platform or delivery mechanism.

What Does User Virtualization mean to Citrix?

- Faster Citrix XenDesktop Deployment
- Enables the user to seamlessly move between Citrix XenApp and Citrix XenDesktop environments
- Enables increased adoption of Citrix FlexCast™ technology
- Faster, cheaper and de-risked migration from existing desktop to Citrix platform

What Does User Virtualization mean to Microsoft?

- Enables true cross platform deployments and a seamless user experience
  - Physical Devices, Virtual Devices, Remote Desktop Services (previously named Terminal Services)
  - Local Application, Virtual Applications
- Accelerates Microsoft EA / Client SA / MDOP
  - Accelerate project implementations
  - Simplifies App-V implementations across platforms
- Accelerates Enterprise Software Deployments
  - Microsoft Window's 7, Windows XP, Vista, App-V, VDI, Terminal Services, RDS, 32/64 bit configurations
  - Help desk problem resolution

AppSense and Citrix

AppSense and Citrix share both a user-centric view of desktop virtualization and an extensive list of joint customers who have deployed AppSense User Virtualization technology with Citrix XenDesktop. Our strong twelve year partnership has produced a global track record of creating value for our 5000+ joint customers and 350+ joint reseller partners. In recognition of this joint success, Citrix awarded AppSense the Citrix Ready Solution of the Year Award in 2010 in recognition of the partner solution that best delivers complementary value, and drives expanded adoption of, Citrix solutions.

Supporting quotes:

"AppSense exemplifies how partnering with Citrix enables both of our companies to deliver desktop management solutions that benefit customers worldwide and increase market leverage. AppSense has a long standing relationship with Citrix, and together we enable our joint customers to obtain the highest quality user experience available today. We congratulate AppSense on being awarded Citrix Ready Solution of the Year and look forward to a continued successful partnership with Citrix"

Al Monserrat, Senior Vice President, Sales and Services, Citrix Systems.

"The Citrix and AppSense partnership has enabled customers to obtain the highest quality user and desktop experience today. AppSense is a strong supporter of the Citrix Ready program and has fully leveraged the program to their benefit."

John Fanelli, Vice President of Product Marketing, Citrix Systems.

"Citrix has been working closely with AppSense for many years, and we are delighted to extend our relationship into the desktop virtualization market. With Citrix XenDesktop and a user virtualization solution from AppSense, all of our enterprise customers receive a familiar, personalized desktop from standardized components every time"

Sumit Dhawan, VP and General Manager of Receiver and End User Services, Citrix Systems

"We are always pleased to see strong development within our partner base, reflecting the compelling value that our virtual computing solutions provide to our joint customers. AppSense User Virtualization solutions have proven to be an excellent complement to our Citrix Desktop and Application Virtualization solutions. We look forward to continuing our strong collaboration"

James McNab, Senior Director of Marketing and Sales Development, EMEA at Citrix Systems

AppSense and Microsoft

AppSense solutions are designed specifically for the Microsoft Windows desktop environment and because of this; AppSense and Microsoft have developed strong technology collaboration. As one of only a handful of Microsoft managed partners, AppSense and Microsoft are jointly engaged in technical development, product roadmap planning and joint marketing programs. In addition, AppSense technology is certified for use with Microsoft System Center, Windows Server 2008 R2 and Windows 7.

Supporting quotes:

"AppSense benefit customers by helping ensure a company's usage of centrally managed applications meet the device licensing models".

Parri Munsell, Director Software Licensing, Microsoft Business Division

"AppSense provides solutions that extend Microsoft's USV offering. AppSense is a leading provider of user virtualization technology to enterprise organizations. User virtualization manages user-specific information independently of the desktop, and applies it into any desktop on-demand. IT Pros can deploy new apps, images, and systems without fear of losing user settings – making transitions to Windows 7 and App-V faster and without user disruption."

Karri Alexion-Tiernan, Director of Product Management for Microsoft Desktop Virtualization

"One of Microsoft's Premium partners, AppSense provides user virtualization solutions that extend Microsoft's USV offering by providing additional capabilities that assist in the migration of Windows XP profiles to Windows 7 profiles by seamlessly combining the two into a single version, thus accelerating Windows 7 deployments in your organization. It can also abstract both the user's desktop personalization and application settings, providing a consistent application experience across physical AND virtual applications."

Skand Mittal, Product Manager with Desktop Virtualization Team, Microsoft

Further information and next actions

Together, Citrix and AppSense have created a Proof of Concept guide for creating a joint Citrix FlexCast and AppSense User Virtualization environment. Please log into www.MyAppSense.com with your existing login credentials or if you do not have one please email XenDesktop@AppSense.com for further information.

Worldwide Headquarters
Citrix Systems Inc.
851 West Cypress Creek Road
Fort Lauderdale, FL 33309, USA
T +1 800 393 1888
T +1 954 267 3000

www.citrix.com

Americas
Citrix Silicon Valley
4988 Great America Parkway
Santa Clara, CA 95054, USA
T +1 408 790 8000

Europe
Citrix Systems International GmbH
Rheinweg 9
8200 Schaffhausen, Switzerland
T +41 52 635 7700

Asia Pacific
Citrix Systems Hong Kong Ltd.
Suite 3201, 32nd Floor
One International Finance Centre
1 Harbour View Street
Central, Hong Kong
T +852 2100 5000

Citrix Online Division
6500 Hollister Avenue
Goleta, CA 93117, USA
T +1 805 690 6400

About Citrix Ready

Citrix Ready identifies recommended solutions that are trusted to enhance the Citrix Delivery Center infrastructure. All products featured in Citrix Ready have completed verification testing, thereby providing confidence in joint solution compatibility. Leveraging its industry leading alliances and partner eco-system, Citrix Ready showcases select trusted solutions designed to meet a variety of business needs. Through the online catalog and Citrix Ready branding program, you can easily find and build a trusted infrastructure. Citrix Ready not only demonstrates current mutual product compatibility, but through continued industry relationships also ensures future interoperability. Learn more at www.citrix.com/ready.

05/11/0017