MATRIX42

Creating the On-demand Workplace

A five-step process aligned with the Citrix Desktop Transformation Model for making desktop virtualization simple and affordable.

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A Breakthrough for Desktop Virtualization

Desktop virtualization is now being deployed by a majority of companies with many more in the planning stages. This is according to a survey conducted at Citrix Synergy 2012 in San Francisco. The survey of IT executives found that more than half (51 percent) of companies are in the process of deploying or have already finished deploying virtual desktops in their organization. An additional 23 percent plan to deploy in the next year, and only 11 percent have no plans to deploy.

While almost all respondents expect to support a mixed environment of both physical and virtual desktops, the expectation for a majority to be virtual is much higher than a year ago. Currently, one-third expect 60 percent of their desktops to be virtual one year from now. This is three times greater than last year when only 11 percent had the same expectation.

There are many other surveys that demonstrate similar results and show that virtual desktop infrastructure (VDI) adoption continues to grow among enterprises. It has taken some time to build momentum, but many companies are now looking to extend the benefits of virtualization to their end users.

The growth in desktop virtualization is driven by cost savings, increasingly complex desktop environments, security and compliance issues, and an ever-growing mobile workforce. With the proliferation of smartphones and tablets, users are looking for access to corporate data and resources through their mobile devices, while companies are looking for ways to provide that anytime, anywhere access while also maintaining the security of the data.

The process of migrating from device-centric desktops to user-centric workplaces with on-demand access to the operating system, applications, user profiles and configurations, data or any IT service is known as desktop transformation.

Why Desktop Transformation?

Over the past two decades, IT organizations have tried to reduce downtime, increase security and increase end-user productivity by locking down desktops and enforcing desktop standards to their end users. The complexity of applications and operating systems forced IT organizations to standardize the user desktop to successfully manage large and distributed environments. The desktop was managed and defined by the IT organization, and the end user had little or no influence on the configuration and installation of the desktop. The desktop was the actual device which contained a merge of operating system, applications, profile and content. IT held the power, but end users were seeking for more flexibility and an on-demand workplace that was accessible from multiple devices to work more efficiently from anywhere. The process to gain access to necessary business applications and IT services was complicated, time consuming and frustrating.

As systems become more complex and users become more mobile, the need has developed to transform the desktop from a technical device to a dynamic workplace that contains access to all necessary business services. This allows organizations to improve productivity and provide end users with more flexibility without sacrificing the security and management of the desktop.

To transform the desktop to a dynamic workplace, the end user needs to have…
- Access to applications, profiles, content and all IT services available via automated self-service while maintaining corporate policies and standards
- Access to the workplace from any device, anywhere and anytime
- Full transparency of application, asset and management costs of the workplace with the ability to charge back to the appropriate department or cost center

To optimize management of the dynamic workplace, IT departments need…
- Simplified and cost-efficient transformation to the dynamic workplace
- Automated management of the necessary infrastructure for both the datacenter and the end devices
- Full transparency of the used services and workplaces
- Ability to easily create, update, extend and provide workplaces
- Full transparency of applications, licenses and asset management costs of the workplace (e.g. license compliance, charge back)

Citrix Desktop Transformation Model

As companies look to adopt a virtual desktop infrastructure, they may not know how to get started, how to know if it is right for their environment or how they can measure the success of it. Citrix, the industry leader in virtualization technology developed the Citrix Desktop Transformation model to guide customers through the process. It helps customers transform their computing environment from a device-centric, distributed management environment to a more user-centric, virtualized model.

The Citrix Desktop Transformation Model provides step-by-step help within three primary phases: Assess, Design and Deploy.

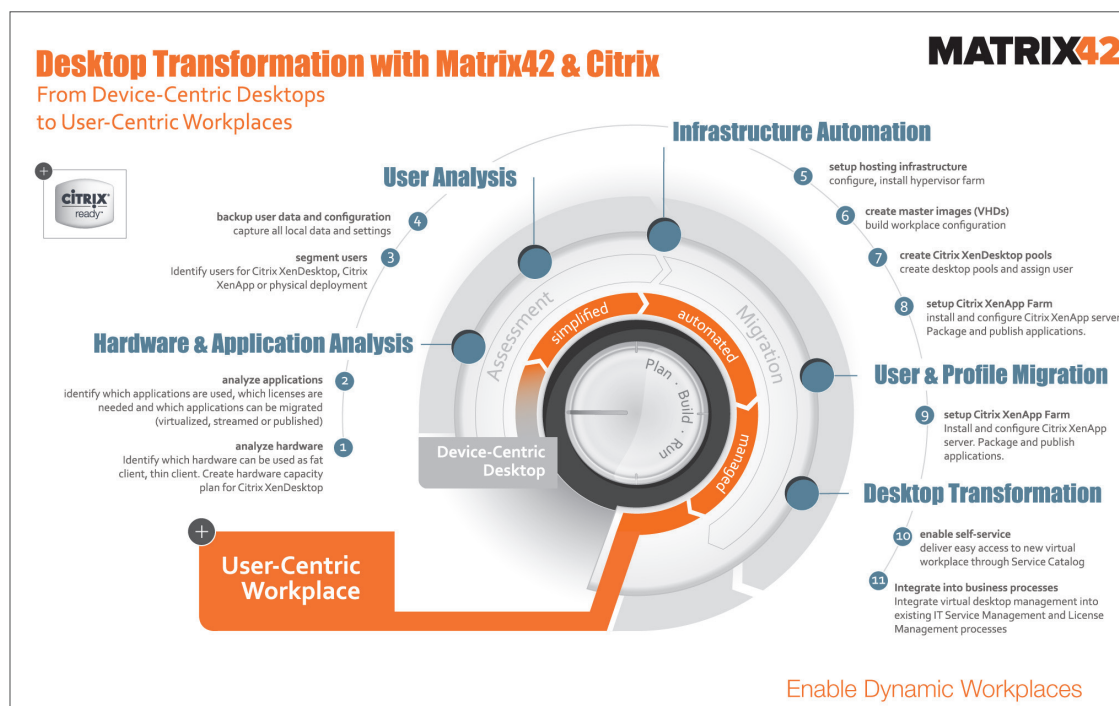| Assess	Design	Deploy
Profile and prioritize user groups and the applications that they use. The goal is to decide which user segments will be virtualized and in what order, which model is best for each and what applications need to be part of the solution. Key documentation includes: • Roadmap of projects • High-level design	Create a detailed design for the first project including networking, Active Directory, storage and image provisioning considerations. The goal is to think through all detailed decisions and requirements of your XenDesktop installation before installation. Key documentation includes: • Hardware requirements • Detailed architecture design	Install, test, pilot and rollout the desktop delivery infrastructure as outlined in the design. The goal is a methodical implementation and thoughtful rollout approach that will help realize an impressive and consistent virtual desktop experience for end users. Key documentation includes: • Deployment and testing guide • Change management collateral

Why Matrix42 and Citrix?

Citrix is the leading vendor in desktop virtualization. Matrix42 is the leading vendor in workplace management, and is the only company that can seamlessly manage mobile, virtual and physical environments. Forrester Research makes particular note that "Matrix42's most noteworthy capability is management of Citrix XenApp and XenDesktop hybrid physical and virtual desktop infrastructure. It's the only Citrix management solution in the Forrester Wave."

Together, Matrix42 and Citrix offer a better way to manage, track and deliver the dynamic workplace by fully automating current request and provisioning processes. This makes it easy for users to order workplaces, applications and services they need through the company's existing service catalog or one provided by Matrix42. A fully automated system quickly and efficiently handles the infrastructure management, provisioning, licensing and asset management of Citrix XenDesktop. By automating the process of installing, updating and maintaining a hypervisor farm along with Citrix XenApp and Citrix XenDesktop infrastructures, Matrix42 complements Citrix to make desktop transformation easy and affordable.
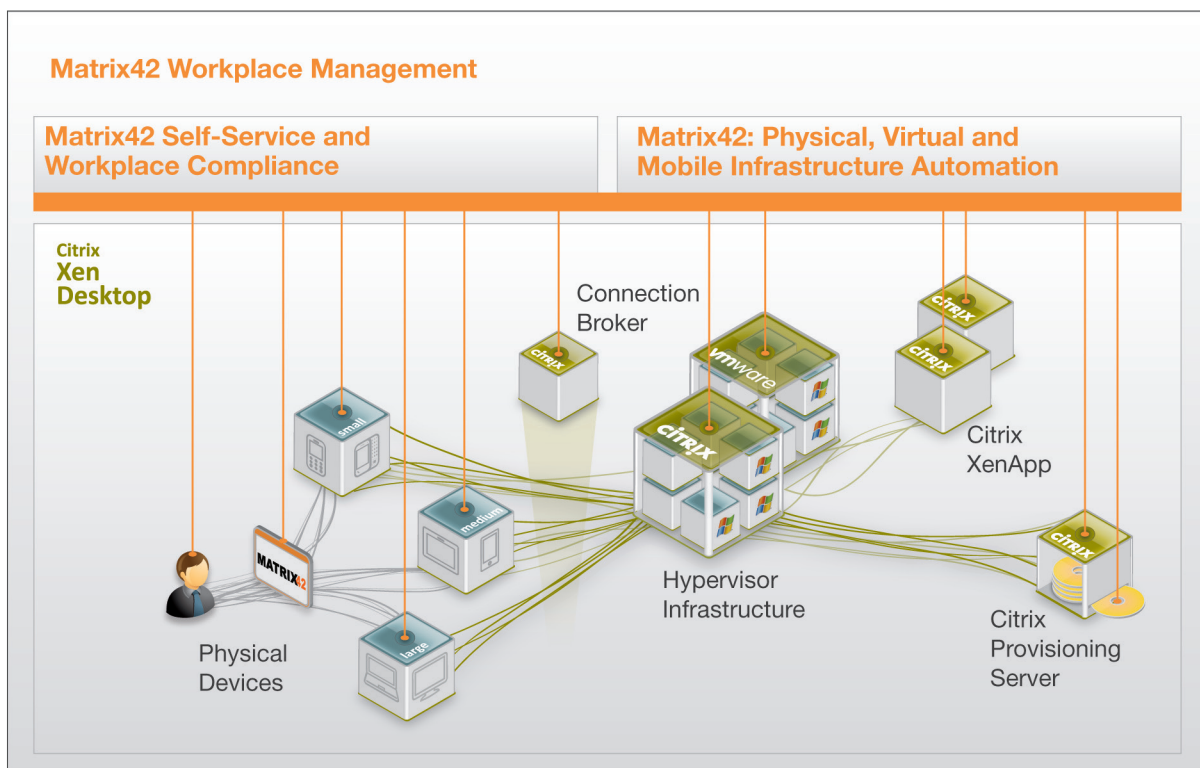
Five Steps to Desktop Transformation

Matrix42 has a simple five-step process for companies to begin their VDI deployment:

Desktop Transformation with Matrix42 & Citrix
From Device-Centric Desktops
to User-Centric Workplaces

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User Analysis

backup user data and configuration
capture all local data and settings

segment users
Identify users for Citrix XenDesktop, Citrix
XenApp or physical deployment

Hardware & Application Analysis

analyze applications
identify which applications are used, which licenses are
needed and which applications can be migrated
(virtualized, streamed or published)

analyze hardware
Identify which hardware can be used as fat
client, thin client. Create hardware capacity
plan for Citrix XenDesktop

Infrastructure Automation

setup hosting infrastructure
configure, install hypervisor farm

create master images (VHDs)
build workplace configuration

create Citrix XenDesktop pools
create desktop pools and assign user

setup Citrix XenApp Farm
install and configure Citrix XenApp server.
Package and publish applications.

User & Profile Migration

setup Citrix XenApp Farm
Install and configure Citrix XenApp
server. Package and publish
applications.

Desktop Transformation

enable self-service
deliver easy access to new virtual
workplace through Service Catalog

Integrate into business processes
Integrate virtual desktop management into
existing IT Service Management and License
Management processes

Device-Centric
Desktop

User-Centric
Workplace

Assessment · simplified · automated · Migration · managed
Plan · Build · Run

Enable Dynamic Workplaces

Step 1: Hardware and Application Analysis

Before the actual transformation of the desktop, IT needs to first identify which hardware can be used for which delivery method. For example, an older desktop can still be used as a thin client for desktop virtualization.

After the hardware check, IT needs to analyze which applications are used and need to be migrated to the transformed workplace. Matrix42 provides standardized inventory reports to identify the complete software ecosystem within an organization. With integrated software usage reports, IT can identify which applications are frequently used and need to be migrated, as well as which applications have never been used. Application usage tracking in conjunction with Matrix42 license management helps to optimize licensing and maintenance costs for software.

Next, Matrix42 identifies which applications can be virtualized with Citrix XenApp or Microsoft App-V and automatically fixes the issues if an application is not compatible with virtualization technologies.

Step 2: User Analysis
During the assessment phase in Desktop Transformation, it is necessary to identify and segment the users into different groups for the different desktop delivery models. Depending on the work style and profile, users are matched with the best delivery method. Primary user profiles include:

- Mobile workers use complex applications and need fully flexible and personalized desktops. The device is typically a laptop, smartphone and/or tablet.
- Office workers use office productivity applications, and the desktop needs to be partially personalized. The device is typically a thin client or desktop machine.
- Guest workers also use office productivity applications. The desktop is locked down and can't be modified or changed from the user. The device is typically a thin client or desktop.
- Remote workers use complex applications and typically need a personalized desktop. They are generally using a PC, Mac or mobile device.
- Task workers use standard applications including standard configurations. The desktop is locked down, and the device is typically a thin client or desktop.

Matrix42 helps to identify and segment users in different categories by providing out-of-the-box hardware and application usage reports that identify which device belongs to which user and which user belongs to which user segment. Matrix42 provides virtualization readiness checks and user identification.

Step 3: Infrastructure Analysis and Automation
The move to the virtualized and transformed desktop creates new infrastructure requirements, and the next step is to identify how many servers and how many virtual machines are needed for the transformation.

Matrix42 provides management tools that simplify the move to virtual desktops and help to easily install, update and extend the virtualization infrastructure based on Citrix XenDesktop. The management solution covers all different desktop delivery methods and device types in one single management console; whether the desktop is physical, virtual or in a cloud environment.

Step 4: Profiles and Settings
To seamlessly migrate users to virtual desktops it is necessary to capture and backup the user profile, along with all local data and settings before migration. After migration to the virtual desktop, users should have access to their preferred working environment including desktop background, configurations, etc.
Matrix42 provides automatic backup of the personality of a desktop and stores it on a central location. IT administrators can also extend backup and restore capabilities to the end user.

Step 5: Transform the desktop to a dynamic workplace
After the desktop transformation analysis and automatic setup of the virtual desktop infrastructure, the provisioning of the virtual desktop to end users can be executed. Virtual Hard Discs (VHDs) and appropriate Citrix Desktop Pools need to be created and users need to be assigned.

Changing or providing master images in a virtual environment is business critical. Matrix42 allows administrators to create, change, test and provide the VDI master image in a secure and reliable manner through an automated, multi-stage test and approval process.

With Matrix42, users have easy, self-service access to virtual applications and desktops via the service catalog. This enables end users to simply order a virtual workplace with just the click of a mouse. The order is directed straight to their supervisor or other party for approval as defined by company policies. After ordering and budget approval, the virtual desktop or application is automatically deployed according to specifications and is ready for use. Licenses for applications or operating systems are handled in the background and departments are cross-charged with the appropriate costs for a new virtual desktop.

The Matrix42 Advantage

Matrix42 is the only vendor that fully supports all three phases of the Citrix Desktop Transformation Model. It is also the only major vendor to integrate the management of virtual desktops and mobile devices to ensure the security of both the data and the device. In fact, the company takes it a step further by automating many of the common processes, such as provisioning a new device, adding apps or adding a virtual desktop to the device, and making them available to employees through the company's service catalog. This gives them self-service options for faster fulfillment and removes the need for IT involvement in routine tasks.

The combination of Matrix42 and Citrix provide the following benefits in a desktop transformation project:
- Automated transformation from desktops to business services
- Reduced costs and time from automated services
- Higher end-user productivity
- More flexibility and mobility for users
- Secure, anytime and anywhere access to any device/workplace
- Reduced management complexity
- Lower provisioning and management costs
- Less time spent by IT on troubleshooting and routine tasks
- Transparency through one unified management console
- Less risk by standardizing the change of a master image
- Higher security and availability of the workplace
- Provisioning possible via the cloud/desktop as a service
- Closed loop management, including business services
- Seamless integration and transparency into business services and processes
- Integration with asset & license management, service catalog and service desk

Conclusion

The new work style and the mobility of users are forcing IT to change the provisioning and management of a workplace as well as how they provide access to business services and applications. In order to remain competitive and grow, businesses need to ensure their end users are productive and can use their workplace when and where they need it. The static desktop transforms into a user-centric workplace when end users have easy access to the services they need, regardless of the device and place.

For CIOs and IT management, the control and management of desktops and devices is only part of the challenge. The desktop transformation into an on-demand business service for users is fully achieved when license and asset management as well as full automation and self-service of the workplace is made available. This leads to increased end-user productivity, more efficient IT departments and improvements in the performance of the business.

New technologies like VDI or cloud provide the infrastructure for the dynamic workplace, but they also create new management challenges that need to be solved. The combination of Matrix42 and Citrix helps customers face the new IT challenges by transforming the technical desktop to a dynamic, on-demand workplace service. Citrix provides the infrastructure and Matrix42 provides the technical and business management for the transformed, on-demand workplace.

Matrix42 software manages more than 2.5 million clients and has been providing workplace management solutions for 20 years. Visit us at www.matrix42.com or contact us at info@matrix42.com or 888-694-2872 to find out how 2,500 customers worldwide are taking control of their workplace to improve employee productivity, IT efficiencies, cost savings and user satisfaction.