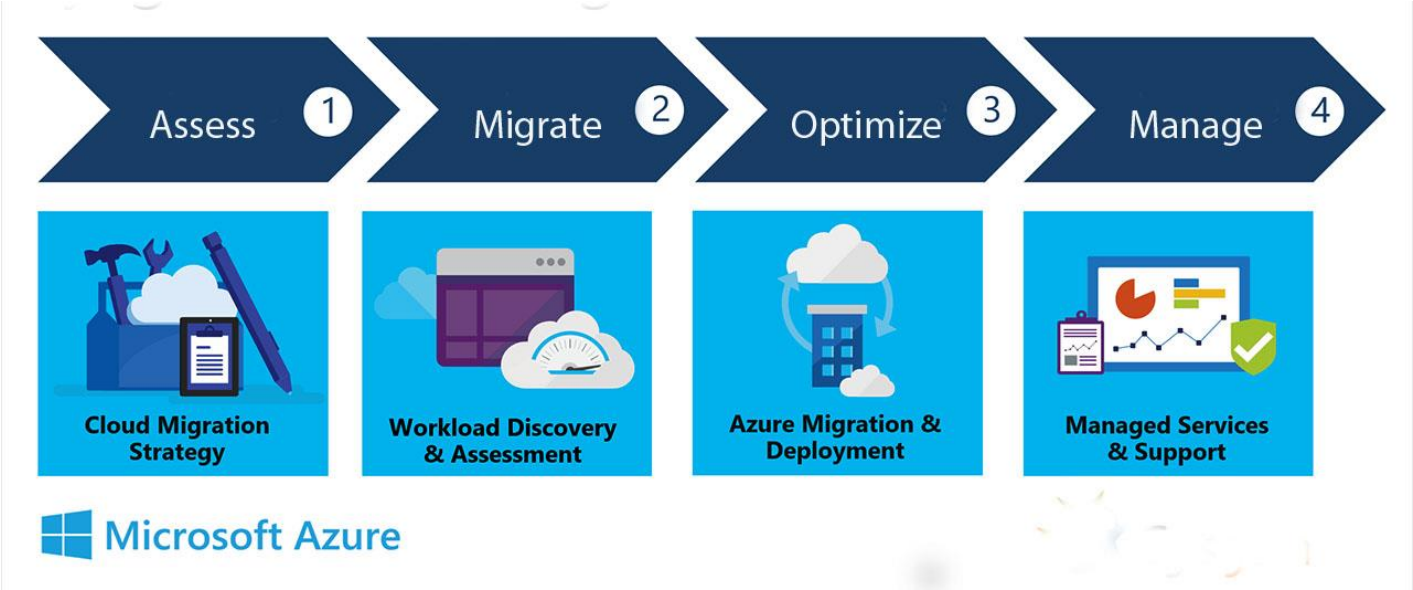
https://www.clouddesktoponline.com/blog/rds-vdi-migration-to-windows-virtual-desktop



RDS and VDI migration to Windows Virtual Desktop: Why Consider?

We will try to explore here, when is it the time to think of moving to Azure Windows Virtual Desktop (WVD) which comes as hosted desktop as a service (DaaS) and its advantages; in case you are using Remote Desktop or Virtual Desktop service. We will also understand how Azure Migrate service with all its features helps to make the migration process smooth.
Remote Desktop Services or RDS denotes the collective features of Microsoft Windows Server, with which the users can access Windows desktops and applications remotely.

Whereas, Virtual desktop infrastructure or VDI is a technology of desktop virtualization that helps Microsoft Windows desktop operating system (OS) to manage and run in a situation like on-premise environment or cloud data center. Here, the desktop image is delivered to an endpoint device (could be a traditional PC, mobile or thin client), along with the OS and apps as though they are running locally.

You can think Windows Virtual Desktop (WVD) as the successor of RDS or VDI.

Even some time back VDI was taken as a magic cloud revolution that helps in reducing costs, saves deployment time, standardizes application experience and takes away all the expense and management issues of user devices completely. Because everything would be available in the datacenter on secure servers.

Yet, companies still had to worry about the endpoints to ensure that proper security is maintained. The savings got used up in keeping infrastructure and expertise to give support.

Windows Virtual Desktop on Azure, on the other hand, comes with new features, capabilities that help you to migrate your existing virtual desktop workloads to Azure; irrespective of whether you are building a new environment ground up or trying to transform your RDS/single session Windows 10 virtual machines.

Advantages of Windows Virtual Desktop over RDS/VDI

- WVD comes as a Platform-as-a-Service (PaaS) meaning, it is Microsoft which runs the show completely without the need of end-user involvement.
- Windows 10 Enterprise multiple session capabilities come as the unique feature of WVD.
- Free Windows 7 Extended Security Updates for the next three years till 2023.
- FSLogix Profile Container integration helps in flawless user profile management, which was so challenging earlier, and also the optimized support for Office365 ProPlus.

Azure Migrate

The Azure Migrate helps you in planning your cloud migration like moving personal desktops, on-premise infrastructure, applications and data to Azure cloud. It will help you to assess how your on-premise workloads will perform along with the costs.

Features of Azure Migrate

Unified migration platform enabling you to commence, run and finally track you Azure migration.

Azure Migration Tool Hub along with **Azure Migrate: Server Assessment** and **Azure Migrate: Server Migration.** It also helps to integrate with other Azure services.

Azure Migrate: Server Assessment helps to assess any on-premise server (e.g. Hyper-V) and physical servers whether they are ready for Azure migration.

Azure Migrate: Server Migration onthe other hand helps in actual migration of on-premise, physical server, other virtual machines or public cloud virtual machines to Azure.

Azure Databases Migration Assistant (DMA) for assessing your on-premise SQL Server databases to Azure SQL DB, Azure SQL Managed Instance or Azure VMs running SQL Server.

Azure Databases Migration Service (DMS) helps in the migration of your on-premise databases.

Web application Assistant for assessment and migration of the on-premise web apps to Azure App Service with the help of Azure App Service Assistant.

Virtual desktops for moving your on-premise VDI to Azure Windows Virtual Desktop.

Azure Data Box provides fast and cost-effective solution to migrate all your data on Azure.

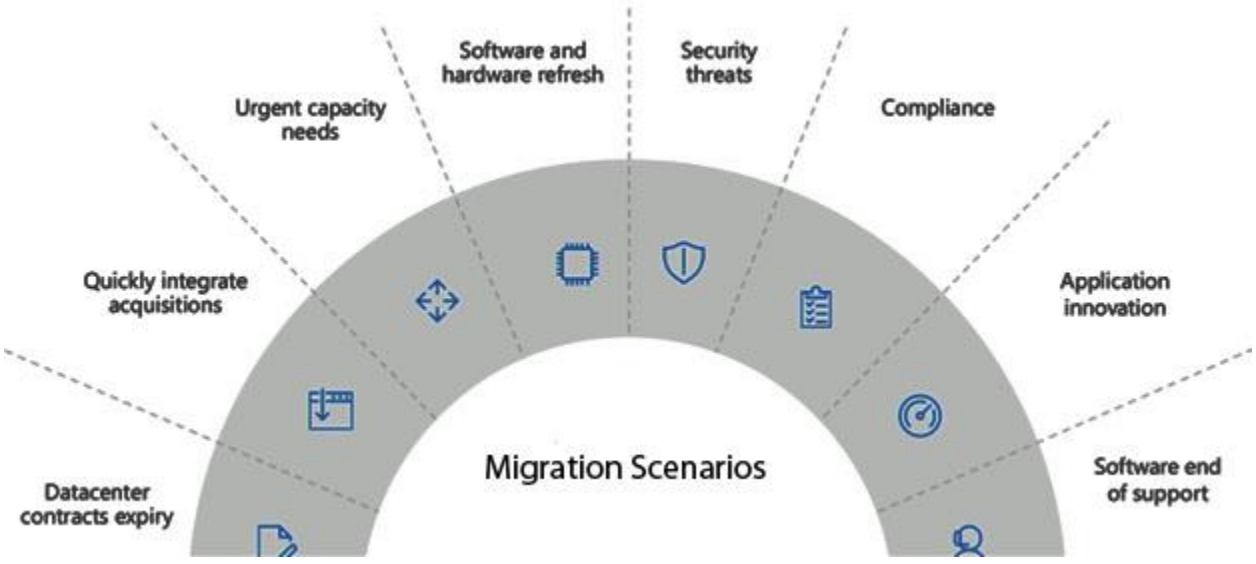
Movere, the Microsoft acquired SaaS platform helps you to gain visibility and control over the environments irrespective of geo-location, application or platform used.

Azure Migrate also integrates with a number of independent software vendor (ISV) offerings (for example, Lakeside, Rackware and others).

Migration Scenarios

The following could be the migration scenarios which you can consider moving your workload from on-premise to Azure…

1. If your lease of data center is expiring, then you may consider it to be a good time for migration.
2. Software reaching the end of support then it is the time to use cloud.
3. Hardware refreshing cases.
4. Application innovation.
5. Security, compliance requirements.



Migration Journey- understanding the phases

Assessment

In assessment stage get the audit of all things on your on-premise environment that are ready to go to the cloud. You may need to fix few things before you migrate. Because not all workloads are readyto migrate to the cloud. Therefore, you need to find out the issues if they can be tweaked and fixed.

Migration

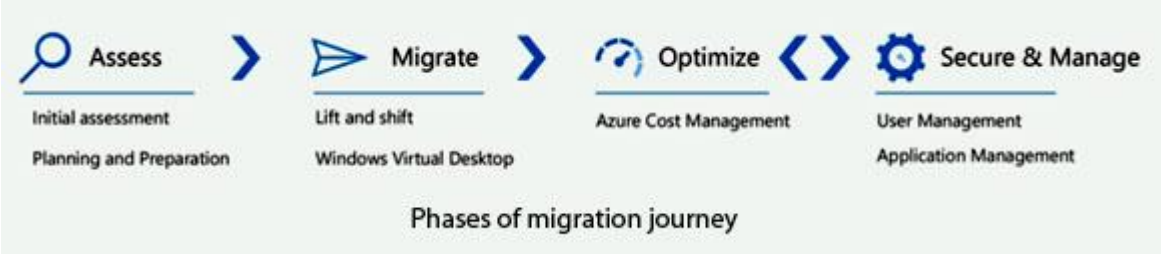
Here is where the actual migration starts with the help of migration tools that you choose and the steps that you follow for migration.

Optimize

For the cost management in Azure.

Management

Involves user and application management.



Azure Migrate: Key Tools for the key migration Scenarios

Azure Migrate helps you in all the process of Assessment and Migration stages. You can use the ISV tools from Microsoft partners as well.

Azure migrate also gives you end-to-end progress tracking which you can use to track your migration journey across different workloads and steps of your migration. Azure Migrate also brings a center Data Depository for your migration.

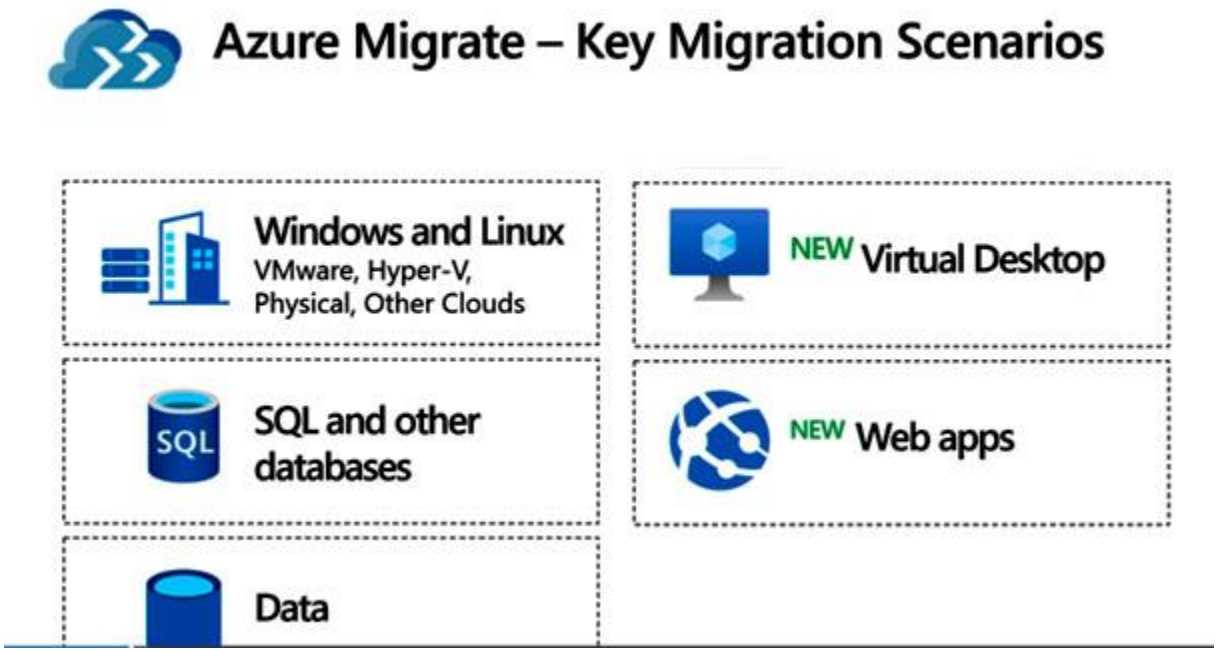
There are different Azure tools for different migration scenarios like…

a) **Server scenario**– helps you to move Windows/Linux servers to Azure

b) **Database scenario**– you can move your SQl/non-SQL databases to Azure

c) **Offline Database** movement scenario

d) **Virtual desktop migration scenario** – the available tools help to migrate your virtual desktop environment to Azure Windows Virtual Desktop. (you can also use the Microsoft partner tools for the purpose).



e) **Web Application migration scenario**– there are tools in Azure Migrate that help you to migrate your on-premise applications.
Let us consider the migration scenarios of Virtual Desktop.

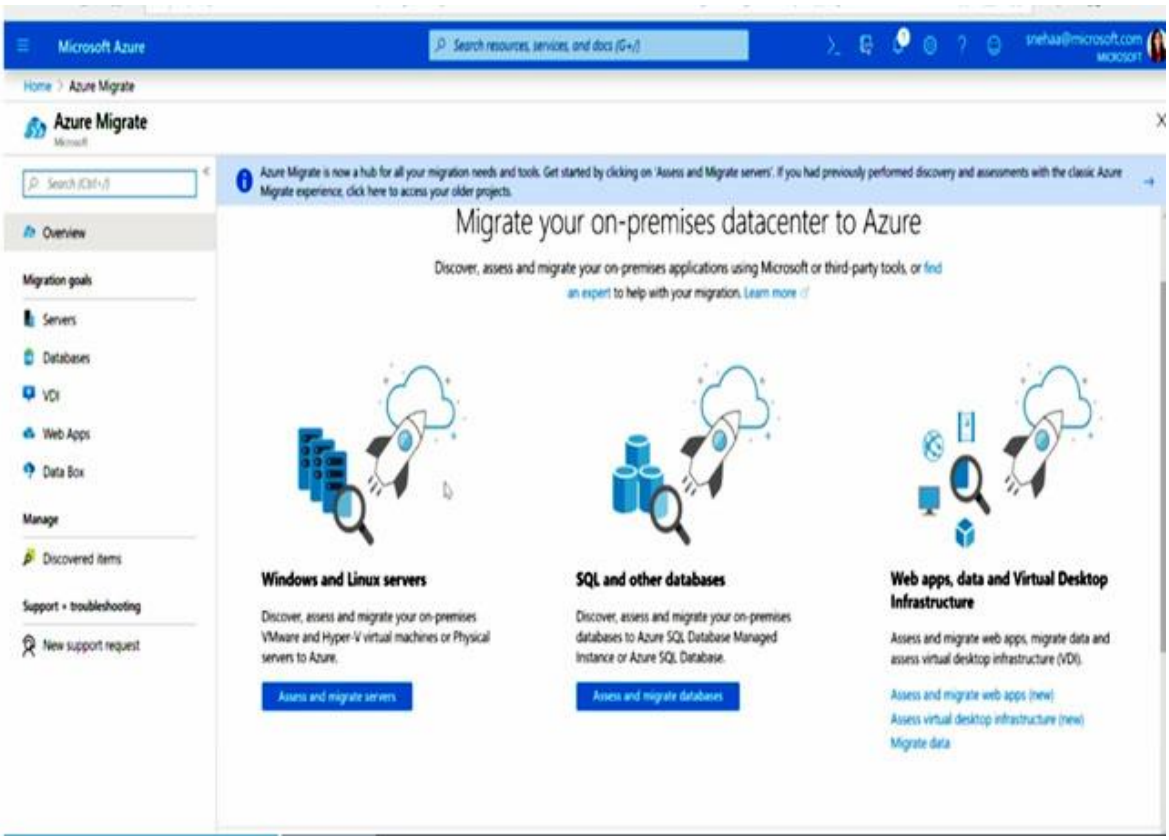
Migration: The Considerations

When you want to migrate your virtual desktop to WVD, there are a few things to consider.

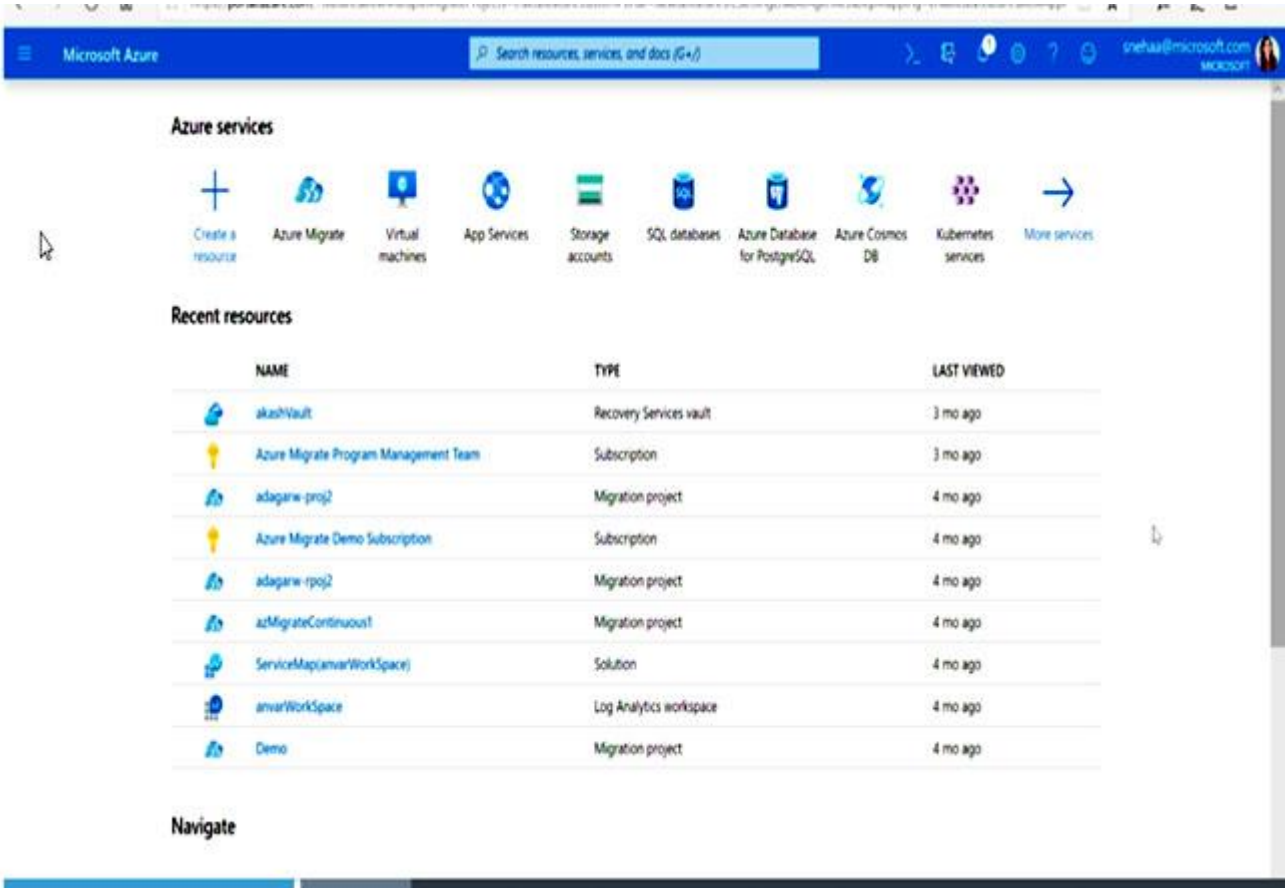
i) **Suitability of migration analysis:** there could be OS constraints to Azure and hence you need to understand whether the on-premise Operating Systems are compatible with Azure.
ii)**Sizing of CPU, Memory**: to understand the sizes of vCPU and Memory you would require for shifting your on-premise CPU, Memory size to Azure. Because often we over-allocate our on-premises resources and they remain unutilized. This assessment will help you to optimize your resources on the cloud.
iii)**Licenses & Dependencies:** to understand the license requirements and dependencies to ensure you are not leaving anything behind.
iv)**Collection of Users:** there would be users for pooled desktops and others needing stand-alone desktops. Accordingly, you can understand the VMs you would be needing in WVD.
v) **Application Rationalization:** there would be applications that are rarely used and those which are critical that must move to the cloud. The rarely used applications you can leave off from migrating to cloud.
vi)**User Density & Segmentation:** for the users using pooled desktops, the set of users that would be sharing a desktop and also those using the same kind of applications.
vii)**Cost Estimation:** to help you know the cost of moving your desktop resources to Azure and running them.

Migration Assessment

You can access Azure Migrate from Azure Portal. There you will get a dashboard showing all the different migration scenarios as discussed above. You choose the one applicable to you.

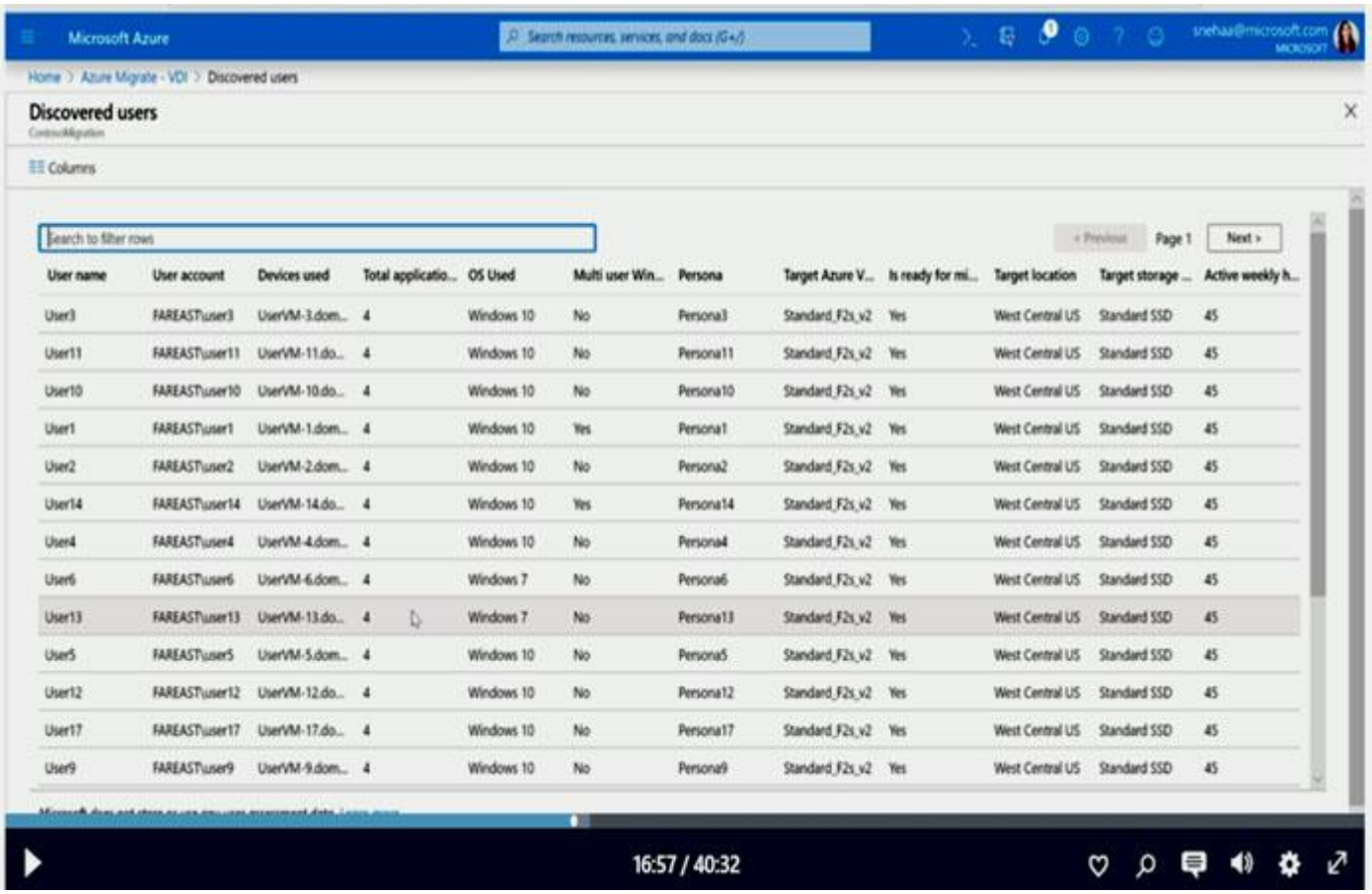


To get started with your assessment you need to start the **Assess Virtual Desktop Infrastructure**. There you will be able to create a **Migration Project** for you. It is associated with your subscription, resource group, geo-location to store your data (in case you do not wish your data to move out of your geographic location) and project name.
Next, you will be allowed to select an **Assessment Tool** (e.g. Server migration). And once you add a tool, it will create a project for you and the required tools will be added to your project and start assessing your project.



First, it will assess your entire on-premise environment as we have discussed in the virtual desktop migration scenario above. The data will then be pushed to Azure Migrate.

There you will get an exhaustive report on the entire assessment journey including the tools you have used for the purpose.



The Migration process to Windows Virtual Desktop

a) The Paths

There are 2 paths that can be taken.

1. **Migration Path1** focused at operational efficiency which helps you to lift and shift your desktop environment to Azure and modernize them later. The trigger here is infrastructure oriented e.g. data center lease, expiry etc.
2. **Migration Path2** focused on innovation and efficiency. (The triggers are mostly app oriented like legacy apps and if you wish to modernize them). If you are in greenfield category (building everything ground up) you can use this path.

b) The Journey

It happens in the following steps…

1. Setup your virtual network-connect to on-prem

2. Setup Active Directory

3. Syn Azure AD and Active Directory

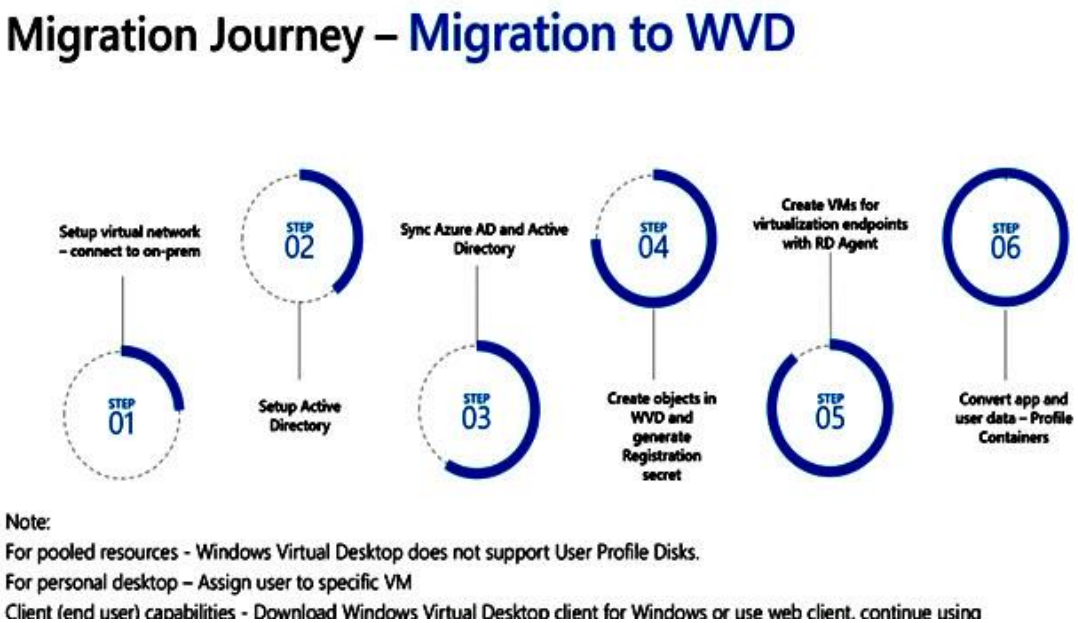
(Steps 2 & 3 can be done interchangeably)

You will need a local domain controller set up in your virtual network and need to synchronize your user details to Azure Active Directory. You can first do the syn and later set up your domain controller or vice versa.

4. Create objects in WVD and generate registration token. First, get into your windows virtual desktop environment and create objects like a) WVD tenant that connects your WVD to your Azure Active Directory Tenant and b) setting up of host pool or the VM sets that you have decided to add to your WVD. Next, you will get a registration token.

5. Once you have your WVD you can move your virtual machines (either migrate or create new VMs) and connect them to WVD.

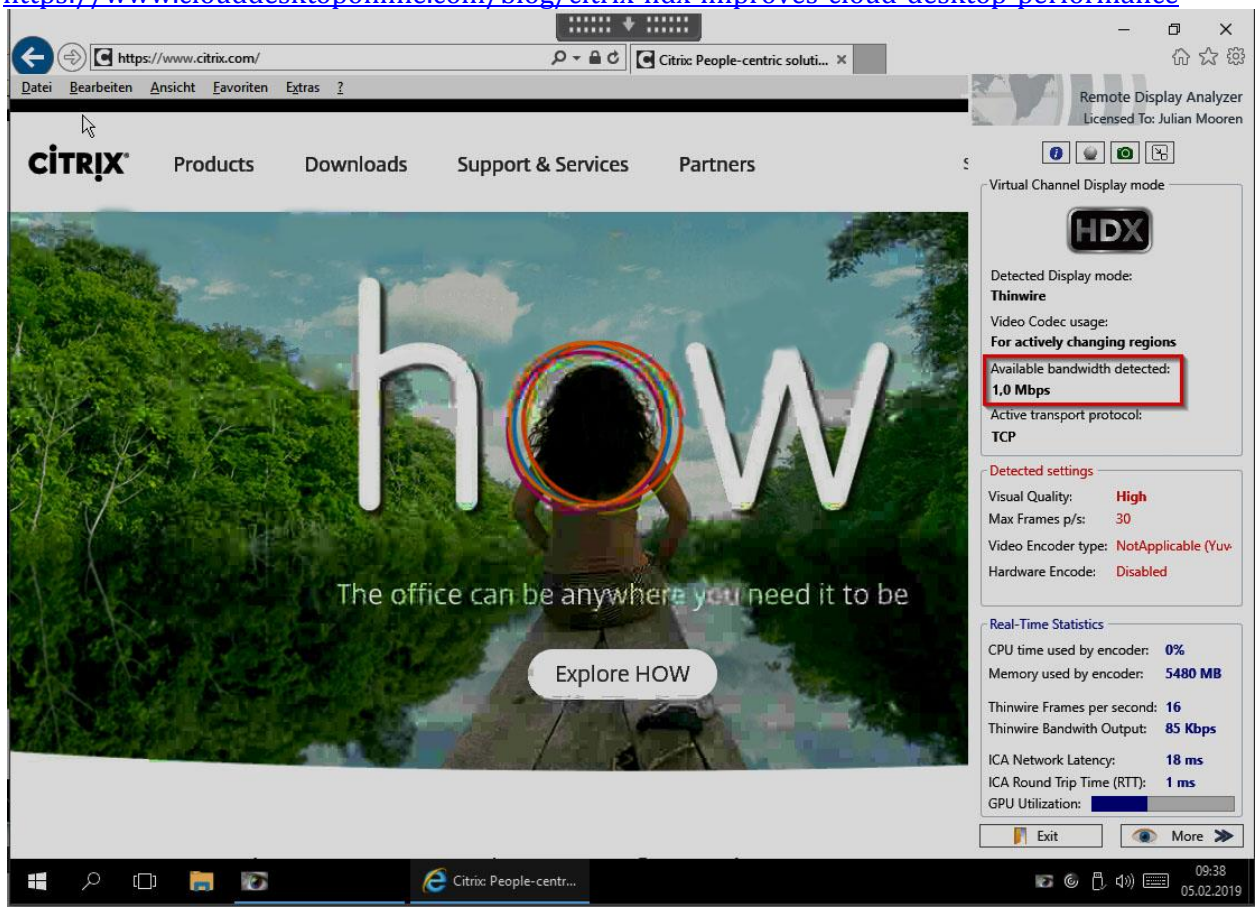
6. Migrate the user data to Azure. Keep in mind that WVD does not support User Profile Disks (UPDs-if you are using them) but supports FSLogix Profile Containers. So, you have to convert your UPDs to Profile Containers. If you are using Personal Desktops you need to assign the users directly to the virtual machines.



Your journey doesn't end after moving things to Azure. You continue to optimize your virtual desktop workloads in Azure, for cost, latency issues and continue managing them.

You can consider Apps4Rent for any help as we are a Microsoft Gold partner offering managed Azure solutions. For over 15 years we have remained as the most reliable, cost-effective hosted software service provider helping 10,000+ clients across 90 countries. Please feel comfortable in reaching us any time via chat or call *1-646-506-9354.*

https://www.clouddesktoponline.com/blog/citrix-hdx-improves-cloud-desktop-performance



How Citrix HDX Improves Cloud Desktop Performance

HDX (High Definition Experience) is a technology built on Citrix ICA (Independent Computing Architecture) protocol to deliver high-definition user-experience of any graphics intensive software application including CAD, accessible from any device, over any network situation. Not only it gives a high performance of the most demanding applications, but it also gives fast deliverance, irrespective of the location of users anywhere in the world.

Principles on which HDX works

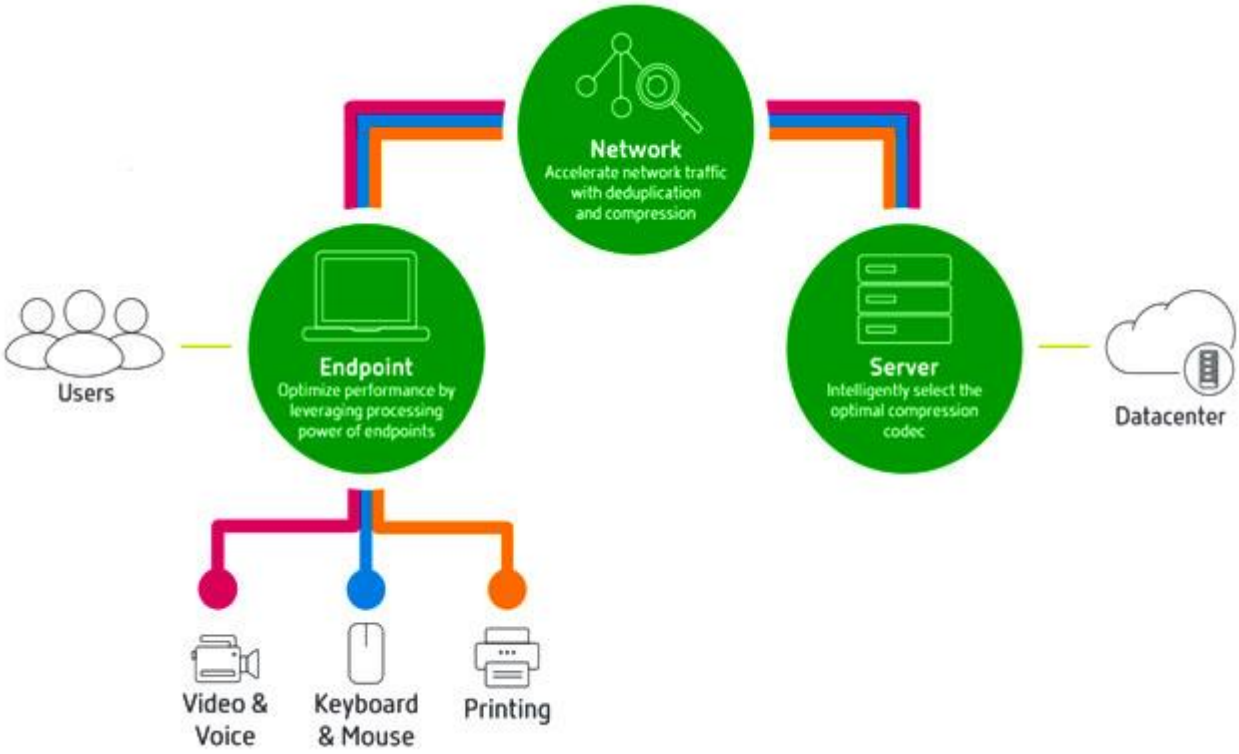
There are three technical principles on which HDX works to bring results like decreasing bandwidth, optimizing applications, user-experience and collaboration.

1. Active Redirection happens through a scrutiny of screen activities, application commands, end-devices, network/server capabilities to determine how and where to render an application or a desktop activity. The redirection happens instantly on any device.

2. **Active compression** is an intellectual property of HDX to determine the codecs (a computer program that encodes/decodes digital data or signal for shrinking large audio/video files for speedy downloads/ streaming), that are to be used for different network situations ensuring maximum utilization of CPU or GPU resources.

3. **De-duplication** (a technique for eliminating duplicate copies of repeating data) is achieved through multicasting and caching techniques.

In HDX multicasting, one-to-many communications happen by delivering a single transmission from one source point to many users; while HDX caching de-duplicates most commonly used accessed data like graphics, streamed-media, files, print-jobs.



The 3-level user-experience through HDX

To deliver high-definition user-experience, HDX uses different technologies at various levels.

Device Level: The MediaStream technology of HDX is responsible for delivering a smooth, seamless multimedia experience at the endpoint device of the users. The workspace control enables users to pause/stop virtual desktops or apps, and restart from a different device exactly from the same left-off point.

Network Level: The advanced technologies of HDX ensures the best performance over any device using any network (including the low-bandwidth, high-latency WAN situations), adapt to changes in the environment, balance load for every unique user-scenario. All these are achieved irrespective of the user-device or user-location.

Datacenter Level: HDX uses the processing power and scalability of servers and delivers high-end graphics output irrespective of the capacity of the user device (desktop, mobile or tablet).

The multimedia data are compressed through active compression and sent directly to the end-point user device in its native format. The channel monitoring capability of HDX shows the status of connected HDX channels on a user device.

User-experience actuals

1.Seamless Multimedia performance

Users get the same kind of multimedia experience they receive from non-virtual desktops. The deep compression of graphics/video brings higher frame rates with better image quality at maximum bandwidth efficiency and the best audio performance with the lowest latency.

Instant rendering of multimedia content is achieved through active redirection capability. The multicast video support for Flash and Windows media enables any number of users to access content rendered and transmitted only once. This saves enormous bandwidth and data center resources for live streaming of videos, training programs, web conferences or news channels.

2.Unified Communication (UC)
Association of Citrix with all the major UC vendors like Microsoft (business Skype), Cisco (Jabber) and Avaya one-X help real-time optimization of peer-to-peer communication between end-users when the app is hosted centrally in a virtual environment.

HDX ensures real-time high-fidelity audio, video experience and screen sharing with minimum latency and highest network priority, delivering a great experience during video meeting or conferences.

3.2D, 3D Graphics
Active compression and rendering help to optimize the performance of both 2D and 3D graphics and CAD. This can be accessed from any device and any network; even at low bandwidth scenarios. The HDX 3D Pro is now available both for high-end 3D professional graphics and business graphics apps as well (Microsoft Office apps for example).

4.HDX Mobile giving Windows apps a mobile-native experience
Users of Citrix Receiver working in Windows apps and server-based desktops on mobile devices get the same mobile-native experience due to the native interface control channel of HDX. The native interface control allows Windows apps to be re-factored for a touch experience including multi-touch gestures like pinch-zoom and more.

5.USB-Support
USB devices like webcams, audio recorders, music players, 3D Space Mouse, cameras get a seamless plug and play connectivity through HDX.

6.Printing, Scanning
Both local and network printer types are supported. Citrix developed the print driver/server technologies from scratch. The advanced Universal Print Server brings improved scalability, OS-support and performance monitoring.

7.Simplified administration
Lastly, the Pre-defined HDX policy templates based on use cases (for example, bandwidth-constrained WAN users, high server scalability), simplify administration and ensure that the users get the best possible experience, meeting the IT objectives at the same time.

To sum up, HDX technology forms the foundation of Citrix XenDesktop and XenApp platforms bringing the highest kind of high-definition user-experience globally accessible on any device, bandwidth or network type.
If you are looking for online implementation of graphics intensive applications like CAD, live streaming or rendering; Apps4Rent can help you with a solution on our own Citrix XenDesktop VDI or on Azure. Apps4Rent is a Citrix Partner as well as a Microsoft Azure Partner.
You can opt for a session-based or a dedicated plan as per your need; keep adding users instead of fresh purchase for every new user.

There is no minimum user limitation. The pay-as-you-use with month-to-month billing brings substantial savings to otherwise expensive HDX-CAD virtualization.

Contact our 24/7 sales team to discuss your requirements.

https://www.clouddesktoponline.com/blog/what-is-citrix-receiver

What Is Citrix Receiver

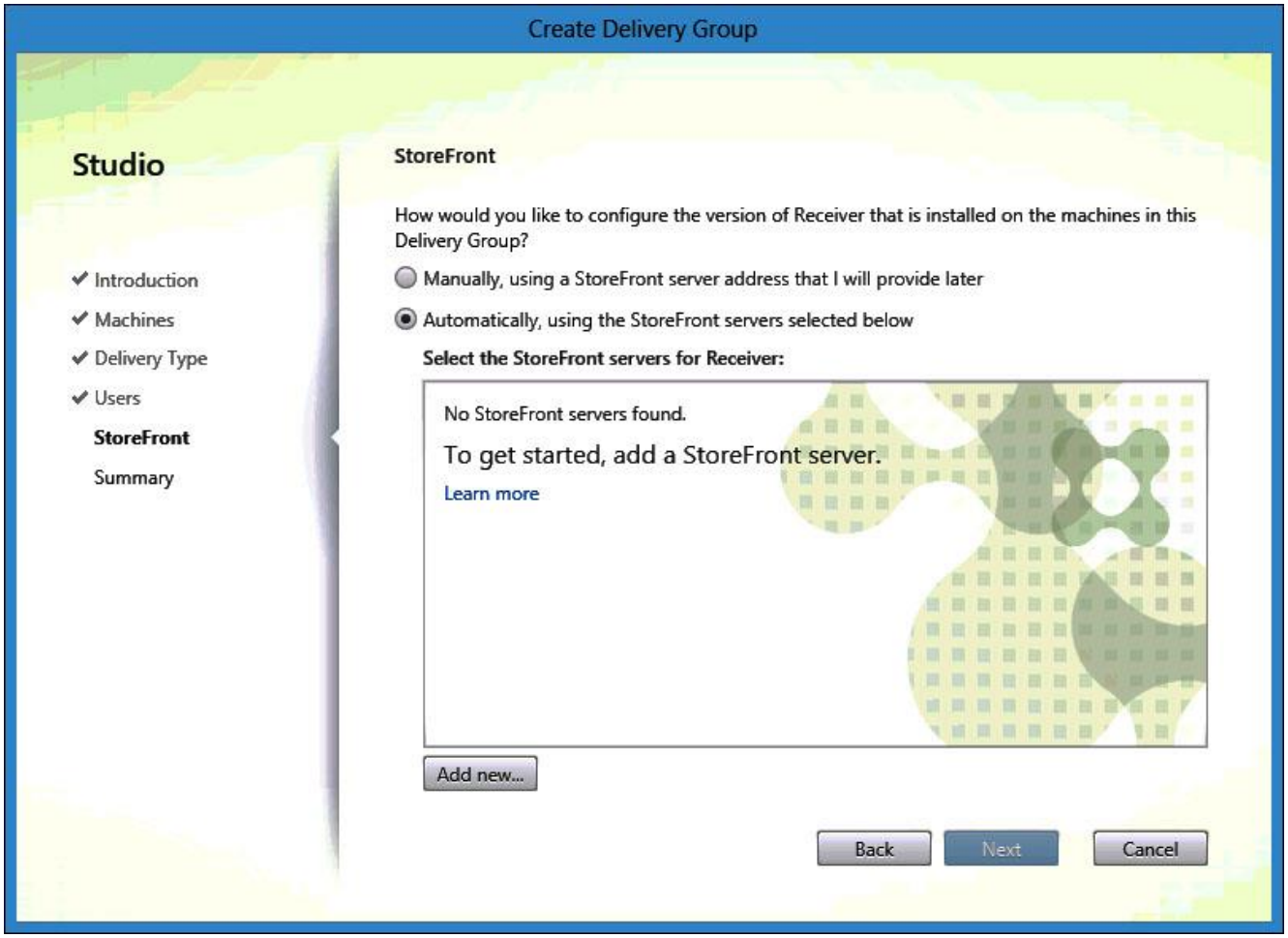
Citrix Receiver is a Citrix client software required to remotely access Citrix virtual desktops and applications hosted on Citrix servers from any user device. Citrix Receiver is needed for accessing Citrix virtual apps and desktops i.e. Citrix XenApp and Citrix XenDesktop. It comes bundled up with XenApp and XenDesktop. It is available for a wide range of OS (Mac, Windows, Android, Mac OS) and devices.

Purpose of Citrix Receiver

The technology is used for remote desktop or cloud apps access.

Citrix Receiver enables XenDesktop, XenApp installations on a wide range of devices and operating systems (OS) like iPad, iPhone, Android, Google Chromebook, Mac OS, Linux.

The Receiver, along with Citrix StoreFront ensures that the users have self-help access to their apps and services with a common user interface. Independent of a hardware device or OS.



In fact, Citrix had developed the Receiver for integrating all Citrix features so that the IT admins can manage and update them together at once, without the pains of maintaining multiple packages.

How the Receiver works

Citrix Receiver works with HDX and Independent Computing Architecture (ICA) protocols. ICA is basically the file formats used for configuring information between clients and servers. The ICA protocol sends the mouse/keyboard inputs to the remote server and receives screenshot updates on the client device.
The HDX protocols, on the other hand, improve the process by providing high definition user-experience of Windows apps across any type of user-devices.

As mentioned earlier Citrix Receiver works independently of the OS used. Whenever a user visits the Citrix Receiver download page it promptly detects the OS used and guides with the appropriate client software to download. The Receiver connects to XenApp and XenDesktop, Access Gateway, and other Citrix Services.

Facilities of Citrix Receiver

1.Centralized management

An IT environment is heterogeneous with the admins using various hardware/software from different vendors and managing them is difficult and time-consuming. The Receiver frees up the admins from the obligation of device/software dependency; because the management happens in a single and centralized location.

When an application requires an update, an admin just needs to go for server updating and not the client devices. This saves time and money.

2.Device compatibility

This great feature allows a user to switch over to any other device from the existing one and continue working from the same "left off" point. For example, if someone working on a desktop needs to go elsewhere and work, can comfortably work using a tablet picking up the same trail without losing the continuity.

3.Security, Control

Receiver brings a secure connection between a client-server and the user's device. All a user needs is to dial into the server and access from anywhere. Especially beneficial for sectors like finance, healthcare, education that handle sensitive information and require secured and demand-responsive systems.

For example, the Receiver simplifies the process of obtaining, integrating and managing databases of a large number of records in hospitals.

Companies get better control of their data without the fear of misuse, data theft or tamper.

The roaming user profiles is yet another useful feature of the Receiver as it maintains all profile information and enables downloading to any machine the admin may be using.

Citrix Receiver Challenges

1. An overwhelmingly large array of multiple products/components, various editions of Citrix virtual desktops/apps with different features and pricing options make it confusing for companies. Selecting the correct one matching the organizational needs and then configuring everything could perhaps be handled best only by an experienced IT professional.

2. Any network interruption or timing error could cause a delay in synchronizing between the authorization-verification and output-deliverance which are indispensable for security purpose. A reliable broadband connection is needed for the seamless Receiver work.

3. Citrix solution is specifically suitable for large scale compute-intensive requirements, therefore may not the best solution for small/medium enterprises.

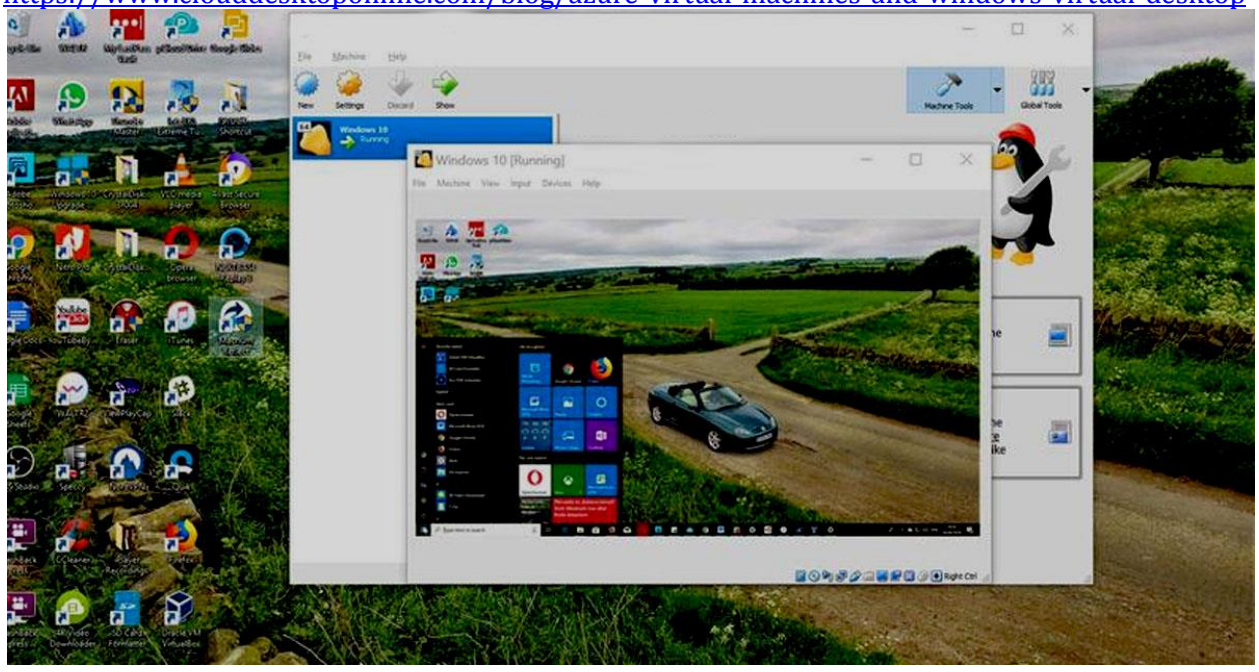
4. Not all features are available to every device. For example, Citrix Receiver for Windows version has the most exhaustive features.

When it comes to improving a business IT infrastructure, Citrix solutions are no doubt a remarkable choice. But with various features, editions, pricing combinations involved it is very easy to get side-tracked by losing direction in selecting the most appropriate option along with its managing and maintenance.

To contact a specialist probably would be a wise choice. As a Citrix Partner, having served over 10,000 businesses for more than 15 years, Apps4Rent brings XenDesktop hosting solutions available in session-based or dedicated modes.

For further technical discussion or support please feel free to contact us any time 1-646-506-9354.

https://www.clouddesktoponline.com/blog/azure-virtual-machines-and-windows-virtual-desktop



Azure Virtual Machines and Windows Virtual Desktop

The Microsoft Azure Cloud offers a large variety of resources and services that can be used to create a virtual infrastructure. Users and business owners, therefore, need to understand the types of VMs available in the world's most popular cloud Microsoft Azure. This also includes the latest desktop virtualization service by Microsoft, the Windows Virtual Desktop (WVD).

Azure virtual machines (VMs)

Azure is Microsoft's cloud service and offers a variety of virtualization options. Perhaps most than anyone else and suitable for any kind of users such as Linux, Oracle, IBM, SAP, Windows Server, SQL Server. Customers can either make their own VM or

select choose from a range of pre-configured Azure VMs suiting the varying requirements and can also opt for pay-as-you-go payment option.

Types of Azure VMs

Microsoft Azure offers hundreds of VM options tailored to suit various requirements like RAM, storage, the purpose of use like low-cost option, general computing, data protection, running heavy-memory applications (SAP for example), high performance, storage and more.

They could be categorized as below:

- **Economical & entry-level VMs**

Suitable for entry level workloads such as testing and development and bring a low-cost VM option to start with. These come under A-Series VMs.

- **Economical burstable VMs**

Known as Bs-series, these offer low-cost VMs for carrying out workloads needing low to moderate CPU usage but need to burst into higher CPU usage whenever required. Low traffic web servers, small databases, development and test servers are some of the use cases.

- **General purpose**

Known as the D-series VMs, with fast CPU and optimal CPU-to-memory configuration, better local disk performance, higher memories these are meant for production workloads.

- **Data protection**

The DC-series VMs are best used for the protection and confidentiality of business data and code. These get processed through secure enclaves and the built-in encryption protecting the data both in transit and rest in Azure.

Memory optimized

Coming under E-series, these Azure VMs are optimized to run heavy in-memory applications like SAP HANA and are configured to high memory-to-core ratios making them suitable for relational database servers with large caches and in-memory analytics. The M-series and the latest Mv2 series are the VMs with largest memory optimization and suitable for large in-memory critical business workloads needing huge parallel computing power.

Computing optimized

These F-series VMs offer a higher CPU-to-memory ratio and are suitable for analytics, gaming, web servers and batch processing.

Heavy memory and storage optimized

Called the G-series VMs, these offer twice the memory and four times more Solid State Drive storage (SSDs) than the General Purpose D-series we have discussed before. Suitable for ERP, SAP, Large SOL and NoSQL databases and data warehousing solutions.

High-performance computing

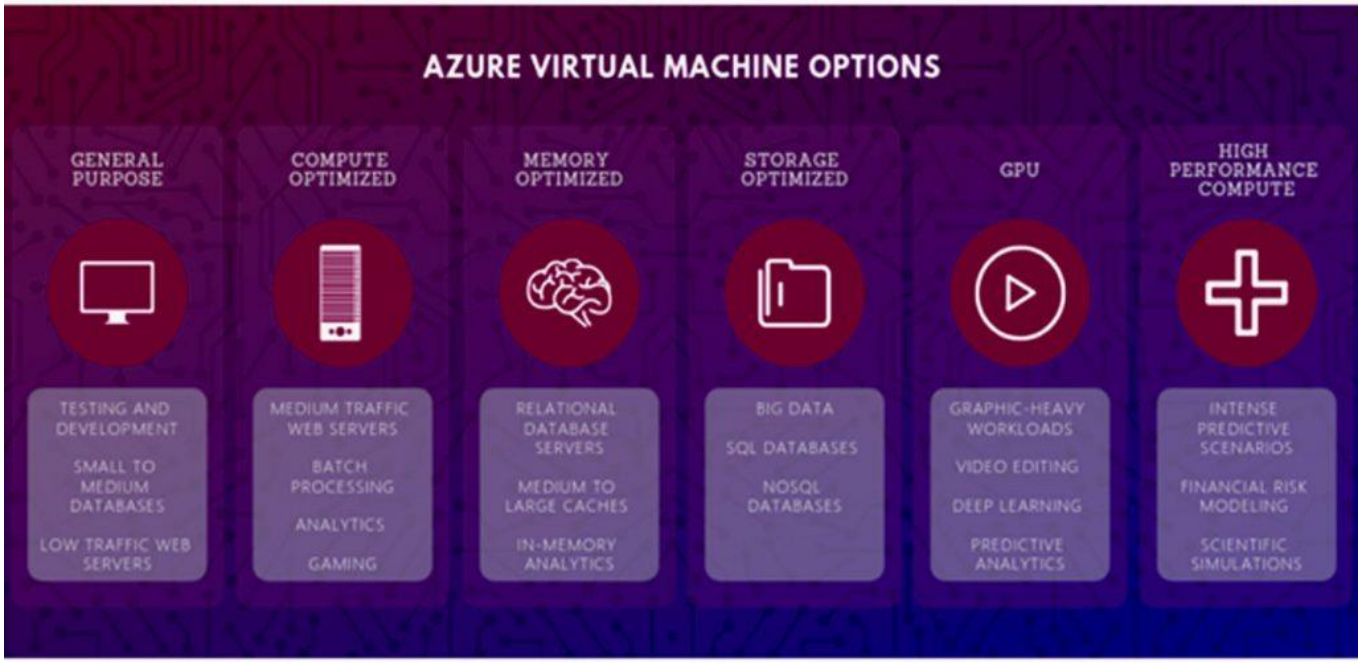
Called the HC-series, these VMs are used in cases like finite element analysis, seismic processing, fluid dynamics, risk analysis, electronic design automation, rendering, quantum simulation and many other such scenarios.

Storage optimized

The Ls-series VMs are optimized for storage and are ideal for applications needing low latency and high throughput (number of transactions an app can handle per second) while the latest Lsv2-series are the new members in the lot. Data warehousing applications and large transactional databases are some of the use cases where these VMs are used.

GPU enabled

Under N-series, the VMs are suitable for graphics-intensive workload, simulation, deep learning, rendering video editing, gaming and remote visualization.



Windows Virtual Desktop (WVD)

Windows Virtual Desktop is a cloud-based platform service, a part of virtual desktop infrastructure (VDI) that uses a set of Microsoft technologies on Azure cloud for virtualizing and managing desktops and applications.

It offers multi-session Windows 10, optimizations for Office 365 ProPlus and support for RDS environments. Other built-in key features include profile management in containers with FSLogix, Terminal Services Session Broker (keeps tracks of sessions on a server) and control plane. It also allows running the single session Windows 7 with free security updates till January 2023.

WVD brings the best profile management solution in a virtual environment with virtualized GPU (vGPU) to run high-end graphics, complex and demanding design applications all coming with tight multi-layered security system.

To sum up, WVD is a combination of all the different Azure virtual machines and goes even beyond bringing some unique features for the first time in the journey of virtualization. The kind of VM a business needs will depend on its specific requirement and available budget. A good virtual desktop infrastructure provider or a Desktop-as-a-service (DaaS) vendor should bring the tailor-made solution after understanding a company's goal and business requirements with an easy step-up/down or pay-as-you-use offer.

Apps4Rent, is a US-based cloud solution and hosted desktop as a service solution provider company. This Microsoft Gold Partner is in the market for over 18 years having served more than 10,000 large and small businesses in 90 countries worldwide. For any of your Azure service or WVD requirements please free to contact 24/7 by chat or phone 1-866-716-2040.

https://www.clouddesktoponline.com/blog/top-use-cases-for-citrix-xendesktop

Top Use Cases for Citrix XenDesktop

Citrix virtualization technologies such as Citrix XenDesktop and XenApp offer significant differentiation and advantages compared to other competitor virtualization products. We surveyed popular review sites to see what real users are saying about Citrix virtualization. The purpose of this write-up is to share with you how businesses across different sectors are leveraging the useful features of Citrix virtual desktop – XenDesktop. In the same context, we will also discuss the most popular features of XenDesktop that are keeping the clients happy.

Maximum harnessed features of Citrix XenDesktop

Cost-saving with lower hardware requirements and Storage

A XenApp hosted shared virtual desktops with one-to-many ratio (each user session isolated and working independently) brings almost 400% more shared computing resources than an only-VDI solution (with each user having a dedicated virtual machine). Citrix XenApp centralized image management technology (many to one server) brought by XenApp Server hosted shared desktops reduce the storage requirement both on local and shared central storage. For example, s single XenApp Server instance needs only 15GB of high-performing shared storage that can support 200 user sessions. Compare this against a VDI solution where each VM needs its own individual storage and 200 VDI users will need 1,000GB of storage.

Enhanced mobility with high security

Citrix Receiver brings enhanced mobility and use of BYOD. Along with XenApp Mobility Pack, the Citrix Receiver gives the user the facility of using native device features of a tablet within a virtual desktop making Windows desktop easy to access/navigate on keyboard-less or without the right-click facility of a mouse.
Citrix Receiver is a freely downloadable / self-configure feature from Citrix website.

The consolidated access to the web and virtual applications, access control based on device, location or application, end-to-end IT visibility across user traffic, use of behavior analytics to detect anomalies and enforce security policies are the ways Citrix helps to maintain tight security.

Get Windows desktop experience from a server operating system (OS)

With Windows 2008 R2 server desktop experience feature, you can now transform XenApp server-based virtual desktop to Windows 7 like desktop experience. In this way, you get the best user experience that XenApp server brings by pairing the mobility with the security of virtual desktop with Windows desktop experience.

The Use cases of XenDesktop

An Investment Management Company with 201-500 employees

Initially, the company used the XenDesktop to address the remote access latency issue of the users. But later it expanded it to a disaster management solution with Citrix Access Gateway (provides secure application-access giving the admins application-level control while allowing the users to access them from anywhere) and then by NetScaler (an application delivery controller for making applications run five times faster thus reducing web application ownership costs with load balancing).

The company finds XenDesktop very helpful for their remote deployments (residing in the same data center along with the servers) and faster access without high latency (quite common in case of intercontinental connections) and with assured security.

Oil & Gas Company with 1001-5000 employees

The company used this for optimizing their bandwidth at their remote locations plus creating a standard for all their applications that are run and maintained centrally.

The remote locations had T-1 connections and needed the bandwidth to be used carefully. By keeping desktops/apps centralized to the data center; it lowered the bandwidth usage at such locations.

The company was also happy with the load balancing of XenDesktop (with load evaluator index for measuring server-load) of the apps and desktops on their servers. Also, the company found managing user sessions easy and simple with Citrix Director (the management console in the XenDesktop/ XenApp).

Insurance Company with more than 10,00 employees

The company uses XenDesktop as BYOD solution for its knowledge workers and also as a VDI platform for its call centers. It is happy because of the easy provisioning of machines along with its smooth system-updates and easy to apply policies.

Information Technology and Services with 51-200 employees

The IT company is happy because of the work-from-anywhere and any-device yet maintaining a consistent and persistent user experience delivered by XenDesktop. The hassle-free customization of their all their desktops and applications as per the user-requirement, profound delegated administration system, seamless integration of desktop/apps, unparallel scalability with Provisioning Services and high performance are its other features the company applauds.

Financial Services with 5000-10,000 employees

The finance company uses XenDesktop mainly for its IT, operations and offshore resources. The company is expanding into other business and looking forward to using the Citrix service there as well.

Anywhere, any-device accessibility independent of network-type along with secure access (whether it is VDI or Remote PC) are some features helping the company. Citrix proprietary protocol ICA/HDX that handle traffic over high latency network is making the company excited about XenDesktop.

Hospital and Healthcare with 11-50 employees

XenDesktop is used by this company to deliver virtual desktops to doctors/nurses throughout the hospital. That a user is not required to repeat the login process each time he or she moves between a patient room and other areas with renewed access, is something the hospital finds very useful. With proximity card authentication and single-sign-on systems, the password reset requests and login times are reduced considerably; something which makes the client highly satisfied.

A company into Transportation/Trucking/Railroad with 10001-5000 employees

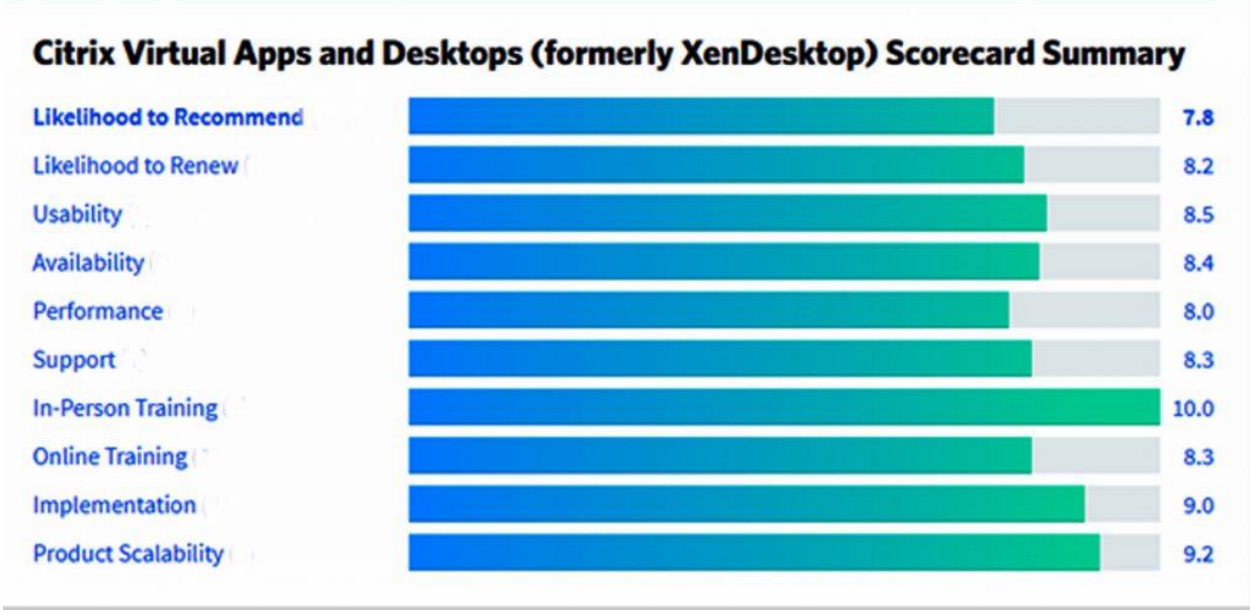
The company is willing to recommend XenDesktop to anyone as it finds the service very useful for App Streaming, easy connectivity, scalability and tough security. It finds XenDesktop lightweight with simple deployment features.

National Energy Technology Laboratory with 1000-5000 employees)
The organization finds XenDesktop extremely useful as many of the employees work remotely using any smart device and need to ensure a high-end security connection to servers.

A Publishing company with 200-500 employees
The company runs Outlook, database system through XenDesktop and stores all files. Easy accessibility to the files from anywhere is something the company finds very useful as it has users working offsite and also from its two different office locations.

A Wholesale Business with multiple locations and 5000-10,000 employees
The business uses XenDesktop to give Windows access (with easy file sharing) across all its locations while giving easy access to its IT department for troubleshooting and updating software.

Banking Company with 200-500 employees
The bank uses XenDesktop to provide its third-party offshore developers access to its internal resources at the same time maintaining tight security. Because XenDesktop prevents sensitive customer information/data/proprietary code to get exposed beyond its own boundary.



Apps4Rent with its experience in virtualization for over 15 years and serving more than 10,000 customers worldwide offers various desktop virtualization solutions including server-based virtual desktop-as-a-service or hosted Citrix XenDesktop. *Please contact 1-646-506-9354 any time.*

https://www.clouddesktoponline.com/blog/delegated-access-system-in-windows-virtual-desktop

Delegated Access system in Windows Virtual Desktop

Delegation is important for any company from the security point of view. As the business grows, it becomes difficult to keep track of all the specific users with particular admin roles. For example, if an employee user gets an admin role that should not be going to that user, the company becomes vulnerable to security breaches.

The size and complexity of your company will determine how many admins are needed and how granular should be their access permission.

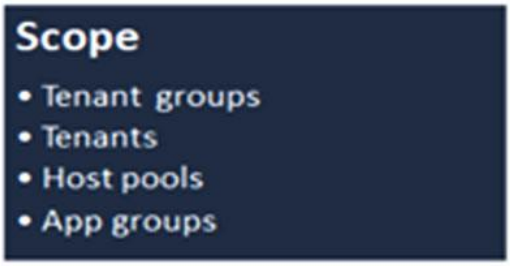
Windows Virtual Desktop the DaaS Windows from Microsoft comes with delegated access component. At the different levels of WVD, this function allows you to define and control the level of access a particular user can be given by assigning a role.
You can view the roles assigned to all the members in the Azure AD portal to help you scrutinize your deployment and delegate permissions. For organizations with multi-tiered IT support system such delegated access could be very useful. Because it allows to manage and control the access to WVD at various levels.

The Components and Values of Delegated Access

The delegated access model of Windows Virtual Desktop (WVD) is based on the **Azure Role-based access control (RBAC)** model. As the name suggests you can assign the Azure resources to your users, groups and service principals as per the RBAC built-in roles. You can create your own custom roles and assign in case the built-in roles do not meet your organization's requirement.

These include **Security principal, Role definition and Scope**.

- Security principal – has users and Service principals
- Role definition – has built-in roles
- Scope- includes Tenant groups, Tenants, Host pools and App groups



Different roles of Delegated Access

The built-in role definitions that you can assign to your users and others are as follows:

- RDS Owner: is allowed to manage everything even access to resources
- RDS Contributor: manages everything but does not have access to resources
- RDS Reader: as the name suggests, can view everything but cannot make changes
- RDS Operator: is allowed to view the diagnostic activities

By running the PowerShell "command-lets" or cmdlets you can create, view or remove the role assignments.

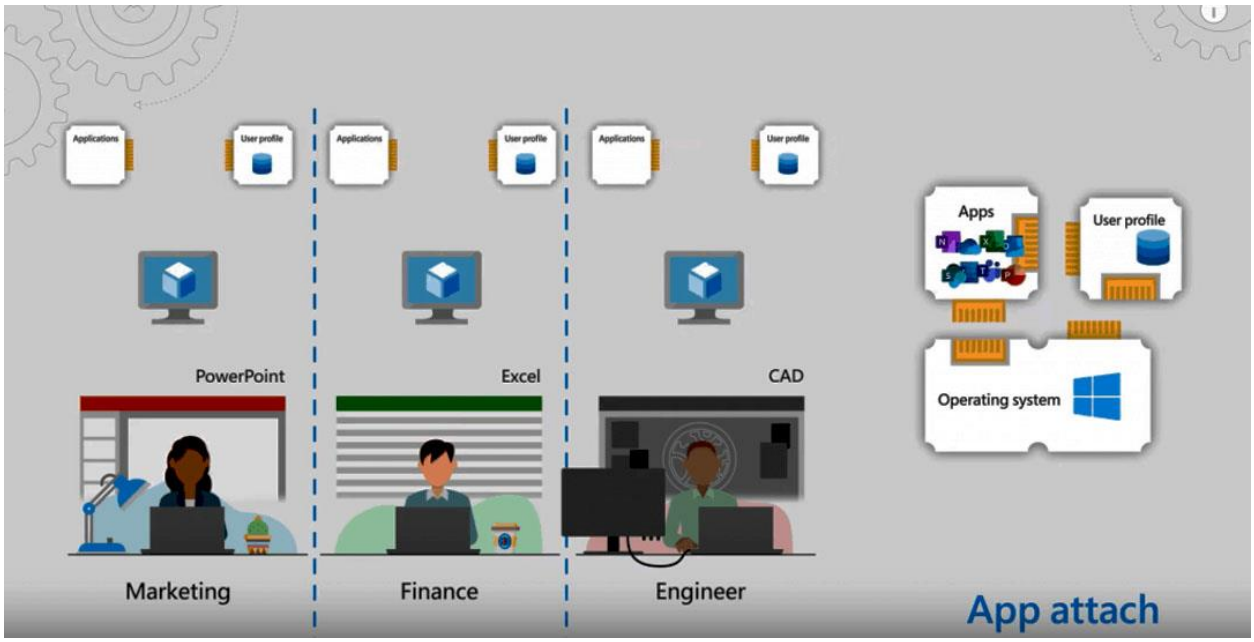
Planning the Delegation

To understand what kind of delegation model will be the best your organizational requirements you must make a prior planning. Here are some suggestions:

- Define the roles that you need
- Determine the application administration delegation
- List and grant authorization to register application
- Determine and delegate application ownership
- Design a security plan
- Confirm the emergency accounts
- Secure the roles of the admins
- Keep privileged elevation a temporary option

Consider taking Apps4Rent for any of your WVD needs or inquiry. With an experience spanning over 15 years of offering Azure managed solutions to more than 10,000 businesses successfully, we can confidently rely on us. Contact us anytime *1-646-506-9354. We look forward to hearing from you.*

https://www.clouddesktoponline.com/blog/msix-app-attach-in-windows-virtual-desktop



AppAttach and MSIX in Windows Virtual Desktop

In our present discussion, we will try to understand the application management services in a virtualized environment, its challenges, how they are overcome by the future technology developed by Microsoft for Windows Virtual Desktop (WVD) and what the clients and users can expect.

Challenges of Application Management

Application landscape involving installing, running and updating remotely is the most time consuming and challenging task for Application or Desktop delivery.

The reasons are:

- Various applications come from different vendors, each with its own installation and updating rules.
- Many applications are there that are not designed to run on the background of a multi-user operating system (OS). They may require some particular registry settings, need special permissions to run or require specific files in the user's profile.

Commonly used Application Management Systems

Use golden images: install your apps in an image (golden image) and update it. Then update your host pool or session collections by deploying this golden image.

However, if different sets of users require different applications you will need multiple such golden images with the compulsion to maintain, manage and update them. Could be a major headache for large organizations.

Install all applications in a single golden image: use the masking technology of FSLogix to hide/show different subsets to different user-groups as required. The drawback here is, the golden image could become extremely large to manage over a period of time.

Application Streaming: another common option that enables you to stream applications on demand but again for this you will require to maintain application streaming infrastructure and that could be a complicated process.

The new method of Application Management: MSIX app attach

MSIX, a relatively new technology for application management in WVD, basically is Microsoft's Windows application packaging format that enables an application-attachment to any OS, much similar to Profile Containers. MSIX maintains the existing application packages/files and at the same time brings modern packaging/deployment features.

MSIX packaging tool allows you to convert existing applications to MSIX packages. The tool helps to streamline the packaging experience.

When MSIX is launched, the application files are accessed from a virtual hard disk (VHD) and the user is not even aware that the application is remote because the app functions like any local application. Another advantage is if the device needs a reset or re-image, these applications will not require a re-installation.

AppAttach, an extension of MSIX is a development on the MSIX packaging tool and registers the regular MSIX applications on a device instead of physical download and installation. The registration is almost immediate and enhances user experience.

MSIX App attach (as it is officially called) can be used on-premises, Azure or AWS environment without any modification and is independent of the OS used. Microsoft officially confirmed that Windows Virtual Desktop will be using MSIX App attach as the native/default way of managing and provisioning applications within WVD.
With the growing interest for WVD plus many companies already using App-V or any other application management solution, the advantages of MSIX App attach over the rest of the pack might make it extremely popular.

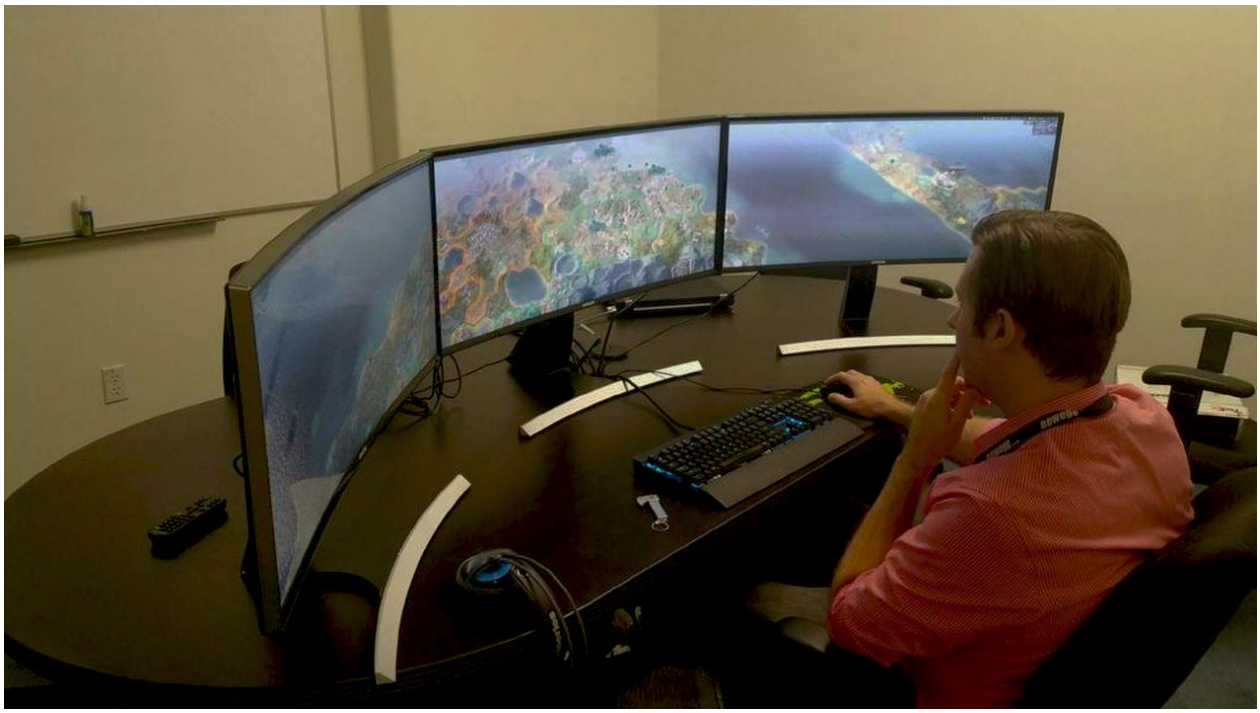
The Advantages MSIX App attach brings
MSIX app attach now is taking up all the Application Layering functions that App-V has been doing till now. Here are the returns it brings:

- No need of special deployment servers
- The existing MSIX packages are sufficient without altering/repackaging
- There is no performance impact
- Can be used on-premises or Azure/AWS cloud independent of the underlying OS
- Will be functional in physical/virtual machines, single or multi-user environment

The Future of App Management Technology
With Microsoft's announcement that App-V would not see further development, MSIX AppAttach would become the standard app streaming/layering technology in Windows Virtual Desktop. Here is what the Microsoft official says:

"App-V is not under active development but it is supported in Windows 10. We will work closely with our App-V customers to ensure that their requirements are met by the future of app deployment, MSIX in conjunction with SCCM/InTune" – Andrew Clinick, Microsoft
To conclude, MSIX App attach is surely going to be a key driver and define the how Microsoft will be evolving Windows in the domain of virtualization especially with its Windows DaaS.
For any of your Azure Virtual Desktop requirement or inquiry consider Apps4Rent. With more than 15 years of experience of offering managed Azure solutions, the company has served more than 10,000 clients so far. Please contact 1-646-506-9354 any time.

https://www.clouddesktoponline.com/blog/rdsh-server



RDSH Done Right

A remote Desktop Session/Server Host (RDSH) is a server computer (a virtual machine or a physical server) for hosting remote desktop and application sessions that can be accessed by a network connection. However, installing applications on RDSH involves more complicacies than installing them on a single-user operating system or virtual desktop. Certain incidents need to be considered and tested before integrating applications to RDSH. However, these usually do not apply to virtual desktops. Here's a rundown of the testing that must be done while publishing an application on RDSH:

Maiden-use settings

When an application is launched for the first time by a user, it needs to be entirely auto-configured with default settings. Group policy, wherever applicable, needs to be applied to the settings.

Roaming user-settings

Users may be connecting a different RDSH machine each day which requires that the user-settings must roam across different RDSH machines. This can be tested by first running one application on an RDSH machine, then making changes and running it on a different machine to ensure that the changes are consistently effective.

Ability to run multi-user

Most of the applications can run multiple times on the same machine by different users but a few of them could have issues. This is more applicable to the applications that keep temporary or write-enabled files in global locations. Take an instance where an application user writes temporary files in the C:\Temp location, while another user writes to the same location and in the process, overwrites the temp files required by the first user. Therefore, testing is required to see if multiple users can run the same application on the same RDSH machine.

Prevent one user from affecting another

Putting restrictions could be required to stop this. Consider a case where the configuration files of an application are stored in a global location with the chance of one user editing a config file thereby affecting another user. Therefore, each application with multi-user on the same RDSH machine needs to be tested.

Permission alterations

The relaxations that are required to allow non-admins and Group Policy Object (GPO)-disabled users to run the applications need to be considered. (A GPO is a single or groups of computers on a network with a group policy applied).

Client device mapping

Unfortunately, the device mapping capability of RDSH is not as elaborate as virtual desktops. Hence it needs to be tested for the generic mapping of USP, printers and COM ports (connections used for mouse, modems, gaming controllers, printers).

Integration testing

Integration testing against the existing applications must be done whenever a new application is installed on an RDSH server to check if all the applications including the new one are running as expected.

Licensing policy of application

It needs to be considered if an application that requires a licensing can be accessed by non-licensed users. If not, then how can it be ensured to prevent such a user to access the application.

Hardware resource sharing

It needs to be checked if an application consumes an excess of hardware resources (for example, consuming 100% CPU). In that case, the application could be placed on its own Delivery Group.

RDS IP virtualization

This might be needed in case of an application giving problems with multiple users sharing the same IP address.

For any of your virtualization requirements, you can consider Apps4Rent. The US-based cloud solution and hosted desktop as a service provider has over 18 years of experience, has served more than 10,000 large and small businesses worldwide in 90 countries. This Microsoft Gold and Citrix partner is well known for its reasonable price and unmatched client support. Please free to contact 24/7 by chat or phone 1-866-716-2040.

https://www.clouddesktoponline.com/blog/engineering-applications-running-best-on-citrix

Engineering Applications running best on Citrix: Why should you care?

Engineering, manufacturing and designing companies especially with employees working remotely or companies engaging talented designers from different parts of the globe, face the biggest challenge of collaboration, often real-time.
Their CAD professionals working from different locations/states/countries need to conform, collaborate and manage the design environments in real-time. Each user needs maximum user experience possible in terms of precision, performance and speed. This must be irrespective of the network, bandwidth or device used or accessing applications on the go from a tablet that must bring the desktop experience.
Citrix XenDesktop comes as an ideal one-stop solution for all such scenarios. Companies can now move the entire CAD workstations to the cloud. Many customers already using vGPU prefer Autodesk Inc. products. This is because of Autodesk Inc's substantial market share and its clear strategy of virtualization that has made the company come up with clear licensing terms and certifying their applications to be used in virtual environments.

In fact, Autodesk has partnered with Citrix (the company is a member of the Citrix Global Alliance Program) to bring greater efficiency, ease and flexibility of use. Using Autodesk designing software on Citrix XenDesktop/XenApp reduces the costs of maintaining expensive workstations and improves performance with seamless access from anywhere.

Citrix-ready popular Autodesk software

Inventor

Professional grade designing and engineering solution for any kind of 3D mechanical designing, simulation, tooling and victualing use. Integration of 2D AutoCAD drawings and 3D data into one digital model is possible along with creating a virtual presentation of its final output from all aspects before it is built physically.

Vault

It is a data management software for engineers and designers to organize, document, track design data and other development processes.

Revit

This is structural/building design software specially built for Building Information Modelling (BIM) and includes features of architectural design, Mechanical, electrical and plumbing (MEP), structural engineering and construction designs.

AutoCAD

Globally used by millions of designers this is a design (including 3D free-forms) and documentation tool suitable for all business sizes across industry sectors. All its varieties like NanoCAD, TurboCAD, ArchiCAD, 3DS MAX are supported by Citrix.

Autodesk applications running on Citrix: why the best?

HDX technology

Citrix technology delivering a "high-definition" design experience to the users. Citrix XenDesktop comes with HDX 3D Pro technologies for improving the performance and delivery of graphics-intensive applications. Designed to optimize the user experience, reduce bandwidth consumption with increased speed, the technology is extremely suitable for any type of high-end graphics, CAD, video or audio streaming and multimedia. At the same time, it excludes the requirement of any special graphics processors and also supports the special designing essentials such as 3D Space Mouse and large displays.

NetScaler

NetScaler appliance helps in load-balanced and secure remote access to all XenDesktop/XenApp applications. By distributing traffic, it accelerates and optimizes traffic flow and visibility features. Users can access data/applications independent of their locations or network (even a Cybercafe is perfect) or the device used with the same high-end output.

SD-WAN

Software-defined wide-area network (SD-WAN) is a networking technology that connects enterprise networks (data centers, branch offices) over extensive geographical areas. This reduces cost, improves user experience, offers seamless audio-video streaming and also simplifies cloud-based management operations.

NVIDIA virtual GPUs

NVIDIA virtual GPUs help the designers collaborate with other team members to access the project-work on the same 3D CAD files/designs independent of their location even over 9,000km distance.

The NVIDIA graphics processor maximizes rendering of complex graphics, the compression codes deliver good application performance even in environments with narrow WAN bandwidth.

Why should you consider Apps4Rent hosted Citrix CAD

Apps4Rent is a Citrix Partner

As a Citrix Partner, Apps4Rent has the hosted Citrix VDI knowledge and you can work with the company's technical experts to guide you and implement your virtual CAD solutions depending on your business objectives and requirements. You can use the dedicated or session-based hosted Citrix desktop- XenDesktop. While in a session-based option the company technicians will take care of application instalment, the dedicated plan will be very useful in case you have graphics intensive applications, as you will be able to install your own applications.

Cost-saving without obligations

Citrix CAD virtualization is expensive.But, **w**ith Apps4Rent you can reduce your Citrix XenDesktop cost significantly with the pay-as-you-use model (month-to-month billing). You can easily scale up once your requirement grows. No need to sign any contract. Besides you can add new users whenever you need on your existing plan.

Resilience, ease, security

Apps4Rent does not impose any maximum/minimum user limit. You can access expert assistance any time 24/7 through chat/phone even for small issues. Your data will remain secure in top-tier SSAE16 Type II certified data center in NY, USA.

Long-standing market presence

Having been in the business for 18 years now after serving 10,000 big and small clients worldwide, Apps4Rent understands cloud hosting in-and-out with the best service response time in the industry which includes 24/7*365 help desk/remote

support, within 15 minutes call-attendance, online knowledge sharing, infrastructure monitoring, management, updates, maintenance and patching or everything you need.

For further technical discussion, support please feel free to talk to us 1-646-506-9354 any time.

https://www.clouddesktoponline.com/blog/citrix-xenserver-citrix-hypervisor-an-overview

Citrix XenServer (Citrix Hypervisor): An Overview

If you are planning to expand your server, virtualization or thinking to shift your server workloads to the cloud, **Citrix XenServer** (now known as **Citrix Hypervisor**) could be an option for you. In today's discussion will take you through the fundamentals and the advantages you can expect from it and also the drawbacks.

XenServer, developed by Citrix Systems, is an open-source hypervisor (a computer software, firmware or hardware for creating and running virtual machines-VMs) platform. It is built over Xen hypervisor for creating and managing desktop, server and cloud virtualization infrastructure. It helps to deploy, host and manage VMs and distribute hardware resources like CPU, memory, storage and networking to the VMs.

The role of a hypervisor in virtualization

Virtualization to the core is the method of running multiple VMs on a single physical PC and the software executed on these VMs remain separated from the underlying hardware resources thereby utilizing the entire physical resources available to the latest powerful servers. This helps to reduce the total cost of ownership of server deployments.

The key outputs of Citrix XenServer

- Consolidates multiple VMs into a physical server.
- Reduces the management of the number of separate disk images.
- Simplifies integration with existing networking and storage infrastructures.

- Allows zero downtime maintenance (through the live migration of VMs between Citrix hypervisor hosts).
- Assures fast availability of the VMs on another server in case one fails.
- Increases the portability of the VM images (a single VM image works on several deployment infrastructures).

The feature-packed advantages of Citrix XenServer / Citrix Hypervisor

Easy virtualization of workload

The fast-running VMs allow the installation and running of software in minutes without the need to configure a complex management infrastructure or involving a dedicated storage network. Virtualization of your workload can start immediately after installing the XenServer. You also have the option of converting the server workloads and turning them into VMs. The Citrix XenMotion migration tool allows moving the VMs across a resource pool without any loss of resources.

Robust server management

Citrix XenServer is designed to create and manage any kind of virtual infrastructure, automate and integrate management processes to turn complex IT environments into simpler ones.

Powerful XenCenter Console

It is a Windows-native graphical user interface (GUI) for managing XenServer. With its help, the admins can closely monitor, administer and manage several VMs coming from a centralized management console. Additionally, a user with just a few clicks can control the VMs (such as create, start, stop, migrate, copy or backup).

XenConvert

XenConvert is a physical-to-virtual (P2V) adaptation tool for converting Windows OS, data and applications from a physical machine to XenServer compatible VMs thus making the transition smooth.

Security

The admins can create policies to automatically collect the snapshots of the regularly scheduled VMs and organize in an archive. This also ensures that in case of an outage a VM could be quickly recovered to its original version.

XenServer Enterprise Version comes with Direct Inspect (APIs) to give protection against malware, viruses and rootkits, and allows the third-party vendors to secure the OS. The Measured Boot feature safeguards the hypervisor ensuring that the VMs run only on authorized hardware.

Server outage protection

In case of a server outage, the protected VMs can be automatically restarted from another server with minimum downtime.

Improved Application Performance

The dynamic memory feature of XenServer helps to share the unused server memory between the VMs thus optimizing the number of VMs involved with improved app performance.

Workload balancing and distributed virtual switching

The workload balancing eliminates any possibility of performance bottlenecks during the migration of the VMs to a new location (within a resource pool) while the distributed virtual switching help to create a network of network fabric for handling multi-tenancy.

Citrix XenServer licensing

Citrix XenServer offers Standard and Enterprise versions. The Standard version is for the users who want a solid, high performing platform for virtualization yet do not need the premium features that come with the Enterprise version. The Enterprise version is a premium edition optimized for server, desktop and cloud workloads. Any customer who has purchased Citrix Virtual XenDesktop or Citrix Virtual Apps is entitled to XenServer.

Having discussed the uses of XenServer let's now turn to the flip side of it.

The downside of XenServer

The XenServer might not be as established as its major competitors. Because it is an open-source hypervisor (and without the same level of integration or available certifications), it is more suitable for experienced service providers. Its lack of automation capabilities will compel you to use PowerShell scripts if you wish to automate tasks.

Apps4Rent is a certified Citrix solution provider. Coming with a huge experience of 18 years in virtualization and having served more than 10,000 large and small businesses worldwide, you can rely on its Citrix experts for ready-made and custom Citrix hosting solutions. Contact Apps4Rent 24/7 at 1-866-716-2040 or by chat.

https://www.clouddesktoponline.com/blog/vmware-alternative-citrix-microsoft

VMware Alternative: Citrix, Microsoft

Customers often inquire about the right desktop and application delivery solution provided by the three leading vendors Citrix, VMware or Microsoft. Each one comes with unique benefits and some shortfalls as well, and the perfect selection will depend on the business objective and end-use requirement. Instead of feature by feature head-on comparison we would consider the elements that customers look for and speak about in general in desktop virtualization scenarios.

Brand and reliability

Both VMware and Citrix have been in the virtualization market for years together and gained a strong reputation. Though Microsoft was long-established in Windows, it made its entry in virtualization landscape comparatively late through its Windows Virtual Desktop (WVD).

Though not a new concept in desktop virtualization, multi-users Windows 10 is what sets WVD apart. Before this, the only way of supporting multi-user was to use a Server Operating System (Windows Server for example) with RDSH installed and enabling the desktop experience. The desktop applications often had issues working on server OS. Moreover, the FSLogix tool brings a smooth roaming profile and application management in a virtual environment, something which was a painful challenge earlier.

Best end-user experience

VMware's PCoIP (PC over IP) brings optimized desktop experience for delivering published desktops, applications, images, audio, video on LAN/WAN.

Citrix claims its HDX technology used in the Cirix virtual desktop and Citrix virtual Apps to be the most powerful and the best. With features like browser content redirection, virtual display layout, seamless multimedia performance even in low bandwidth situation on any mobile device with instant rendering, Unified Communication (UC) and more, it is perhaps the best solution for designing, engineering and manufacturing sectors.

With virtual GPUs (Graphics Processing Units) for designing, CAD, video applications, Windows Virtual Desktop on the other hand perhaps would be the best and the most cost-effective alternative.

Simplified management

Managing a virtual desktop environment is not easy always. The management capability of VMware Sphere (the virtualizing platform VMware uses), helps the admins to centrally manage and simplify the complexities of multi-device accessibility through a single management platform.

Citrix offers unified management experience for on-premises, cloud and hybrid environments both for desktops and applications. Unified and platform agonistic management in a hybrid scenario is the uniqueness here.

Citrix with its day-to-day management, application compatibility, built-in end-user support console (for maximum incident handling) along with extensive Citrix-ready partner ecosystem and flexible infrastructure upgrades, claims to be better than VMware.

Microsoft uses PowerShell scripts for Windows Virtual Desktop management. For those who do not prefer this, Microsoft offers a couple of management tools for Windows Virtual Desktop like WVD Management UX and WVD Diagnostic Tool. There are many third-party vendor tools for the purpose like Liquidware, PolicyPak, Login VSI and others.

Better value

Though we are taking this feature at the end, this could be the key differentiator. The term better value only justifies if it fulfils business-specific requirements.

VMware comes up with additional features in its Horizon Suite license that many businesses may or may not use depending on the need. Whereas some important features like RDS are included in Horizon Advanced and Enterprise Edition only.

In contrast, Citrix XenDesktop Platinum license though costs more, includes many features not available in VMware or comes at an additional cost or available only from third-party vendors making VMware an expensive solution.

Microsoft's WVD, on the other hand, does not require any Client Access License (CAL). A client can avail WVD with existing Office 365 Pro Plus, Microsoft 365 E3, E5 and F1 licenses including educational E3, E5 and F1. The only additional payment needed is compute and storage expenses to run Windows 10 Enterprise and the Microsoft Office.

Picking up the right vendor depends on deeper business analysis through defining the objectives, identifying the uses, considering the future plans and the available budget.

For small and mid-sized businesses VMware may prove to be the most expensive option. Citrix or Microsoft could be a better selection, especially when customized to match the business requirement.

In case if you are considering desktop virtualization/ planning to migrate, and need technical guidance based on your business environment, please feel free to contact Apps4Rent 24/7 by chat or phone 1-866-716-2040.

With 18 years of virtualization experience, having served more than 10,000 large, mid-sized and even small clients, App4Rent is also a Citrix and Microsoft Gold Partner.

https://www.clouddesktoponline.com/blog/rds-vs-citrix-xendesktop-5-things-to-consider

RDS vs Citrix XenDesktop: 5 things to consider

With businesses increasingly seeking virtualization, many get confused with the array of virtualization choices available. Today we will discuss, and also compare, the two popular desktop virtualization solutions – the familiar old boy the **Remote Desktop Services (RDS)** and comparatively new entrant, the **Citrix XenDesktop**. This will help you to understand which one would be the best fit for your work.

But first, let's get a glimpse of the two.

RDS

RDS, developed by Microsoft (originally known as **Terminal Services**) is a virtualization service. Here your entire desktop running RDS, along with the Windows software can be accessed by any remote client-machine supporting the Remote Desktop Protocol (RDP). The remote users thus get a secure, mobile and remote access to desktops and applications.

Citrix XenDesktop (XD)

Citrix Virtual Desktop is a multi-session virtualization software developed by Citrix. It may be considered as the latest successor of desktop virtualization that centralizes desktop management in a data center, and allows a user to run virtual desktops from anywhere with advanced data security.

Both have many similarities at the core, yet lots of feature-divergences make them different altogether. While choosing one over the other, this is where discretion is required, based on the output requirement.

Let's approach their features head-on.

RDS vs XenDesktop Comparison

- **Performance**

Remote Desktop Protocol (RDP) is the core of any virtualization.

While Microsoft uses RDP, Citrix uses HDX and the major difference starts from here.

With RDS, every user interacts directly with RDP on the server. Could be a single server or a cluster at a time, but this means every user shares a fixed amount of resources (RAM, CPU). Naturally, the scalability issue arises-more the users online, slower the user experience.

Citrix XenDesktop uses **High Definition Experience (HDX)** protocol built on Citrix ICA (Independent Computing Architecture) to give high-performance user experience along with superb scalability, faster deliverance (even of the most demanding applications), anywhere accessibility.

The HDX protocol works on principles like active compression, redirection and faster rendering by acting as a buffer between the servers and the users. The user gets seamless experience irrespective of device or bandwidth.

- **Scalability**

As seen already, RDS doesn't scale well. Meaning, new users will not be able to log in if the server reaches its capacity. The worst scenario, some of the existing users could be logged out without any prior warning.

Same is not the case with Citrix. Here, with increased users, all you need is to request for more resources without any spooling up, configuring or patching a new server.

- **Usability**

With RDS you will often need to use some third-party generic applications to access it on some devices say tablets or mobiles. You may have to close some Windows-features to get RDS work. Not a very exciting experience; this makes RDS a better choice for app virtualization instead of a full-desktop virtualization.

RDS is based on server operating system (OS) and low data transfer makes it more suitable for application virtualization for remote workers with minimum internet speed (works even with low strength mobile data connections).

As against, the HDX protocol that Citrix uses works on 3-levels of user experience:

a) **Device level** where users can work on any device and pause/stop any virtual desktop/app and restart from a different device exactly from the left-off point.
b) **Network level** ensuring best performance over any network, low bandwidth and high-latency WAN environments.
c) **Datacenter level** using the processing power and scalability of servers to give high outputs.

- **Reliability**

RDS needs an uninterrupted internet connection. If you have fluctuating internet, your session will disconnect without giving any warning or chance to save your work.

The **Session Reliability** feature of Citrix XenDesktop gives continuous output even under patchy internet situations without any fear of losing work.

- **Cost**

This is the situation where Citrix XenDesktop pricing may lose out against RDS.
With all its standout features, Citrix Xendesktop cost is more. Because, it's basically a desktop virtualization solution in a true sense, giving you far better user-experience and greater control.
At the same time, though RDS has lower upfront expenses, it has hidden costs due to its increased downtime and loss of productivity.

Now the question, which one would be your best bet?

In case if you are not looking for a complete desktop virtualization solution, don't need heavy applications to run like graphics-intensive designing or CAD, have limited users to access with decent internet connectivity, you can get away with RDS.
Otherwise, XenDesktop is an unmatched solution for you.

Having said everything, here are a few last sentences.

XenDesktop though comes with more possibilities and promises, its correct installation could be painfully difficult and complex to troubleshoot, should anything go wrong.

With App4Rent hosted Citrix VDI however, you can have all your requirements met, minus the pains. Besides, the no-contract, pay-as-you-use model, along with no minimum-user limitation and flexible scalability will be very cost-effective for you.
With more than 18 years of virtualization experience having served over 10,000 business in 90 countries worldwide, the tech-experts of Apps4Rent would be happy to guide you to the right kind of desktop solution as per your requirement. Contact the 24/7 available sales team to discuss your requirements.

https://www.clouddesktoponline.com/blog/revit-server

Benefits of Revit Server on Citrix

Businesses prefer Autodesk Inc. products as the company has a clear virtualization strategy and has come up with licensing and certifications that users can use their applications in a virtual environment. Autodesk is also a Citrix partner for running its Citrix-ready products. We bring you abstract on how designers can use Revit and Revit Server (the server application of Revit) on Citrix environment and the best practices for running Revit on Citrix.

Autodesk Revit

Revit and Revit Server (the server application of Revit) from Autodesk include tools for architectural design specially built for Building Information Modelling (BIM) with features of architectural, mechanical, electrical and plumbing (MEP), structural engineering and construction designs. Revit's 3D components interpret the model with 2D drafting elements and are also capable of 4-dimensional building information modeling (BIM).

The advantages of running Revit on XenDesktop

A XenDesktop user working with Revit gets the same feeling of a native desktop session and is ideal for delivering Revit to any number of users whether working remotely or in the same office. Here the XenDesktop users have an edge over the XenApp users in the sense that instead of being confined to a system containing the application that has been made available, the XenDesktop allows control of the entire remote desktop.

Design engineers working from anywhere in the world who need to collaborate in real-time would find Citrix XenDesktop an ideal platform. The HDX technology, NetScaler, NVIDIA virtual GPUs, SD-WAN features are designed to maximize user experience, improve the performance of graphics-intensive applications, video/ audio streaming and multimedia.
Here's a brief on the system requirement for running Revit on Citrix and the best practices.

System requirement

The application would require the following:

- Revit
- Revit LT
- Revit Cloud Worksharing
- Revit Server
- Citrix : Recommended-level configuration

Revit can be installed and configured on a single computer as a standalone installation and allows to customize the configuration as per the need. It comes with translations for the user interface for each of the supported languages.

Before Installing Revit ensure that the servers/workstations meet or exceed the recommended minimum hardware/software requirements. The paging file size needs to be optimized for your system. At least it must be of the size recommended for Windows and twice the amount of RAM installed.

Best practices for running Revit on Citrix

- While working on Revit, close the other applications that are accessed via Citrix.
- Keep the detailing level at Coarse or Medium mode.
- If not a dire necessity, turn off shadows for all printed views.
- Because rendering needs higher system resources, it works best when running on a dedicated machine.
- To avoid any user profile corruption, it is better to install Citrix Profile Manager on each Windows.

- Upgradation of Revit models should be done on a separate system before opening the upgraded models in a Citrix environment (because Revit model upgradation

consumes a lot of memory hence other users working on the same server could face issues).

- Ensure the following Revit Options:

Tooltip Assistance set to “none”

ViewCube: turn “off”

SteeringWheel Text Visibility: turn the 3 options “off”

What are the known issues of running Revit on Citrix?

So far there is one known issue, a warning message that a user may encounter while writing the IFC files (the open file format used for BIM programs containing a model of a building including materials, shapes and spatial elements). Ignoring the message solves the problem.

What advantages you can get if you use Apps4Rent hosted Citrix Revit

- Apps4Rent is a Citrix Partner and has the knowledge of the hosted Citrix VDI. The company’s technical experts can hand hold you in implementing your Revit application.
- You can significantly reduce your Citrix XenDesktop cost by opting for pay-as-you-go payment option and easily add new users on your existing plan. There is no maximum or minimum user limit.
- Top-tier SSAE16 Type II certified data center in NY, USA will ensure your data security.
- The company has over 18 years of experience in hosting solutions and has served more than 10,000 large and small clients worldwide. Company experts will be available 24/7 for any technical assistance that you need even any minor one.

Please feel free to reach us any time via chat or phone 1-646-506-9354.

https://www.clouddesktoponline.com/blog/cs-professional-accounting-suite

Thomson Reuters CS Professional Suite Hosting Alternative

CS Professional Software Suite from Thomson Reuters, which includes tax software such as UltraTax, is a powerful tool used extensively by larger accounting firms. UltraTax CS automates the business of tax preparation with the accessibility of entire federal, state and local tax programs including individual, corporate, partnership, multi-state returns, trusts and many more.

Thomson Reuters provides hosting solutions to customers for remote access to its software suite relieving the IT burden of the clients. The suite is relatively expensive and so is the hosting service through the software vendor. And occasional outages or connectivity issues have forced some customers to look for alternatives. Fortunately, there are cloud hosting providers such as Apps4Rent who have an exemplary record of long-term reliable hosting of business applications including accounting and tax applications such as UltraTax, Drake, QuickBooks, and Sage. Apps4Rent has hosted the CS Suite on Microsoft and Citrix cloud desktops. Apps4Rent can provide significant savings on hosting of the CS Suite.

Why Have a Dedicated CS Professional Accounting Suite Hosting?

- Exceptional on-demand help desk support 24/7/365 days from technical experts
- Seasoned migration experts in the team to handle the backup and migration process
- Unmatched data security with the minimum downtime of the service
- Cost-effective with easy payment and scalability options, without the obligation of a long-term contract
- Long-standing market presence with the ability to handle both large and small-sized customers
- Proven experience in CS Suite migration

Why Choose Apps4Rent for Citrix CS Professional Suite?

- **24/7 Support Via Phone, Chat, Email**

  On-demand service is something desired the most received the least despite the promises met. Apps4Rent experts are available 24/7 without holidays for helping the customers in resolving even the minor issues with ticket raised and persistent action until the client is satisfied. The technical experts reach out with extended software support wherever required, something very few service providers can match.

- **Authorized Citrix Partner**

  As a Citrix Partner, Apps4Rent has an in-depth hosted Citrix VDI knowledge and the experts to guide at each step in implementing the hosting of CS Suite including UltraTax as the company has many years of experience in UltraTax CS migration.
- **Guaranteed Data Security**

  The sensitive and private customer data always remain safely housed in SAE16 Type II data centers in New Jersey and New York with AICPA compliance, data security offered by CISCO ASAs with IPS enabled. The company promises 99.9% uptime, automatic data backup with on-demand recovery.

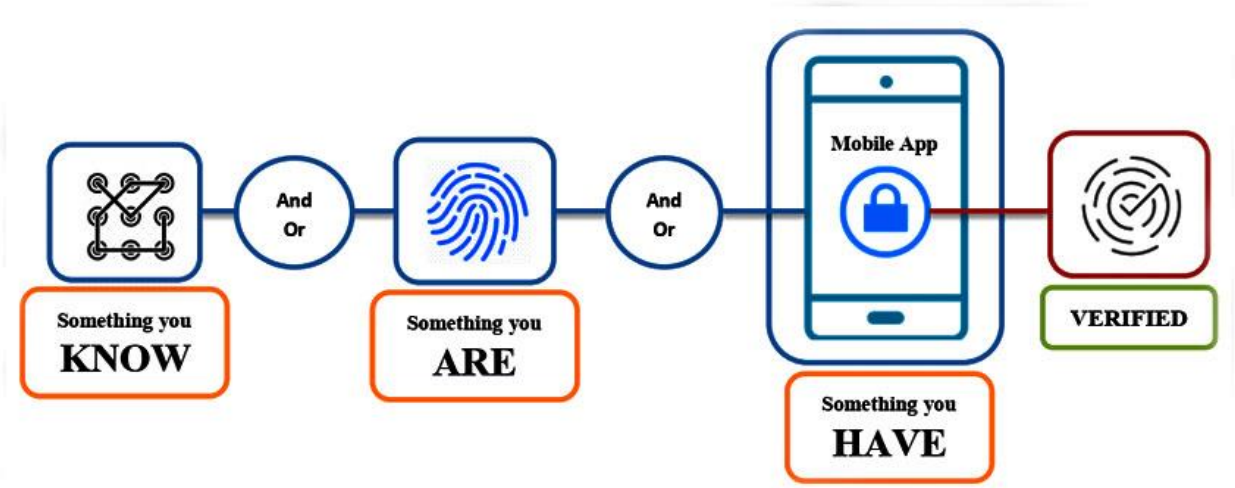
- **High Savings**

  The easy pay-as-you-use option along with the freedom of adding new users to the existing plan brings substantial savings by reducing Citrix XenDesktop cost. There is no minimum or maximum user limitation with quick on-demand scalability.
- **Well-Established Market Presence**

  Apps4Rent has been in the hosting business for over 16 years now and has served more than 10,000 large and small clients in 90 countries across the globe.

If you have any questions related to Citrix or its peripherals, feel free to contact our experts right away!

https://www.clouddesktoponline.com/blog/how-to-enforce-multi-factor-authentication-on-windows-virtual-desktop



How to Enforce Multi-Factor Authentication (MFA) on Windows Virtual Desktop

Azure Windows Virtual Desktop (WVD) supports Azure Multi-Factor Authentication (MFA), Azure Conditional Access (CA) and Self-service password reset (SSPR).

While Conditional Access is great for user-access based on their location, device, and other conditions Microsoft desktop as a service recommends that you direct your users to choose MFA. The admins can define in their policies which authentication methods are available to users because some methods may not be available to all features.

Why do you need Multi-Factor Authentication (MFA)?

MFA is required to protect access to data and applications. At the same time making it simple for the users to access. It provides an extra layer of security by making additional authentication mandatory and provides a powerful authentication system through a wide range of authentication methods. For example, password authentication needs MFA and SSPR, Microsoft Authenticator app also needs the same.

As a precaution, Microsoft also recommends that the admins must enable the users to select more than the minimum number of authentication methods required.

Breaking MF security is hard to beat challenge for attackers. Even if a hacker gets the user's password it remains useless unless the additional authentication methods are broken into.

Principles of MF Authentication

The MF authentication is based on the principles of Something You:

- Know (a password)
- Have (a trusted device such as a phone, laptop)
- Are (biometrics)

MF authentication uses two or more of these methods for validation.

Ways to get Multi-Factor Authentication Solutions

MF forms an intrinsic part of the following:

- **Azure Active Directory Premium service / Microsoft 365 Business solution**: Complete MF authentication using Conditional Access policies.
- **Azure AD Free (that comes with an Azure subscription) or standalone Office 365 licenses**: These use pre-created CA baseline policies (set of predefined policies that help protect organizations against various common attacks like phishing) to require MF authentication for users/admins.
- **Azure Active Directory Global Administrators:** these are Azure MF authentication capabilities for protecting global administrator accounts.

Creating Awareness for Multi-Factor Authentication

Users mostly are familiar with using only passwords for authentication. Therefore, they need to be informed about the process and its importance. This will also help to reduce the chances of users reaching out to help desk for minor issues related to MFA.

Temporary Disablement of MFA: Some Scenarios

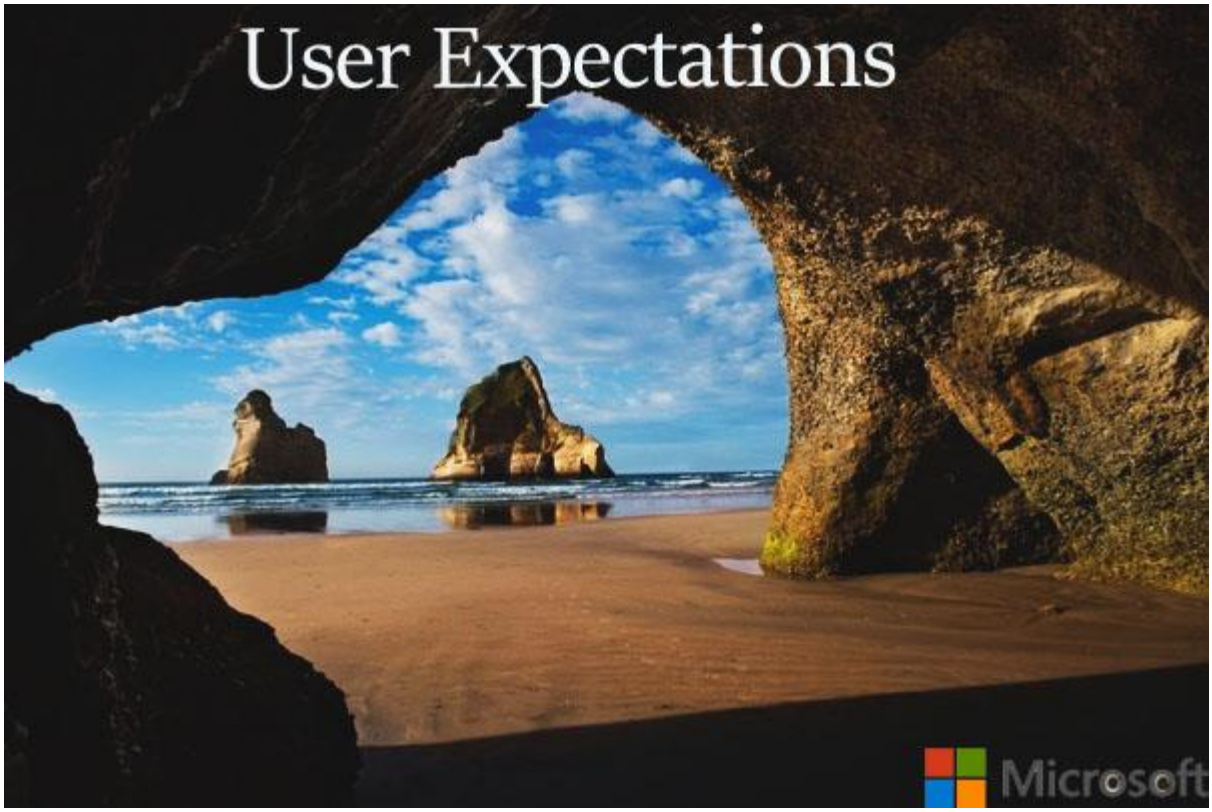
Situations could arise where the MFA needs to be bypassed or disabled temporarily. The following could be a couple of examples:

- A user is unable to sign in because of not having access to the required authentication method or it fails to work properly.
- Using the Conditional Access policies for Azure MFA Service you can add a user to a group that does not require MFA.

To conclude, integration of Azure MFA and CA with WVD will allow admins to create a remarkably secure virtual desktop environment and at the same time making it easily accessible to users, independent of device or location.

Consider Apps4Rent for your Azure WVD requirement or inquiry. As a Microsoft Gold partner, we have been offering managed Azure solutions for more than 15 years and served over 10,000 businesses. Please feel free to contact *1-646-506-9354 any time.*

https://www.clouddesktoponline.com/blog/what-is-lacking-in-windows-virtual-desktop



What is still lacking in Windows Virtual Desktop (WVD)?

Microsoft announced Azure Windows Virtual Desktop public preview on March 21, 2019. As a provider of desktop as a service, the company worked hard in developing the scalability and delivering a real multi-session virtual desktop and application experience running on any device. This is apart from the support for Windows Server Remote Desktop Services (RDS) desktops/ apps, extended support for Windows 7 for the next three years along with its complete virtualization solution and Office 365 ProPlus optimization.

To improve the user experience, Microsoft keeps listening to its customer feedback on Windows Virtual Desktop "UserVoice" forum. For you we have collected information on what the users expect from the Microsoft Windows Virtual Desktop. Here we are summarizing some of the highly voted requirements posted by customers within the period of June 2019 to January 2020.

Windows Virtual Desktop: User Expectations

Windows Virtual Desktop virtual machines (VMs) need to be independent of the Azure Active Directory Service (AD DS).
As of now, the VMs must join an AD DS pool. One needs both Azure Active Directory AAD (containing user objects) and AD DS (containing computer objects) and that the AD DS needs to be synchronized with AAD.

The cloud-first/cloud-only customers and small business users find it restrictive of not being able to join the VMs on Azure AD (AAD). Besides, the users mention that AD DS is not cheap (over $100/month) and makes it a hard sell for small businesses.

All these make it a highly voted requirement.

Automatic scaling of session hosts
The demand for auto-scaling of session hosts has raised a flag. Although a script by Microsoft is available but it requires to be configured to the task scheduler, plus needs additional VM to run the scheduled task.

This increases cost and naturally not liked by users. They want the script to be implemented using Azure Automation with Hybrid Runbook Worker configuration without requiring any additional VM.

Azure AD security group to synchronize with app groups
Users desire that instead of assigning users to app groups, there must be an Azure AD security group synchronized with app groups- yet another high-voted demand.

Integration of published virtual machines (VMs)
Users do not prefer a separate portal to connect to the published VMS. Instead, they request to integrate it with the existing myapps.microsoft portal.

Implement Single sign-on (SSO) in a true sense
The demand is for the double log-in (once into the portal and again while connecting) to be replaced by Single Sign-on (SSO) that enables them to securely authenticate multiple apps by one-time log in.

Passwordless Solution
Customers urge Microsoft to allow users to log in to virtual desktops/apps using the FIDO2 key support.

FIDO2 is an open authentication standard offering tight security based on public-key cryptography wherein a message sender uses a recipient's public key to encrypt a message and for decrypting the recipient's private key is used.

At present, a password using password hash synchronization for the virtual machines is required.

Migration tools for native roaming profiles
With the discontinuation of the migration scripts for native roaming profiles, clients with high users (600 users for example) find it difficult to migrate as manual migration is not possible in such cases.

Local version of Windows 10 multi-session
Interestingly this too is in demand. The Non-English customers of Windows 10 multi-session using the language packs face problems as these are not 100% perfect.

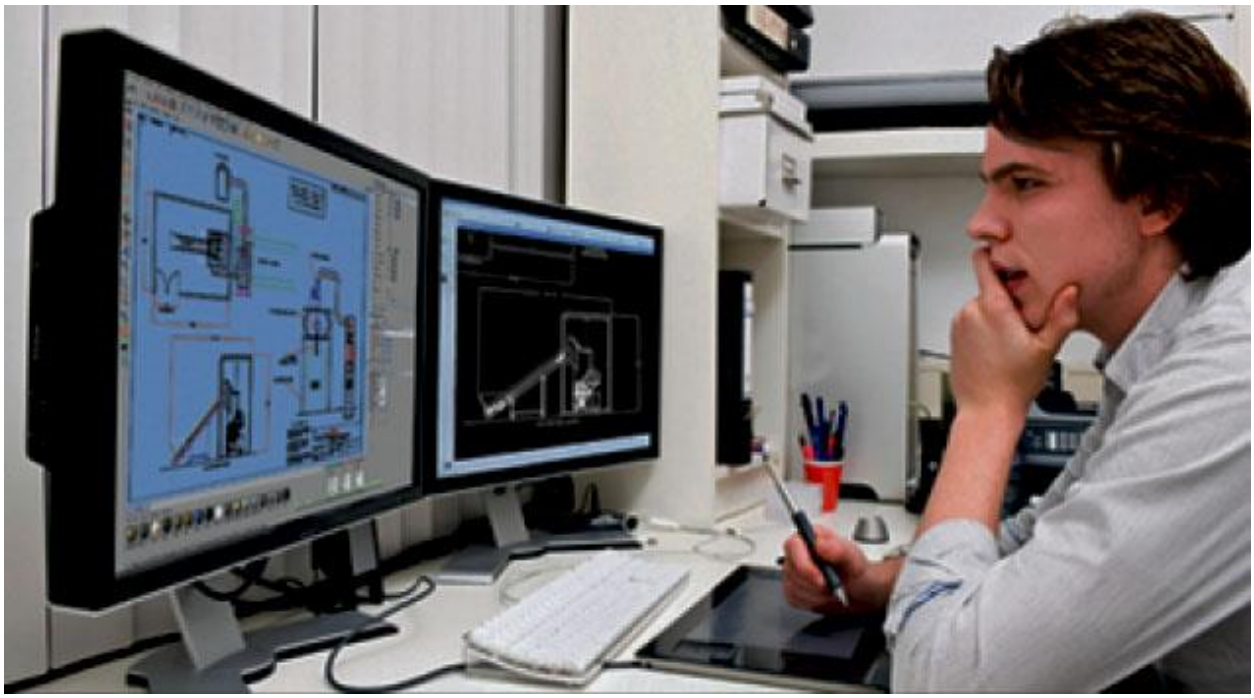
Windows Virtual Desktop session controller service required in the South Africa North DC
Customers are demanding this to get rid of the high latency issues. Right now, the session controller service is being managed from a US DC and customers in SA are affected by high latency problem. The demand is for an ideal distance of 150ms or less for an acceptable experience.

Windows 10 multi-session must be tuned for increased user density
Customers ask for it to reduce cost by bringing down the number of virtual machines. Especially useful when running low volume remote apps.

Various other customer requirements are discussed in the forum and Microsoft has already responded to many of them. We have picked up those that hopefully would be addressed to in the near future.

Apps4Rent, a Microsoft Gold partner has been offering managed Azure solutions for more than 15 years and has served over 10,000 businesses. For any technical enquiry please feel free to contact *1-646-506-9354 any time.*

https://www.clouddesktoponline.com/blog/cad-online-with-citrix-desktops



CAD Online with Citrix Desktops

In the present discussion let us explore why and how companies are going for high-end graphics virtualization, how Citrix is helping companies with virtual 3D CAD and the advantages of Citrix graphics virtualization.

Designing and manufacturing companies worldwide face issues of global collaboration. Their CAD professionals, especially the offshore members /working remotely using any smart device need to conform, collaborate and manage the design environment; with high performance and precision.

For example, a design engineer in London needs to synchronize data, send editable files, live-collaborate a design to a colleague in Australia, to complete a project fast. Earlier, this was something almost impossible to achieve. The companies at the same time,

needed the teams to work with more flexibility, complete projects quickly, start new projects and consistently grow their business.

Citrix XenDesktop comes as an ideal solution with high-end graphics. Through virtualization of such graphics applications, even moving the entire CAD workstations to the cloud, companies now can get a one-stop solution to all their designing needs.
The HDX 3D Pro acceleration technologies of Citrix not only increase the high-quality experience, visual performance of the demanding applications, but also their fast deliverance from anywhere with any-device access.
Autodesk Inc., the company popular for CAD software, works with Citrix to bring CAD online solutions with Citrix virtual desktops. The company has allowed customers to implement Autodesk products in virtual environments and has partnered with Citrix for the purpose to bring flexibility, ease and efficiency of use of its products.

Advantages of CAD with Citrix

Significant Cost Savings: companies can quickly assign more members to the teams, split teams across different projects at multiple locations. They can hire project-based professionals/freelancers without having to pay for the travelling expenses or provide complete CAD workstations and see them off at the end of the project. All these reduce the lead time of a project. Even old or ageing CAD stations can be replaced with thin clients.
Freedom of virtualization: the virtual desktops/apps that are executed on server-based virtual machines give the designers to use any device with the same look, feel and experience of a traditional PC. Your shop floor can go paperless with less expensive thin-client 3D users.
Centralization, Safety: Centralization helps companies to avoid hackers and security issues while protecting the IP rights and customer information. They can collaborate safely with other business partners, contractors or outsourced workers, exchange sensitive design data (as these are never stored on any device exposed to risks). Businesses can now centralize everything, with real-time secure access from any location.
Real-time collaboration: A designer can collaborate with a co-worker real-time from anywhere, can share work with a customer from any location, even using just a tablet, thus speeding up the production execution process.
Single unified platform: Companies can use any network/cloud infrastructure through a single unified platform with a simplified deployment process and user-management. At the same time, support a wide range of desktop and application delivery scenarios from any smart device.
HDX technology: A proprietary technology that brings a "high-definition" design experience to the users. Citrix XenDesktop protocol includes HDX 3D Pro technologies for enhancing the visual performance and delivery of graphics-intensive apps. It is designed to optimize the IT/user experience, decrease bandwidth consumption substantially, and increase user density per hosting server along with speedy service.
Companies find this extremely useful for any kind of high-end graphics, smooth voice/video streaming and multimedia performance.

While HDX eliminates the need for any special graphics processor at local workstations, it supports professional designing peripherals like 3D Space Mouse and large displays.

NetScaler & SD-WAN: NetScaler helps the apps to run faster reducing the web-app ownership costs with server offloading and ensuring the availability of apps with load balancing function.
Designers can access data and applications through NetScaler irrespective of wherever they work from (even a Cybercafe using any type of network) or whatever device they use, all with the same high- quality output experience.

The SD-WAN reduces costs, improves performance with agility and optimized user- experience, simplifies cloud-based management operations. Even you can optimize your Skype for Business in a virtualized environment for seamless audio-video streaming.

NVIDIA virtual GPUs: The Citrix Workspace along with NVIDIA virtual GPUs enable the designers to view, collaborate the same 3D CAD files/designs independent of their location. The engineers based anywhere in the world can access and collaborate the same files defeating the distance factor (even more than 9,000 km long WAN overhaul is possible).

The NVIDIA graphics processor speeds up rendering of complex graphics, its compression codes deliver good application performance even in a narrow WAN bandwidth environment.

Apps4Rent hosted CAD with Citrix

Citrix Partner: As a Citrix Partner, Apps4Rent can implement your online CAD solution. Apps4Rent brings XenDesktop hosting solutions either in session-based or dedicated modes. With the session-based mode, Apps4Rent professionals are responsible for the installation of apps. Whereas with the dedicated plan you can install any of your customized desktop apps with the option of adding GPUs. Extremely suitable for your graphics intensive applications.

Reasonable Price without Contract obligations: Citrix CAD virtualization is expensive as it is suitable for high-end graphics. With Apps4Rent you can significantly reduce your expenses with the pay-as-you-use model (month-to-month billing) with freedom of easy up-scale as your requirement grows. Without any need for you to sign any contract. Very helpful for small/medium-sized businesses.

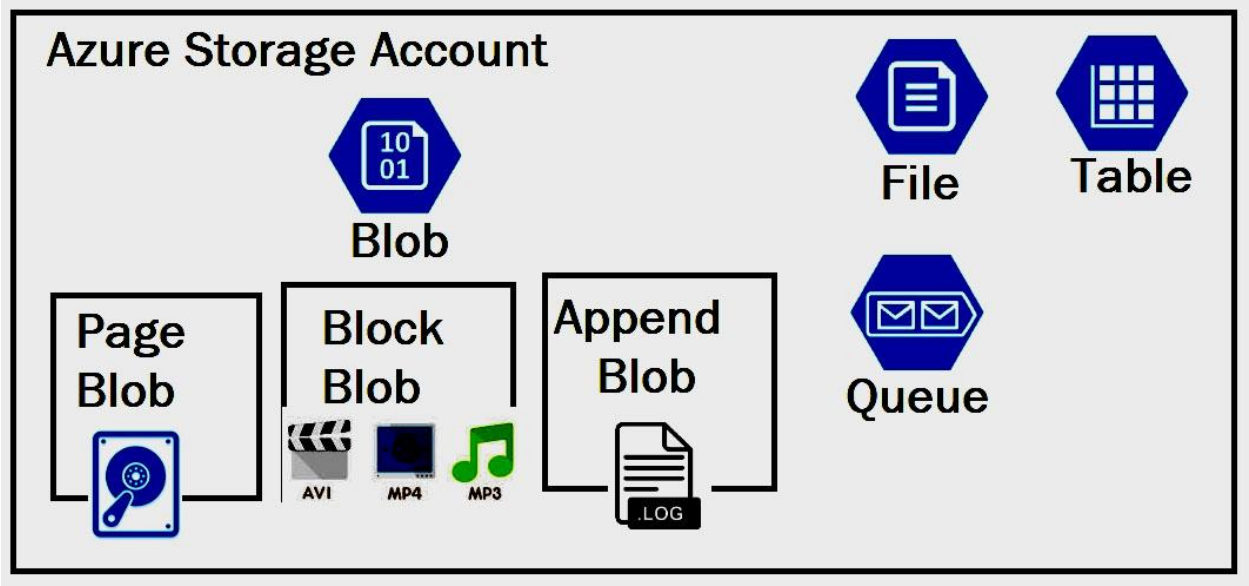
Flexibility, Freedom, Security, Ease: There is no upper / lower limit of users. Irrespective of your number of users or issues (significant or minute), you can avail expert assistance any time 24/7 using chat or phone, access from anywhere in the world using any smart device, without the headache of infrastructure management or security updates/issues. All your data and IP will remain safe and secure as the services are delivered from top-tier SSAE16 Type II certified data center in NY, USA.

Add-on-Users: Will enable you to keep adding new users as and when you need, without buying afresh for every new user.

Long Experience: With the involvement of serving over 10,000 businesses for more than 15 years, Apps4Rent brings the best service with excellent response time in the industry. The service includes calls-attendance (within 15 minutes), 24/7*365 help desk/remote support, online knowledge sharing, infrastructure monitoring, ticketing system, management, updates, maintenance, patching, escalation and everything you need.

For further technical discussion, support please feel free to talk to us 1-646-506-9354 any time.

https://www.clouddesktoponline.com/blog/azure-storage-types-for-windows-virtual-desktop



Azure Storage types for Windows Virtual Desktop (WVD)

Azure Storage offers cloud storage solution by Microsoft and is available for Windows Virtual Desktop (hosted desktop as a service) solution. It is scalable, durable, limitless and optimized for storing structured and unstructured (text and multimedia) data; available in the pay-as-you-go model. The useful features make Azure Windows Virtual Desktop (WVD) storage very suitable for your business; irrespective of whether you need only a few hundred GBs or trillions, you can scale up/down as per your need using Windows or Linux OS. Here's a brief on the Azure WVD storage system.

Types of Storage

Broadly coming under two types Azure storage account comes under **i) Standard Storage and ii) Premium Storage**.

A) Standard Storage- offers 4 versions of storage a) Blob b) Table c) Queue and d) File storage

B) Premium Storage- offers Azure Virtual Machine (VM) disks.

A) Standard Storage

a) Blob Storage

Azure Blob storage typically comes in three different types – a) Block b) Append and c) Page blobs. You can store data like videos, music files, image files, message, log and metadata and your backups. You must specify your blob type while creating a blob. Because once created, its type will remain fixed. You can only update the blob following the available options unique to that blob type.

i) Block blobs are used for document, image, video files and allows insertion, replacement and deletion of blocks.Blob storage can contain up to 50,000 blocks. Each blob gets identified by its ID and can be of different sizes of reaching a maximum of 100MB.

ii) **Append blobs** are blocks that are optimized for appends i.e. if you modify blocks will be added at the end of your Append blob. Very useful for situations that require adding data to the existing blob without modifying the existing ones. You cannot update or delete the existing blocks and neither these have block IDs. Each block can be of a maximum of 4MB and an append blob can have up to 50,000 blocks.

iii) **Page blobs** (collection of 512-byte pages hence the name)are optimized for random read/write operations. You need to specify your page blob size with a maximum size of 8TB.

b) Table Storage

Azure storage table allows you to store enormous structured data. It uses NoSQL database and is extremely suitable for storing non-relational, structured data with on-demand scalability.

c) Queue Storage

Allows you to store substantial messages that you can access from across the globe via calls using HyperText Transfer Protocol (or HTTP- that allows online communication and data transfer from one machine to another. A message can be up to 64 KB and queue storage can include millions of messages within the limit of a storage account.

d) File Storage

Azure file storage offers you fully managed file sharing in the cloud using the Server Message Block 3.0 (SMB) protocol. You can move your applications including on-premise apps to the cloud from anywhere in the world, integrate the latest apps with the existing ones.

B) Premium Storage

The difference between the Standard and Premium storage is that the latter uses the latest Solid-State Drive (SSD) for the Azure VMs whereas the former stores data on Hard Disk Drives (HDD).

Premium Storage brings consistent high input-output performance with low latency and useful for Online Transactional Processing, Big Data and Data Warehousing workloads.

At present this storage is available for Page Blobs and Data Disks on VMs.

Features like scalability, security, reliability and easy accessibility (using latest technology like HTTP) make Azure Storage popular.

No hassle for data backup and maintenance or security as these are taken care of by Microsoft Azure. Through replication process, Azure maintains different data copies at various geo-locations so that your data remains safe against any natural disaster.

Apps4Rent is a Microsoft Gold partner offering managed Azure solutions. Please feel free to reach us any time *1-646-506-9354* or come for a chat.

https://www.clouddesktoponline.com/blog/windows-as-a-service

Reviewing Windows as a Service

Microsoft has introduced a new process to build, deploy, and service Windows known as **Windows as a service (WaaS)**. Here is an account on its purpose and unique features that make it popular over previous versions of Windows.

Focus

The main aim is to maximize customer experience for Windows (through desktop as a service) by simplifying its deployment and servicing. To reduce the IT hardware and resources needed to deploy and maintain Windows is another consideration Microsoft keeps in mind.

1. Easy Feature Upgrades

In the bygone days, before Windows 10, Microsoft kept releasing frequent new versions of Windows. The result was an additional burden of training, as the revisions/improvements were often heavy. Users waited long for improved/new features, especially on security-updates apart from the deployment and management challenges.

Earlier, Microsoft released technical previews on the new Windows versions once they were ready to hit the market.

Now with Windows 10, Microsoft will deliver the new/improved features to the **Windows Insider** (an open software testing program that enables the users to register for pre-release builds of the operating system that was previously accessible only to software developers). As a result, businesses can remain informed of what Microsoft is developing and immediately start testing. Simultaneously, Microsoft will get feedback from businesses throughout the developmental process and make necessary adjustments immediately.

2. Smooth Deployment

Windows 10 deployment is much simpler than the previous Windows versions. Even migration from the earlier versions is smooth, thanks to the easy up-gradation features that auto-preserve everything including settings and data. Deployment of Windows 10 feature-updates is also equally uncomplicated.

3. Application Compatibility

There is no compatibility issue which was a concern previously for businesses undergoing up-gradation to newer versions of Windows. Windows 10 compatibility with Windows 7 or later version, is the main reason behind. The feedback received through Windows Insider Program and internal testing data will help in maintaining the same level of compatibility for each feature update.

4.Device Compatibility

Windows 10 is remarkably device compatible without the need for new hardware. Most functional hardware drivers in Windows 8.1, Windows 8, or Windows 7 will continue to function in Windows 10. Any smart device capable of running Windows 7 or later can run Windows 10.

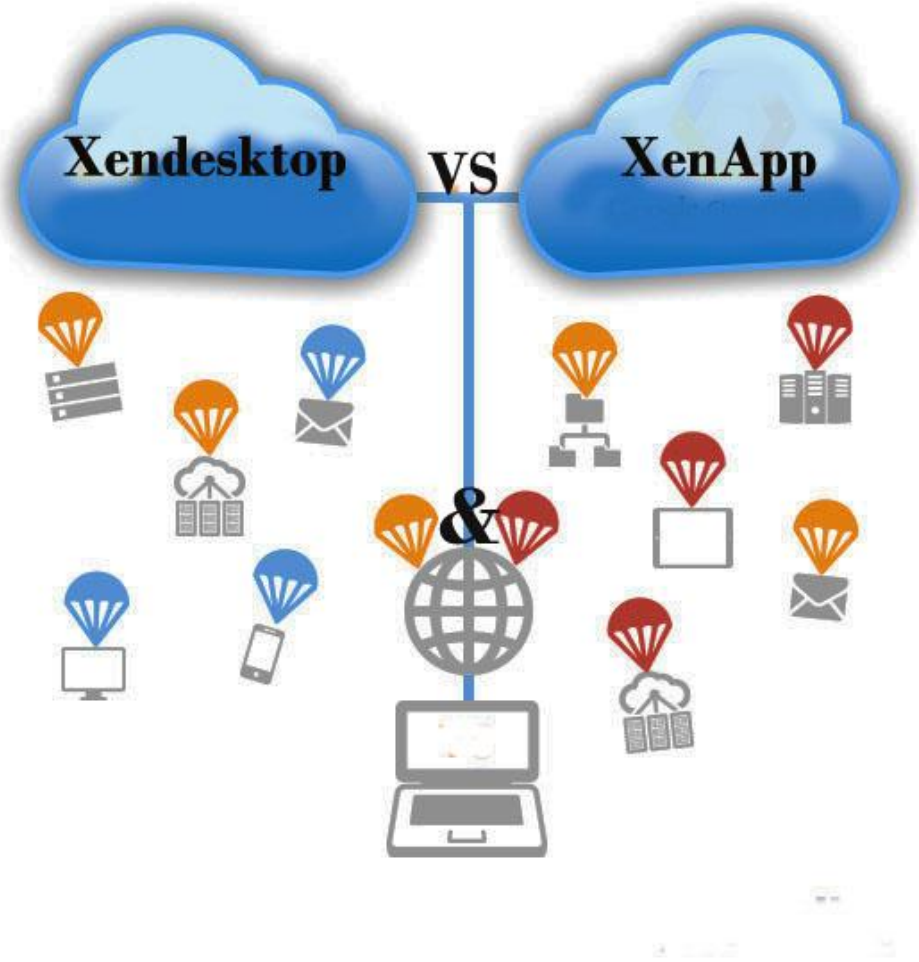
5.Trouble-Free Servicing

Earlier Windows versions included several release types: **major revisions, service packs,** and **monthly updates**. Windows 10 has just two release types. **Feature updates** (adding new functionality) and **Quality updates** (for security).
To deliver the releases, Microsoft has introduced **three servicing channels**.
1)**Windows Insider Program** (to test and provide feedback on features that could be included in the next feature update).
2) **The Semi-Annual Channel** (provides new functionality with twice a year feature update releases).
3) **Long Term Servicing Channel (**only for specialized devices that do not run Office and get new feature releases every two or three years. Example ATMs, medical equipment).
The beauty is businesses can use the same management tools they used to manage updates and upgrades in previous versions of Windows.

For businesses, WaaS is a one-stop-service offering all attractive features and advantages even if all of these are not used across.

Consider us for any help with your Windows as a service solution. Talk to us *1-646-506-9354* ***any time 24/7*** or come for a chat. Let us discuss!

https://www.clouddesktoponline.com/blog/citrix-xendesktop-vs-citrix-xenapp-comparison



Citrix Xendesktop vs Citrix XenApp Comparison & Congruency

As you know, Citrix brings two cloud-hosted Citrix VDI resources to users…Citrix Virtual Desktop aka XenDesktop and virtual applications or Citrix XenApp. Both are formidable products sharing lots of similarities; yet each has its unique features. This blog will help you understand each one of these so that you get a clear understanding of which product would you need, why and when.

Let's get the products- understanding first.

XenDesktop & XenApp: Insight

What is Citrix XenDesktop VDI?

It's a multi-session **Citrix desktop virtualization software** that allows a single user to access and run virtual desktops, centralizes desktop management in a data center, reduces cost and brings advanced data security.

What is Citrix XenApp?

It's an **application virtualization software** that allows multiple users access resources from a shared server or a Cloud system (App cloud) from anywhere in the world, using any device.

Note here, though XenApp is an application publishing platform essentially, but you can also publish desktop with XenApp.

XenDesktop vs XenApp: Differences

It's a general belief that if you want to access virtual applications (apps), you need XenApp (XA) and for accessing hosted desktops, you use only XenDesktop (XD).

It's true that the XenApp has applications as fundamental focus, whereas XenDesktop focuses on hosted desktops.

But the point to note is, **both of them can give access to hosted apps and desktop** though in a slightly different way.
Here are the differences…

Execution environment brings a major difference. XenDesktop will allow you to access hosted resources as a **single user** on a Windows client machine (e.g. Windows 7,8) when you have the entire infrastructure in place. That is, one user can run multiple apps at the same time. Hosting service provider companies (like Apps4Rent) providing XenDesktop furnish Windows server OS. **XenApp** gives access to **multiple users** (from 5 to 200, because it shares resources) **on a Windows Server machine** (e.g.Windows Server 2008R2 or 2012). Here multi-users share resources (like CPU, GPU, memory, disk) of one machine at the same time.
Vis-à-vis **XenDesktop** users get their **exclusive/private resources**. **A single user** can use **multiple applications** at the same time.

Differences Summary

XenApp (XA)	**XenDesktop (XD)**
Multiple users	Single user
Server OS	Client OS
Hosted Shared Apps	Hosted Private Apps
Hosted Shared Desktop	Hosted Private Desktop
Instance on a shared platform (no VDI)	Uses a VDI machine

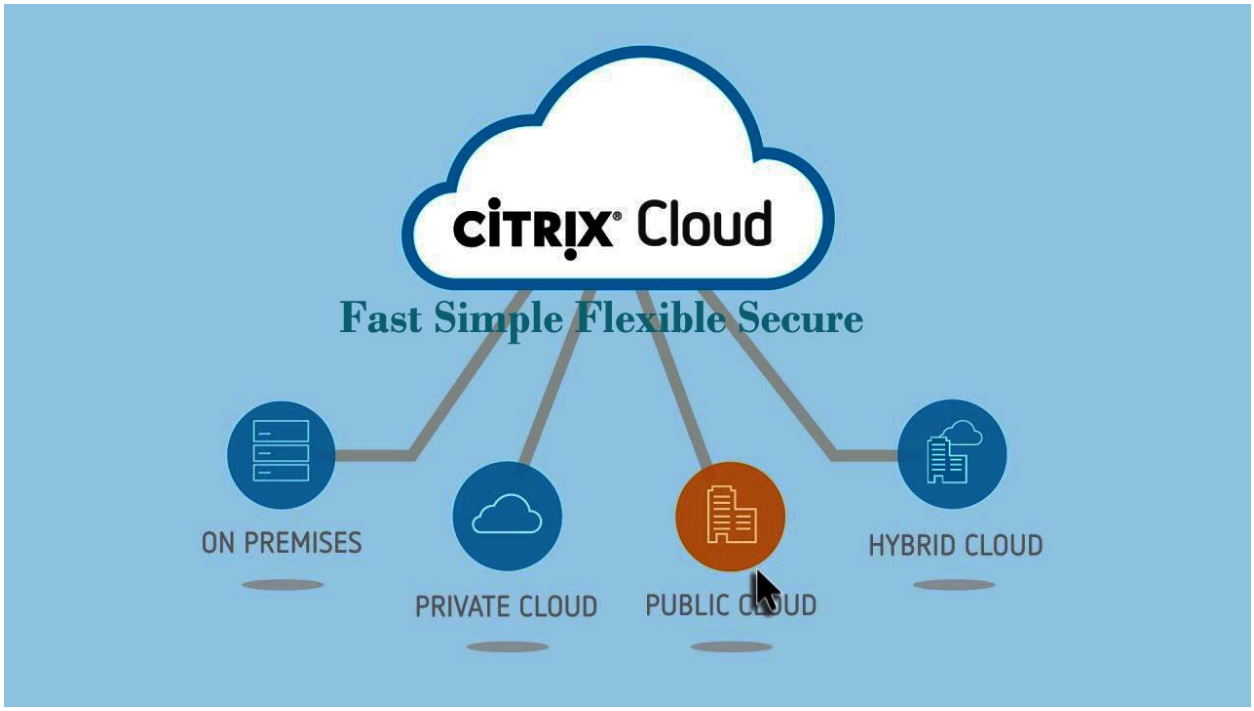
Put simply, **XenApp is a shared solution, XenDesktop is a virtual desktop solution both working through the same web interface**.

Citrix XenDesktop or XenApp – Relevancy

XD suits best for large organizations that have dispersed and resource-intensive users. Such businesses usually deploy hundreds of virtual machines justifying the Xendesktop cost. Examples could be government, finance, insurance sectors to name a few. Small to medium-sized businesses that are not resource-intensive, typically use XA wherein they can get easy virtualizations without large expenses. Usually, they have 3-4 servers and able to improvise productivity and performance both along with enhanced security at much-reduced costs.

We can offer you Citrix Virtual Desktops at an unbeatable price. Talk to us ***1-646-506-9354*** **any time 24/7** or come for a chat. Let's take it ahead.

https://www.clouddesktoponline.com/blog/demystifying-citrix-cloud



Demystifying Citrix Cloud

Developed by Citrix Systems (released in 2015), Citrix Cloud is a **cloud management platform**. Through this hosted Citrix VDI, you can deploy cloud-hosted desktops and apps using a public, private or hybrid cloud or on-premises hardware. You can integrate, deliver virtual apps, virtual desktops, mobile apps, device management, file sync / share and more; access them integrated on **Citrix Workspace** or independently.

Citrix Cloud: Purpose

The approach of Citrix cloud aims to

1. Reduced infrastructure
2. Centralized control
3. SaaS-style updates (ensuring low admin-cost and complexity)

Through Citrix Xendesktop VDI and XenApp, you can deploy workloads on any cloud / infrastructure of your choice (like Microsoft Azure, Amazon Web Services, Google Compute Engine, and others.

Citrix Cloud: The Features

You get all the **Citrix Products** like **XenApp**, **XenDesktop**, **Content Collaboration** (earlier ShareFile), **NetScaler and several other cloud-native services (e.g. Secure Browser Service) at one place.**

1)Cloud compatibility allows your workloads in one or multiple clouds (e.g.Microsoft Azure, Google Cloud and others) or data center.

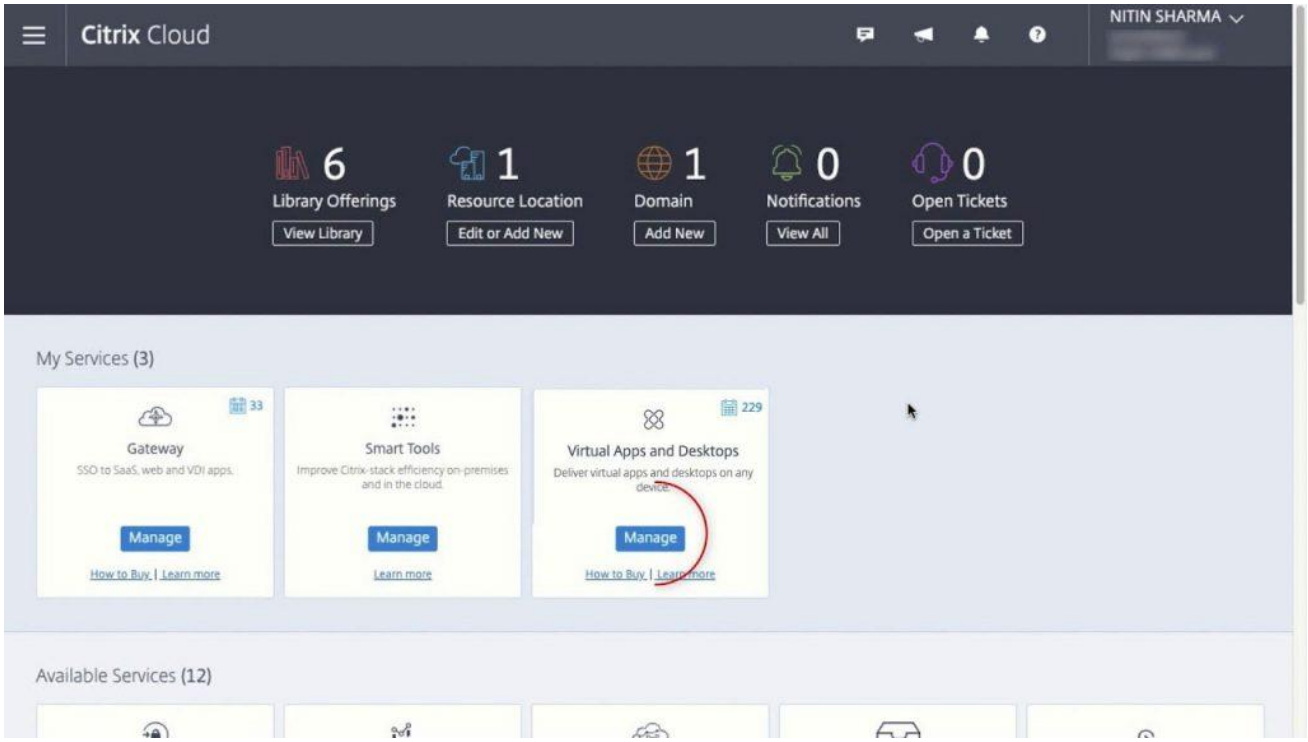
2)Cloud Independence allows you to have your workloads in one or multiple public clouds (like, Amazon AWS, Google Cloud, IBM Cloud, Oracle Cloud) or data center. While the Citrix products reside in Citrix Cloud, other apps or resources may use other clouds or infrastructures.

You can choose your customized combination of data centers and cloud providers. Auto-updating of Citrix Cloud lets you run the latest version of it.

3)Services you can access include Citrix Workspace Service, XenApp and XenDesktop, ShareFile, XenMobile, Secure Browser Service, NetScaler GatewayService, NetScaler Management & Analytics Service, Smart Tools

4) Windows Virtual Desktop support as always Microsoft and Citrix are partners. Citrix managed desktops, virtual apps/desktops or the Citrix Essentials products all Support for Microsoft Windows Virtual Desktop (WVD).

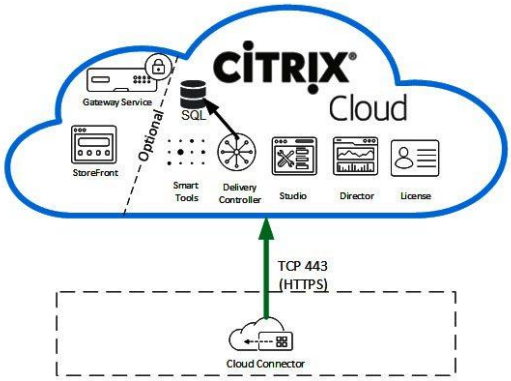
5) Citrix Autoscale (earlier SmartScale) allows you to keep a tab on your public-cloud spends (all public cloud supported). It is a part of Citrix Virtual Apps and Citrix Virtual Desktops; integrated with Citrix Managed Desktop Service (CMD) as well. You can configure the power settings, load settings and schedule settings on a delivery group. You can get an estimation of your cost savings too. Autoscale is available on both virtual desktops and hosted shared workloads.

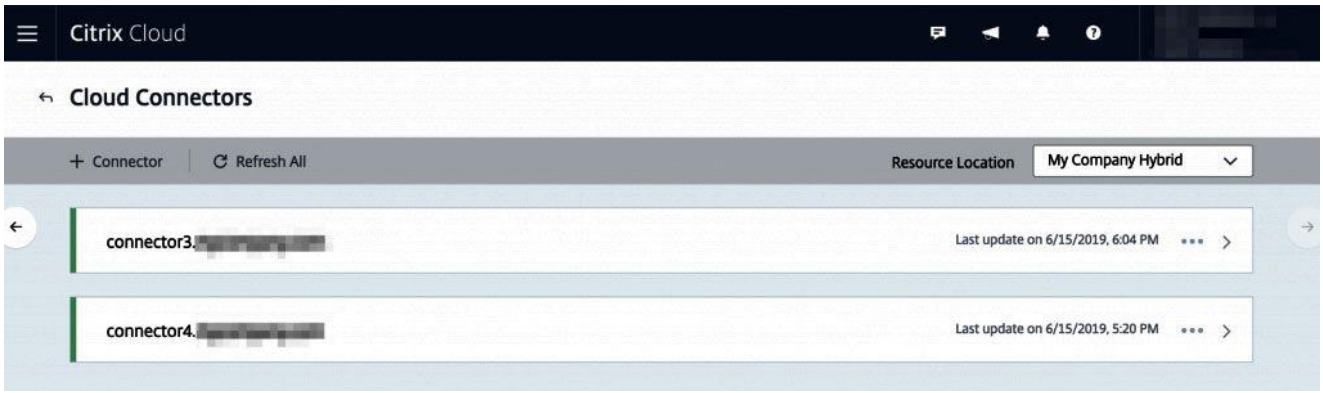


6)Citrix Analytics for Performance is a user-centric experience score with more insights on performance and cost, quantify user experience for on-premises and cloud customers. You will have the visibility in your workloads to isolate users/apps with poor performance (classified as “Excellent,” “Fair,” or “Poor”). You can pick out the trouble spots and mitigate them for the best user experience.

7)Citrix Managed Desktops (CMD) delivers Windows apps and desktops on Microsoft Azure management, provisioning and managed capacity for delivering device-independent virtual apps and desktops.

8)Citrix Cloud Connector comes with a collection of Windows services installed on Windows Server 2012 R2 or Windows Server 2016. It allows communication between Citrix Cloud and your resource locations. Connector maintenance brings more granular controls for customers.





Citrix Cloud: Your Take-aways

- Easy migration environments in the cloud through cloud adoption.
- Reduced CAPEX (or total elimination) of on-premises infrastructure, installation, up-gradation.
- Up/downscale as per need, very useful for seasonal / short-term employees.
- Citrix Cloud management platform helps multi-access/management across on-premises data centers and also on multiple cloud regions or availability zones.
- Extremely fast delivery management (in hours) with little or nothing to install.
- Services delivered in publishing or subscribe model.
- Simplest, quickest way of integration of multiple Citrix services.

Our Citrix XenDesktop pricing comes at an unmatched rate you won't get elsewhere in the market. Consider us for help with your Citrix solution. Talk to us ***1-646-506-9354*** **any time 24/7** or come for a chat. We will love to discuss!

https://www.clouddesktoponline.com/blog/citrix-workspace

Citrix Workspace: Unfurled

Citrix workspace Suite alias **Citrix Workspace** is a multi-user, device-independent digital workspace (software platform) developed by Citrix- the provider of hosted desktop as a service. It allows you to access and operate desktops including Microsoft Windows desktops, data, applications and services running in a public or a private cloud or in a datacenter from anywhere using any network and device.

You can access your virtual desktop/apps through **Citrix Workspace App**. The applications are delivered and managed by **Citrix Virtual Apps** alias **XenApp** and can be accessed on a shared server or cloud using any device.

Citrix ensures uniformity of its products over all platforms, work in synergy and bring a seamless user-experience accessible from any location.

Purpose of Citrix Workspace

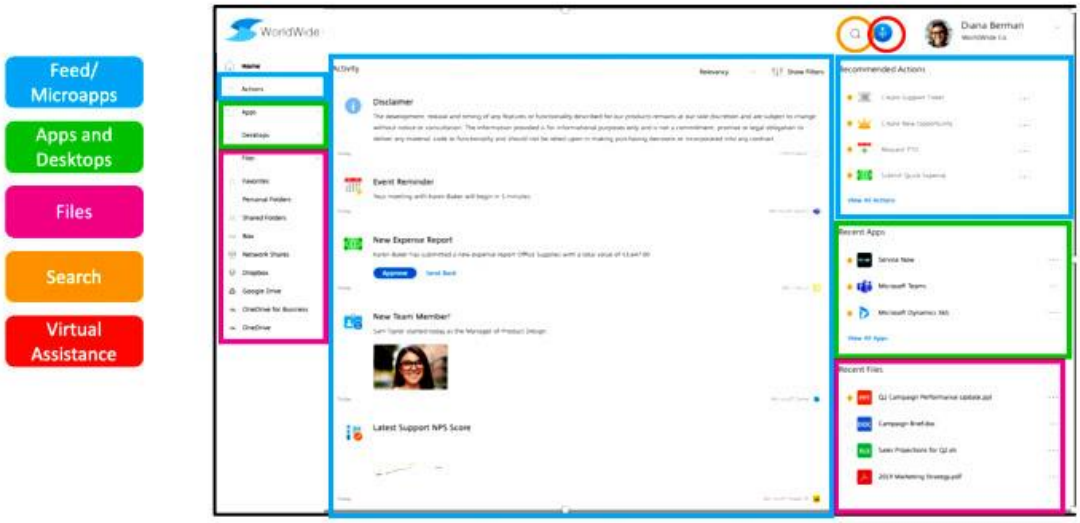
Through Citrix Workspace the company brings you all applications including resources that are not Citrix resources, such as SaaS apps), content (On-premise, cloud), devices (PC, tablet, mobile, IOT)…all aggregated into a single cloud interface.

In simple words, a completely bundled solution to all products that you will need. Integrated in one place accessible from any device, location on any internet browser at any point of time.

Citrix Workspace- Your Take-aways

1.Complete SaaS App & Other unified Control – you can access 50+ SaaS applications provided by an embedded built-in Citrix Workspace app download, along with additional security controls for SaaS and web apps. All your virtual apps, desktops (on-premises or public cloud), files (on-premises or public cloud) are aggregated in the same Workspace.

2.On-premises infrastructure support with Site Aggregation – Site Aggregation feature allows you to bring existing Citrix deployments located on-premises. The benefit is, when not using public cloud even or using a hybrid environment you can keep working.



3.**Unified Cloud admin console** – allows you to require one console for all configuration/management tasks. The cloud control plane has every one of the Citrix services integrated on the back end.

4.Integrated Content Collaboration –

Content Collaboration (earlier ShareFile) is integrated with Citrix Workspace Windows. You can find all your documents directly here irrespective of their actual location. The result is flexibility, ease of use, timesaving. It has a **Files client** which is the replacement of ShareFile Desktop client.

Content Collaboration helps you in content tracking, workflows creation, content aggregation from multiple locations, integration with Citrix Analytics. Plus, the compatibility with Microsoft Office 365 and OneDrive for Business.

Integrated Content Collaboration

5.Seamless, integrated experience, integrated portfolio – Citrix Workspace download has a default configuration giving an integrated and seamless access to applications or content. Independent of any devices, irrespective of application type and network. All at one go.

Citrix Receiver now is replaced with **Citrix Workspace App.** It comes with all the capabilities of Citrix Receiver plus new capabilities that you can use depending on your Citrix deployment. That is, you get more than just an upgraded version of the previous Citrix Receiver.

6.Self-Service through ServiceNow – Through the just released Citrix plugin, you can now integrate your Citrix infrastructure with ServiceNow's automation tools. The advantage, you can request Citrix resources (like virtual desktops or apps) through Self-Service portal and admins will automate provisioning. This feature you can use if you are using Citrix Cloud and ServiceNow solutions.

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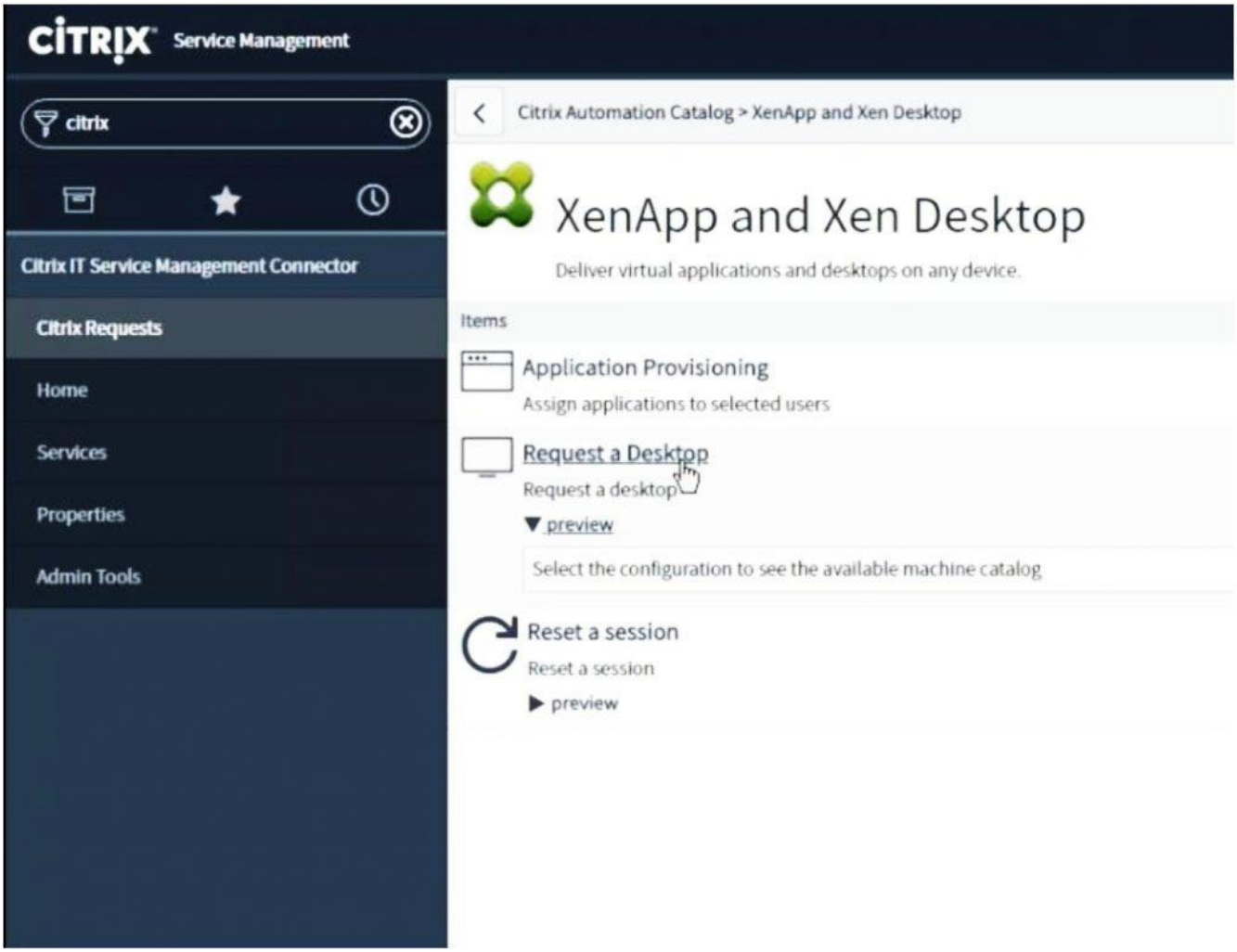


7. Cloud Independent-You can have your workloads in one or multiple public clouds (like Microsoft Azure, Amazon AWS, Google Cloud, IBM Cloud, Oracle Cloud).

Consider us for help with your Citrix VDI solution. Talk to us 1-646-506-9354 any time 24/7 or come for a chat. We would love to hear from you!

https://www.clouddesktoponline.com/blog/citrix-managed-desktops-cmd

Citrix Managed Desktops (CMD): Things to know

The blog aims to give you a bird's eye view of Citrix Managed Desktops (CMD), its main features and also the best use scenarios.

Citrix Managed Desktops (CMD) is a cloud-based desktop-as-a-service for delivering Windows apps and desktops on Microsoft Azure. It includes management, provisioning and managed capacity for delivering device-independent virtual apps and desktops.

The Citrix Managed Desktops (CMD) Make-Ups

Citrix Managed Desktops (CMD) includes the following…

- Management, provisioning for delivering hosted Citrix VDI like Windows Virtual Desktops, and apps on Azure cloud.
- Users of the Citrix Workspace app get high-definition user experience.
- Managed single-session and multi-session images, simplified image creation and management workflows.
- Any place, any-device, remote and secure access harnessing the global presence-points of the Citrix Gateway service.
- Latest help desk management and monitoring features.
- Offers managed Azure services complete with Azure compute, storage, and networking for delivering virtual desktops.

Citrix Managed Desktops Exclusives

High Performance — The HDX technology helps to bring unmatchable high definition user experience. Users get an immaculate desktop image at each login (way ahead of what a traditional desktop or laptop brings) through non-domain / domain-joined desktops and global anytime/any-device accessibility.

Simplicity re-defined with managed Service – the easiest deliverance of virtual apps and desktops that can be delivered to users on demand by anyone with any level of IT experience. Needs minimal assembly, and a customer gets everything needed.

Easy Connectivity – By way of Azure Virtual Network (**VNet**), CMD makes it easy to connect to all user-resources like Active Directory, file services and more, in the cloud. The SD-WAN brings the best ever end-user experience for any Windows, SaaS and cloud apps with extended, safe and reliable networks in Azure.

Global Availability – Citrix Managed Desktops are available across the globe- U.S. East, U.S. West, West Europe, and Australia East with the list is to grow.

User Access to CMD

Users/subscribers can access directly through their browser using the Citrix HTML5 client, browse Citrix Workspace url that has been allotted. The Citrix Workspace provides the Citrix products that the admins use to deliver secure access to desktops, apps irrespective of device, network or location. Users start working from their workspace. Another option is to download the Citrix Workspace app on the target device.

Use Case Scenarios

Some of the scenarios, among others where CMD would be the best fit are…

1.Elastic manpower situations
Business undergoing mergers/ acquisition, contractor businesses where workforce keeps changing with short term workers.

2.Special work-circumstances
Where employees work with BYOD, businesses with mobile staff or work from different parts of the globe, call center workforce and branch employees working from different locations.

4.Special call of duty
Engineering sector and Designing companies demanding extremely high-definition user-experience and complex design requirements, businesses using legacy applications, IT sector into software development and testing will get tremendous value out of CMD.

CMD is the name of desktop-as-a-service that brings powerful, flexible virtual desktop/app solutions with speed and simplicity.

Why consider us for your CMD solution?

You can rely on us, safely. Because we are… 1) a Citrix partner 2) An Azure Cloud Service Provider (CSP) 3) Have Citrix Virtual desktop solutions on our infrastructure and 4) much more reasonably priced than you will get elsewhere.
Talk to us right away 1-646-506-9354 any time 24/7 or come for a chat. We would love to hear from you!

https://www.clouddesktoponline.com/blog/azure-windows-virtual-desktop-citrix-compatibility

Azure Windows Virtual Desktop & Citrix Compatibility: The Ins & Outs

We have been receiving inquiries whether Windows Virtual Desktop (WVD) Azure would be compatible with Citrix VDI. Therefore, thought of taking this up for a discussion.
Here we are going to understand what WVD is intended to be (beyond definition), and how a Microsoft partner like Citrix can use WVD for better customer service and satisfaction. We will learn from Scott Manchester; the principal engineering lead for Windows Virtual Desktop the intention behind rolling out WVD, extending virtualization beyond current niche use cases.

Understanding Windows Virtual Desktop (past definition)

a) Not an innovation but Special

WVD is not something new. A vendor like Citrix was already in the cloud VDI market with its complete virtual app and desktop solutions.
What sets WVD apart is, it allows multi-users Windows 10.

Before WVD, the only option available to support multiple user functionality was to use a **Server OS** (like Windows Server) with installed RDSH with the enabled desktop experience. The desktop apps often had issues working on server OS. WVD, on the other hand, uses **Windows 10 OS** for supporting multi-users sharing a single VM and also brings improved user-experience.
The FSLogix provides improved roaming profile management without any issue whatsoever.

Also, WVD alone gives extended free support of Windows 7/8 for another three years.

b) Partner friendly

The most flexible Windows desktop and app virtualization in Azure cloud, Windows Virtual Desktop (WVD) takes virtualization a step ahead. Businesses can use WVD from their preferred service provider; using Microsoft is not a compulsion.

In other words, '**Microsoft WVD**' can be delivered by Microsoft alone, whereas '**Windows10 Enterprise Virtual Desktop**' can be delivered by any virtual desktop solution provider, including Citrix Workspace. The only rule of the game is, the virtual machines (VMs) running Windows 10 must be hosted in Microsoft Azure cloud.
Microsoft & Citrix have worked together always from past till now.

Microsoft-Citrix : Bonding for the best

The flashback

There was a time when users could purchase Citrix XenDesktop/XenApp Essentials from Azure Marketplace. These were moderately different versions and allowed Windows 10 Enterprise virtual desktops access on Azure cloud on a minimum monthly per-user price. Obviously, this helped the hosted Citrix VDI to be a dominant player in VDI space. However, Microsoft now is making its own control plane in Azure.
However, both the businesses realize that building, maintaining VDI and profiting from is challenging with meticulous work, components and business mix-match approach. Hence they strategize accordingly.

Citrix has added multi-user Windows 10 Enterprise Virtual Desktops (**EVD**) to its operating system (OS). From Citrix control plane, it is possible to construct multiple user catalogs and delivery groups on Azure. As a result, customers can combine Windows 10 Enterprise Virtual Desktop in Citrix Workspace.

Fast-forward to present…Continues

Citrix managed desktop as a service, virtual apps/desktops or the Citrix Essentials products all support Windows Virtual Desktop. The company is integrating App Attach into Unidesk (the management platform for Windows app mobility using layering technology). It separates out Windows Apps from infrastructure so that they can be managed and delivered from any cloud to any device. -

The control plane of Citrix is way ahead of WVD due to its seasoning in desktop virtualization than any other player in the market. However, customers not needing the advanced features that Citrix control plane offers, WVD would be perfect for them. And they can avail it from Microsoft or Citrix as well as discussed earlier.

Actually, WVD is based upon global mindset in view with broad partner ecosystem like Remote Desktop Services (RDS). Customers can either take service from Microsoft or from other partners. The point is, with WVD, Microsoft isn't bringing just a different or inexpensive way of offering VDI. Rather it wants to take it beyond the current niche workloads. The question of compatibility issue, therefore, doesn't arise.

Scott Manchester, the principal engineering lead for Windows Virtual Desktop goes to say, *"Our overall intention was not to simply shift one user from one solution to the other, but to actually extend the reach of virtualization," Manchester explains. "Any time you can reduce the IT overhead for building, managing and deploying Windows, you're increasing the total market."*
Latest cloud-based virtualization technologies allow you to do much more. But, you need experts to help you deliver after understanding your company's requirements. As a Microsoft Azure and Citrix partner, Apps4Rent can help you with the migration of your organization's desktops and applications to the cloud.
Talk to us ***1-646-506-9354*** **any time 24/7** or come for a chat. We will love to discuss!

https://www.clouddesktoponline.com/blog/how-microsofts-windows-virtual-desktop-wvd-cloud-is-better

How Microsoft's Windows Virtual Desktop (WVD) Cloud is Better

With Windows Azure Virtual Desktop (WVD) Microsoft has started recognizing app and desktop virtualization as a viable strategy for end-user computing. At the moment, there are at least twenty other virtual desktop provider businesses in the market. Compared to this, Microsoft is rather a later entrant in the game of cloud virtual desktops and apps. Our discussion aims to explore what makes WVD hosted desktop as a service stand out from the crowd, and also the scenarios where WVD would be a perfect fit.
First let's take both the parties head-on, i.e. WVD and the other cloud desktop solution providers.

Operating System (OS)

Other Cloud Desktop Providers: Use a Server Operating System (OS) like Windows server, with the enabled desktop experience. Because Remote Desktop Server is available exclusively in Server OS enabling multiple users sharing one virtual machine (VM). It has limitations.
For example, the Search index will be a per-machine database. If a user switches over to another VM, the index needs to be rebuilt.

WVD: Uses Windows 10 OS for supporting multi-users sharing a single VM, aimed at improving user experience. For example, the Search index is a portable database per user and will move with the user from one VM to another.

Control Plane

Other Cloud Desktop Providers: Uses the RDS infrastructure like Web access, Gateway, License server, connection broker (software program allowing the end-user to connect to an available desktop and performing tasks like validating and providing the connection to the user), and HTML client. Such server roles are installed on Windows Server virtual machines (VMs) managed either by a customer or a managed service provider.
WVD: Replaces domain-joined RDS roles by Azure cloud service simplifying the process and the use of virtual machines (VMs) to run them.

Profile management

Other Cloud Desktop Providers: It is quite difficult. Despite plenty of solutions available including Microsoft's own roaming profiles, folder redirection, user profile disks and many third-party products, not even one is fool-proof.
WVD: Using FSLogix tools like Profile Containers, the user profiles can roam through all the pooled session hosts.

Licensing

Other Cloud Desktop Providers: Separate license required for RDS and the Server OS.
WVD: Windows 10 Enterprise subscription will be enough to avail WVD. No additional expense for purchasing a Server OS license or RDS.
All said and done, though windows virtual desktop cloud is available worldwide and you can host your VMs wherever you want, as of now the management plane instances are available in the US and EU (though future and fast expansion could be possible). Second, you will need to bring your own images, apps, security patches and other software to use WVD.

Now the dilemma…

WVD vs other Cloud Desktops, which should you select? Let's run some instances to help you make an informed decision.

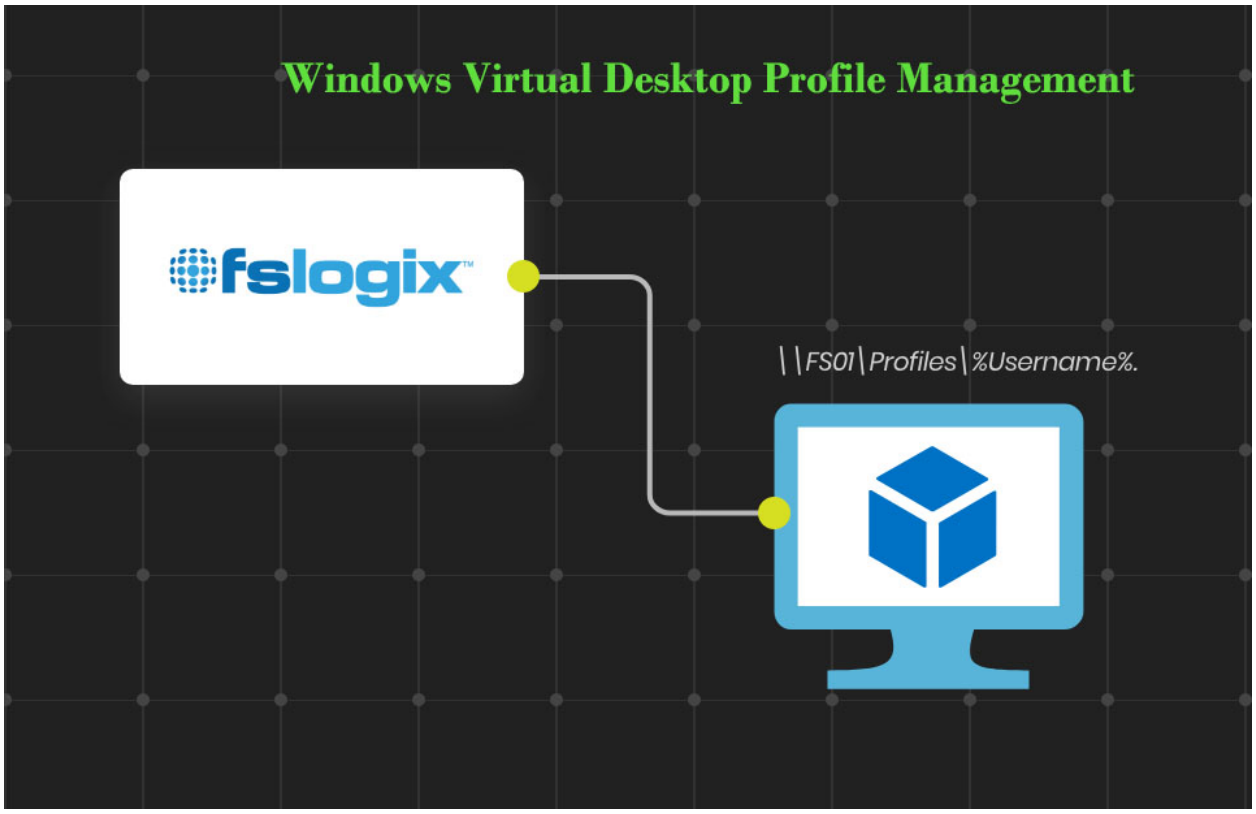
WVD Use Cases

Case-1
You have some legacy Windows apps (like Windows 8 or legacy Win 7 support) that you need to continue with then it's worth shifting to WVD with your *existing license (*like Microsoft 365 – E3/E5/A3/A5/Business; Windows (via CSP) – E3/E5/A3/A5).
Case-2
Your business needs a flexible workforce due to merger/acquisition or consulting business or seasonal business, specific roles (using BYOD) or departments with similar computing environments.
Case-3
Industries with security and regulation as the topmost priority like defence, government, healthcare or finance, for example, will find the regulatory norms best met through WVD. Security controls like multifactor authentication (MFA) plus the fact the virtual machines (VMs) in WVD are not exposed to the internet directly bring tremendous leverage for such sectors.

Case-4
In case if you are looking for cost reduction, WVD could be your good bet from CAPEX and other savings point of view. Also, if you want the best-integrated solution for virtualization minus the headache of building, maintaining the infrastructure along with cost-saving, WVD could be your final destination.

Do not hesitate to reach out to us any time should you need any further elaboration or clarification on this.

https://www.clouddesktoponline.com/blog/windows-virtual-desktop-profile-management



Windows Virtual Desktop Profile Management

Profile Management or managing the what, when, why, who and how of users is not a fun-game. It had always remained a serious issue, especially in virtualization or hosted desktop as a service landscape.
Despite the available tools including Microsoft's roaming profiles, user profile disks, folder redirection and many third-party tools, none was without compromise. Windows Virtual Desktop (WVD) profile management through FSLogix takes care of the painful limitations of profile management. We will explore here how profile management is done by WVD.

What is a user profile? Why Crucial?

A user profile is a bunch of settings and configuration data (folders, files, registry settings, and configuration settings) that shows how the user interacts with the desktop environment.

Some such settings are customizable and customized by a user, like backgrounds, taskbars, desktop icons, layouts etc. Some configuration is set by the IT department using tools like Group Policy (GPO), user environment management solution (UEM), Scripts and more.

Now, a profile is operating system (OS) specific; doesn't work beyond its own OS. For example, a Windows 7 profile will not work with Windows 8. Forget about working between desktop and server OS.

There are 1. Local Profiles and 2. Roaming Profiles

Profile Types

1. Local Profile

In this case, a user's profile is stored on a network server (in contrast to being stored locally on a desktop PC). Through Active Directory configuration admins link the roaming profile with the user's account. Whenever the user logs in, Windows copies the user profile from the network to the local computer.

The default profile in any Windows environment that lives locally. By default, it contains everything related to that user's operating environment. As a user upgrades Windows, simultaneously the user upgrades the profile. But if the user signs into another machine, the process has to start again. The user experience fails.

2. Roaming Profile

Although Roaming profiles became commonplace, it had its challenges. The user experience was slow, painful; the admins got sleepless hiccups and swollen eyes.

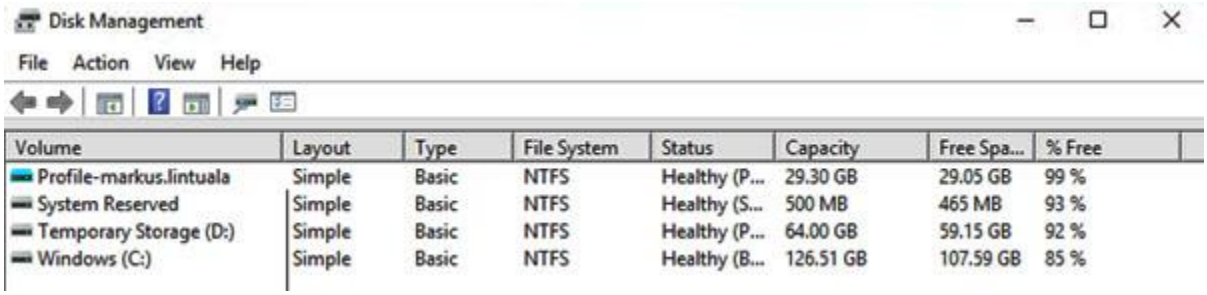
FSLogix for profile management

Microsoft acquired FSLogix for better profile management of the user profiles that roam through all pooled session hosts.

Profile Containers

The FSLogix tools help in profile and application management especially in a virtualized environment and the most valuable tool is Profile Containers.

What Profile Container does is, it packs the user-profile to VHD(X) files, stores it in File share. These VHD(X) files can be mounted through network when the user logs in and demounted when the user logs out.



Profile Container of FSLogix

Cloud Cache

To reduce network traffic, FSLogix brings a caching mechanism – Cloud Cache. It caches profile files to the local machine.

Multi-session feature

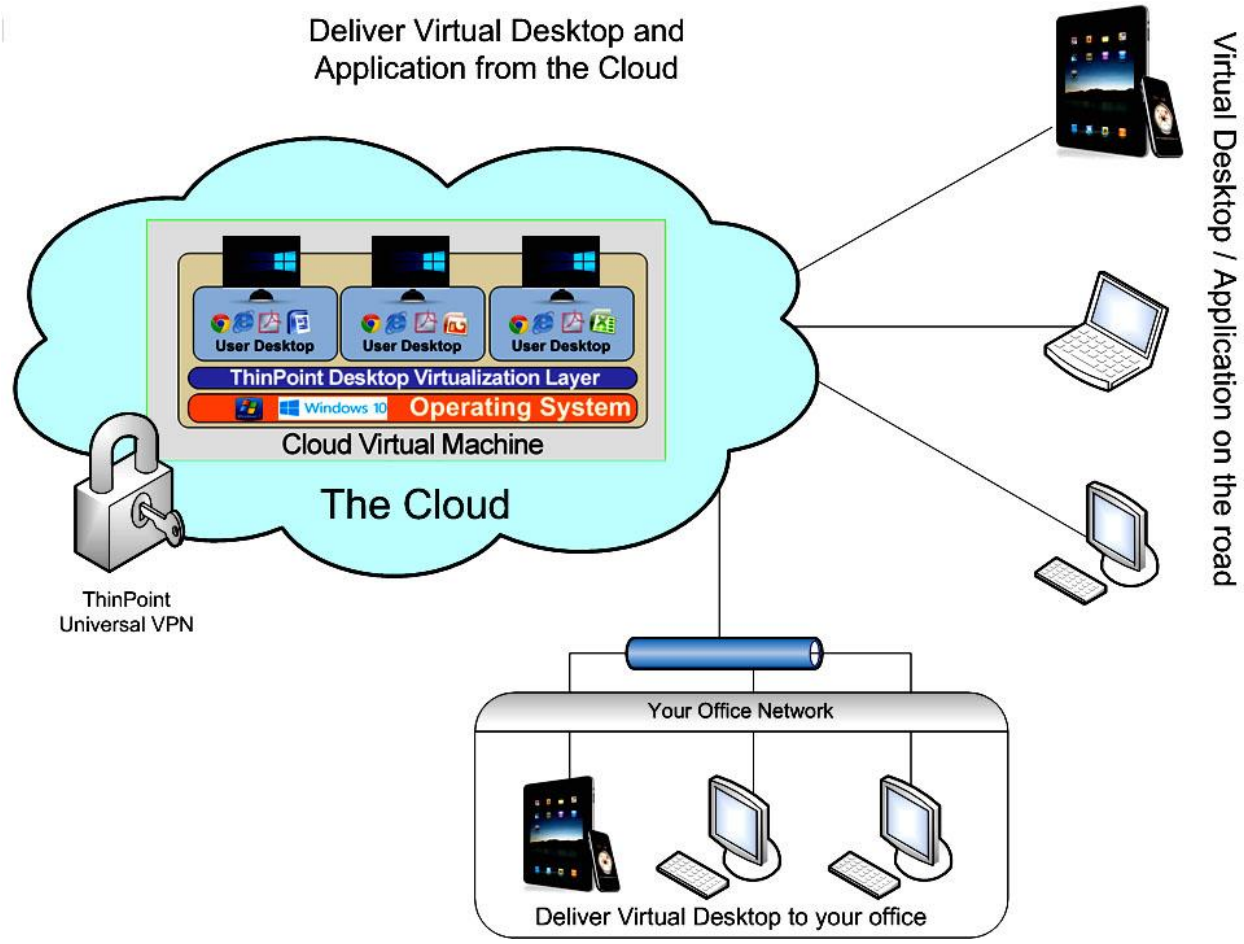
Multi-session at a time is the beauty of WVD. This feature is done through FSLogix.

With all these advantages, the beauty of FSLogix is it doesn't need an extra license but comes bundled with existing WVD license.

Advantages of FXLogix

i)Improved Performance: through profile containers and resolve performance issues.
ii)OneDrive: FSLogix profile containers enable support for OneDrive in non-persistent RDSH or VDI space.
iii)Additional folders: FSLogix enables to extend user profiles to include additional folders.
Virtual desktop profile management has had been a challenge for a long time. But the profile management through FSLogix comes as a relief aimed at flawless profile management.

https://www.clouddesktoponline.com/blog/windows-virtual-desktop-cloud-advantages



Windows Virtual Desktop Cloud Advantages

Enterprises worldwide are seeking a more agile, easy and secure way of doing business. Windows Virtual Desktop (WVD) offers maximum fluidity with device-independent, location-free, using any Remote Desktop (RD) client (Windows, Mac, HTML5, Android) and with multi-user facility.

For you, we are going to discuss here the issues and expectations of businesses from virtualization vis-à-vis, how Windows Virtual Desktop cloud smartly plugs-in the expectation-deliverance sockets.

Business pain points

Businesses are there who want Virtual Desktop Infrastructure (VDI) or hosted desktop as a service,without the burden of building, maintaining this infrastructure. They want a cloud desktop from someone who must build everything…the operating system (OS), tools, and the cloud; so that they get everything at one place making their life simple yet cost-effective. The pleasure of virtualization minus the headaches.

They prefer Microsoft; as it gives them everything under one umbrella. Microsoft Office being the most used virtualized app, enterprises mostly using Microsoft management already, prefer the best-integrated solution for virtualization for moving everything to the cloud.

The pleasure balm of WVD

The simplicity of using WVD without having to pay for hardware, easy with the licensing system (usage rights are included in Windows E3 and Office 365 Pro Plus licenses), and finally the biggest edge…the exclusive multiple user cloud VDI, Windows

Virtual Desktop (WVD) has taken virtualization to the next level. Those who are still with Windows 7 will get an extended free security update for the next three years.

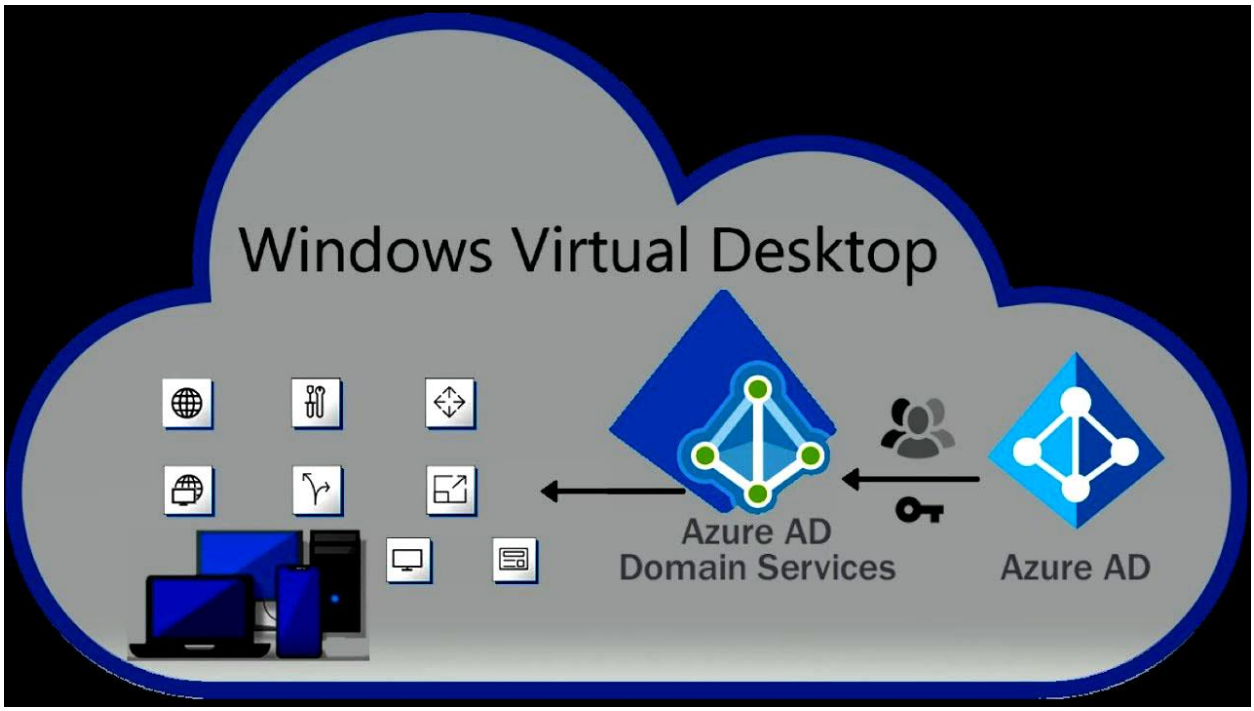
Here's a quick rundown of what WVD can do for you…

Windows Virtual Desktop Cloud Takeoffs

1. WVD is a typical example of fluid flexibility that it brings to companies. Users get the same desktop experience from anywhere, using any RD client application (Windows, Mac, HTML5, Android).
2. Complete virtualization of desktops, apps; assigning and connecting users.
3. Bringing down your capital expenditure by reducing hardware expenses.
4. Supports persistent/nonpersistent VDIs with dedicated or multi-session uses.
5. Without the compulsion to deploy or maintain on-premise infrastructure. Gateway, brokering, licensing, and diagnostic services come as an Azure service.
6. Reduced CAPEX cost frees up funds to be utilized elsewhere.
7. Saving money through multi-session and reducing the number of virtual machines (VMs) through their optimized allocation.
8. Benefits of extra security control via multifactor authentication (MFA) through Azure Active Directory.
9. Additional security is ensured as the virtual machines (VMs) in WVD do not get a direct internet connection. Using private IP address they remain separated from other workloads or internet through the technology of reverse connect (the reverse connect technology allows access to virtual machines without the need of inbound ports. Instead, an outbound connection using TCP/443 is made into the WVD management plane).
10. Instead of running directly on the internet, the Windows Virtual Desktop virtual machines (VMs) run by way of reverse connect technology using a private address and remaining separate from the internet or other workloads.
11. Optimization of Office 365 ProPlus.
12. Enterprises already using Windows 10 Enterprise E3 Per User" license, Windows 10 Enterprise E5 or Microsoft 365 E3, E5, F1, or Business or RDS CALs can use Windows Virtual Desktop without any extra expense. The only expense would be for Azure storage and network.

The list is just the tip of the iceberg. With time Microsoft could unfold yet more potential advantages of WVD. But for now, we hope to have given you a bird's eye view of the benefits you will get through WVD.

https://www.clouddesktoponline.com/blog/windows-virtual-desktop-prerequisites



Windows Virtual Desktop: The Prerequisites

In the present days of advanced digital transformation, we have started moving desktops to cloud in addition to migrating data and applications to the cloud. Not only it relieves you from rigid hardware dependency, reduced product lifecycles; you benefit from the security, scalability and easy deployment of Azure cloud desktop platform, Windows Virtual Desktop (WVD). Here is a rundown on the prerequisites for your Windows Virtual Desktop Azure service.

You can think WVD as a Desktop-as-a-Service (DaaS) from Azure or Platform-as-a-Service (PaaS) that helps you in desktop and app virtualization in the Azure cloud to be accessed by users on any device, at any point of time or from any location.

You will need the following for availing Windows Virtual Desktop service.

Windows Virtual Desktop Prerequisites

1. Subscription to Windows 10 Enterprise for each WVD user
2. Azure Active Directory (AAD) tenant
3. Active Directory Domain Services (AD DS) deployment
4. Azure subscription
5. File Server

Now, let's run through each one.

1. Windows 10 Enterprise Subscription

You will need to subscribe to Windows 10 Enterprise for your WVD Management Service and Windows 10 desktop OS.

To connect to multiple WVD desktops, irrespective of Windows 10 Enterprise multi-session/single-session, or Windows 7, you can use any of these licenses … a) Microsoft 365 – E3/E5/A3/A5/Business or b) Windows (via CSP) – E3/E5/A3/A5.

a) Microsoft 365 – E3/E5/A3/A5/Business or b) Windows (via CSP) – E3/E5/A3/A5.

2. Azure Active Directory (AAD) tenant

You will need an Azure AD (AAD) tenant (it's Microsoft's cloud directory service) for deploying and managing WVD as an administrator, assign users to desktops and applications.

In case you are using Office 365, you are already an Azure AD tenant ready to deploy WVD.

Next, you will create a Global Administrator with access to the AAD tenant. The global administrator gives you unlimited control over your subscribed products, and you can access maximum data.

3. Active Directory Domain Services (AD DS) or Active Directory

The WVD virtual machines or the hosts running the multi-session Windows 10 Enterprise, must be a part of Active Directory Domain Services (AD DS) pool.

Note that you will need both AADand AD DS. The AAD contains user objects, AD DS contains computer objects. The ADDS needs to be integrated with AAD.

4.Azure Subscription

The Azure subscription includes WVD Management Service, Windows 10 VMs and infrastructure.

5.File Server

A user accessing a pooled or nonpersistent desktop, the profile and also Windows Search cache need a file server to store these profile disks accessible to the session host VMs.

Once you are ready with all these, you will be ready for your next journey of initial WVD set up.

https://www.clouddesktoponline.com/blog/windows-virtual-desktop-end-user-perspective

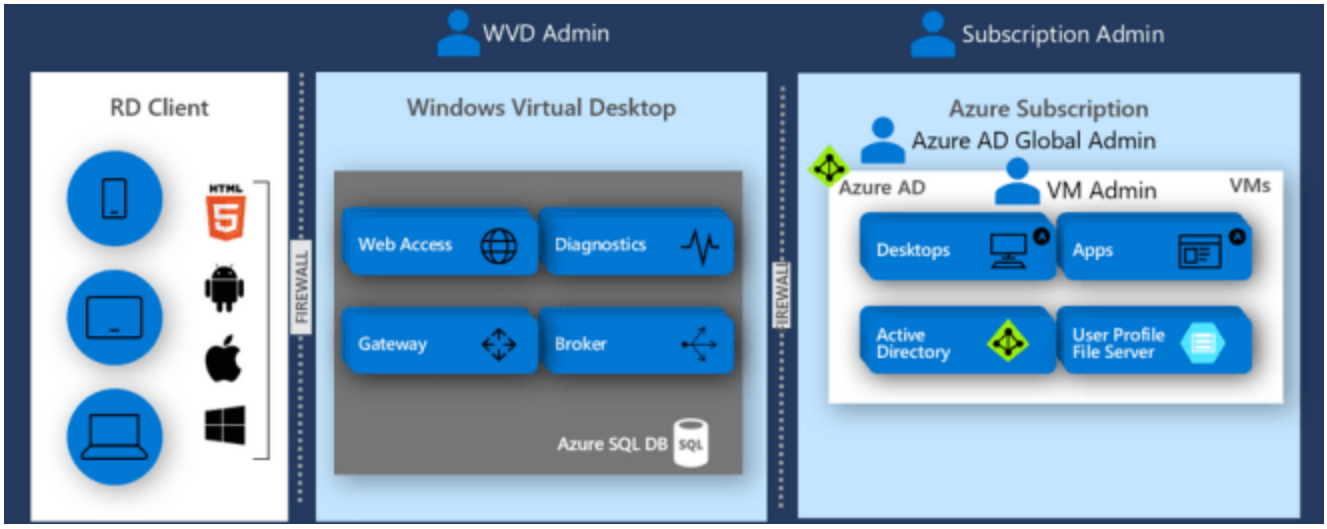
Azure Windows Virtual Desktop from Admin & End-User Perspective

The purpose of this discussion is to give you an overview of Azure Windows Virtual Desktop (WVD), its overall architecture, setup processes and above all, a general idea of what the platform looks like from the viewpoint of users and mainly administrators. Without getting into the details of uses, cost factors, other features (or comparisons) of Azure Windows Virtual Desktop.

Windows Virtual Desktop is a cloud-hosted desktop as a service by Microsoft Azure for virtualizing desktops and apps for customers and end-users.

WVD offers multi-session virtual Windows 10, optimizations for Office 365 ProPlus, and support for RDS environments. The Azure portal and Powershell commands help in the management of images, profile, and virtual disks for caching and more.

WVD Architectural Overview



End-Users access the Virtual Machines (VMs) along with user profile and offline caching technology (FSLogix for optimizing the Office 365 ProPlus) via WVD nestled in the organization's Azure VDI subscription.
While the Remote Desktop Session (RDS) client (Windows, Mac, HTML5, Android) is managed by the user-organization; the Web Access, Diagnostics, Gateway, Broker, operating system installation, up-gradation, patching of the Operating System (OS), network configuration are all managed and controlled by Microsoft in Azure.

Licensing Simplified

Licensing gets simplified as you will not need a Client Access License (CAL). Your existing Windows E3 or Office 365 Pro Plus subscription or even an eligible Microsoft Remote Desktop Services (RDS) Client Access License (CAL) will be enough.

Setting Up Windows Virtual Desktop

As already discussed, you need not worry about the management or OS installation, maintenance elements. Selecting and customizing a desktop image, configuring some Azure services and assigning desktops or apps to users is all you need to do. Of course, you will need PowerShell expertise for this.

The Windows 10 multi-user option is available from the gallery. It is not exclusive to WVD but to Azure. Hence VMware, Citrix is also offering the same although managed by a different control plane.

User Access

Accessibility can be done by way of a) Microsoft RD client b) HTML5 based Web Client c) iOS RD Client.

Post authentication, the end-users are able to access the virtual desktops or applications that are included in the Azure subscription.

Once the users select their choice resources, connections (pooled or exclusive) are given via the Gateway.

WVD Experience Synopsis

End-Users Advantages

- Easier to set up compared to conventional Remote Desktop infrastructure.
- Multi-accessibility via RD clients or web browsers.

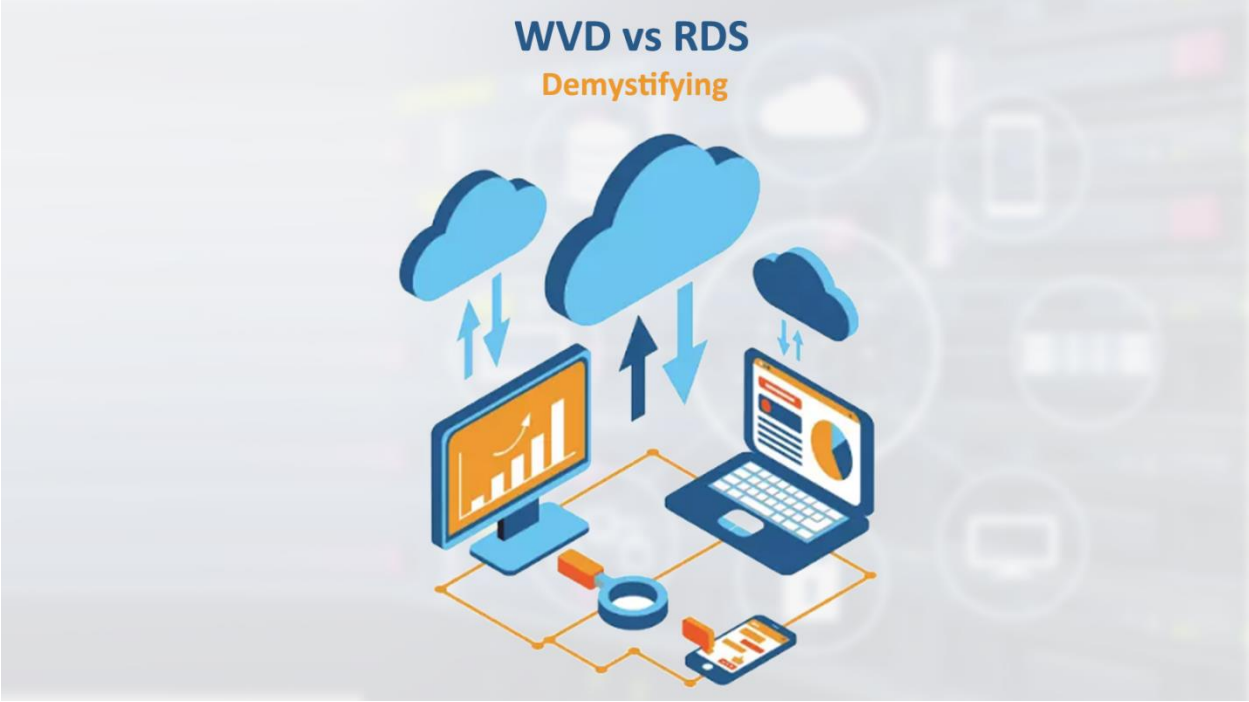
- Windows 10 with a multi-user option.
- On-demand automatic scalability.
- Awesome desktop experience.

Pains for Admins

- Only an Application or Desktop is available from a pool per user; not both.
- If you are not comfortable with PowerShell scripts, setting up a Windows Virtual Desktop (WVD) tenant could be challenging.
- Microsoft does give you a couple of management tools, but you need to deploy them manually and get an App service plan at an additional payment.

To conclude, WVD does need improvement in some areas. But, as of now, it is the most simplified, versatile service with a multi-user Windows 10 option. Additionally, for those who wish to continue with Windows 7 for a while, will get free security updates for another 3 years after 2020.

https://www.clouddesktoponline.com/blog/wvd-vs-rds



Windows Virtual Desktop vs RDS – 6 Attributes to Consider

With the roll-out of Windows Virtual Desktop (WVD) which is a hosted desktop as a service, the common question that keeps coming is the difference between Azure Remote Desktop Session Hosts (RDS) vs WVD and which one to choose. Here we will take you through the broad technicalities, how WVD relates to RDS, the benefits, cost-effectiveness and user preferences for opting one against the other.

Windows Virtual Desktop

Windows Virtual Desktop is a cloud platform service, a set of Microsoft technologies running in Microsoft Azure for virtualizing desktops and apps. WVD is not a virtual desktop that you can buy from Microsoft. Rather, it is a set of technologies used to build virtual desktops for customers and end-users.

Along with simplified virtual desktop management, WVD offers multi-session Windows 10, optimizations for Office 365 ProPlus and support for RDS environments.

Remote Desktop Services (RDS)

Remote Desktop Services (RDS) is a virtualization service where the Windows software along with the entire desktop of the computer running RDS are accessible to any remote client machine supporting Remote Desktop Protocol (RDP). Thereby providing secure, mobile and remote desktop access to users and also to run applications and desktops.

WVD vs RDS Convergences, Differences

i) The OS

The basic difference between RDS and WVD is, RDS is based on a server operating system (OS), WVD comes with a desktop OS that is, multi-user Windows 10.

WVD is both platform and infrastructure services (PaaS and Iaas). Here the host is a virtual machine (VM), and the rest of the service is PaaS. With much fewer machines to care for, WVD is an easier environment than RDS for the service providers. RDS is a DaaS service, and the end-user choose the server type, storage, security groups, and more.

ii) The Management

In WVDs, the entire infrastructure is managed by Microsoft (Paas); whereas in RDS, the infrastructure is created and maintained by the service provider. In WVDs scenario, the operating system installation, up-gradation, patching of the OS, network configuration everything is managed by Microsoft.

Whereas, with RDS, the service providers or IT departments need to build one or more Windows Server VMs, install and configure. Boils down to additional Azure infrastructure plus expenses to support the control panel.

iii) Multi-User Windows 10

This exclusivity is available with WVDs and not on RDS, or any other cloud either. Instead of one Windows Client VM per user, WVD allows multiple-users Windows 10 on a single VM.

RDS allows users to work from a shared computer, but the OS needs to be Windows Server.

iv) Supports

WVD supports Windows Server VMs as Session Hosts.

Those who want to transform gradually to WVD this is a benefit. Because RDS Session hosts are supported in WVD. As a result, users or service providers can enjoy the WVD benefits that are not present in the RDS environment (for example, the availability of WVD infrastructure, auto-scaling, and more.

v) Resource Optimization & Load Balancing

WVD offers to scale and load balancing by way of 'breadth' and 'depth' mode. The breadth mode offers user distribution among the host pools for the best performance. The depth mode enables one server to be used first before allocating the next.

Even a combination of the two is possible at periods as per the need. All these help in cost saving.

Again, through persistent desktop (i.e. many-to-one using the same desktop), it is shared among different users where settings are not saved, resulting in space optimization. WVD also enables you to select the number of users per CPU.

vi) Windows Virtual Desktop & RDS License

So far as Client Access License (CAL) for Windows Virtual Desktop, RDS is concerned, you will not need a CAL for WVD. You can use your existing Windows E3 or Office 365 Pro Plus subscription or even an eligible Microsoft Remote Desktop Services (RDS) Client Access License (CAL).

Azure compute, storage, and networking associated with the virtual machines used are the only extra costs for WVD. You get all Office 365 features, OneDrive, Edge and Azure Marketplace.

In RDS you need to purchase everything. A Windows Server License, RDS Subscriber Access License for desktop deployment in Azure. Then you need additional VMs to run and manage.

RDS or WVD, What to Choose?

There is no fixed answer to this, as it would depend on many factors, needs, and preferences.

Users may like WVD over legacy RDS for various technical reasons:

i) WVD is the latest, newest technology

ii) profile management through FSLogix

iii) managed through PaaS

iv) supports OneDrive, indexed search in pooled desktops

Again, some service providers may opt for RDS because:

i) it is a market-tested known and proven solution

ii) some applications written for RDS on Server OS may not work in multi-session Windows 10 Enterprise at least immediately

iii) Users may prefer to retain full ownership of VMs and also the control plane or the RDS roles

iv) User settings on being changed/customized are saved/retained

v) RDS can be used both on-premise and in the Azure cloud. In contrast, WVD is an Azure only service

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https://www.clouddesktoponline.com/blog/persistent-vs-non-persistent-vdi

Persistent vs Nonpersistent VDI: Which to Select?

Flexibility, ease of use, cost-saving, and simplified management are the major benefits of the virtualization of desktops and applications. But businesses must decide how much end-user experience they want to retain and to what extent they can sacrifice by choosing between persistent vs nonpersistent virtual desktops. Our aim here is to take you through both, their benefits, shortcomings, under which kind of scenario each can be used. Accordingly, you can request your desktop as a service provider to deliver you the product you want.

Persistent/Stateful VDI

In this case, each end-user's desktop is customizable and once saved, the customized data persist from session to session. By definition persistent VDI is a one-to-one desktop, each running from a separate, customized disk image. Naturally, they consume more storage space and backups.

Advantages of Persistent VDI

Personalized, familiarity, ease: because a user can save the personalized data, shortcuts, files and gets the same desktop image each time, it helps to embrace VDI with the least mental resistance.
Easy to manage: such a VDI has the same setup as a physical desktop; the admins can easily manage as there is no need to re-engineer the desktop while shifting to VDI. The same setup can be used.

Disadvantages of Persistent VDI

Storage: storage and backups are the major concerns. Storage uses a separate drive integrated with a virtual machine (VM) while the actual user data are stored on the desktop.
Tough image management: it gets complicated for the admins to manage various diverse images.

Nonpersistent/Stateless VDI

It is just the opposite of persistent VDI where none of the user settings/data is saved. The desktop gets back to its original state and each time a user logs in gets a fresh image.

Advantages of Nonpersistent VDI

Easy to manage for admins: being made up from a master image, admins find it easy to manage, patch and update image, take quick backups and deploy the needed applications to all. Because the users can't install their own apps, security is foolproof. Even in case of any security breach, it can be rebooted to clean.
Less storage: the main user settings and data are stored on separate hardware with remote access separating the OS from user data reducing storage costs.

Disadvantages of Nonpersistent VDI

Limited personalization, flexibility: it doesn't allow users to personalize their desktop or install apps. Whatever degree of customization is required for a particular function, are done by the admins so that the users can access all the apps they need. All these may need user environment virtualization, which at times could get complex. Also, there could be apps that cannot be virtualized.

Persistent vs Nonpersistent VDI Scenarios

Whether you will need persistent or nonpersistent VDI will depend entirely on your task need. The following are different scenarios that use the two different sets. Also, there could be a mix-match between the two. For example, morning till lunch or day hours may use nonpersistent and evenings/nights to utilize persistent desktops.

Task Workers

They are the people who do repetitive work using a small set of applications; call center workers, for example. Here you can use nonpersistent VDIs, standardize the images needed by them to be available every time a user logins.

Knowledge Workers

They deal with complex documents or need to install their own applications. Therefore they need persistent desktops that don't change and save the settings and data.

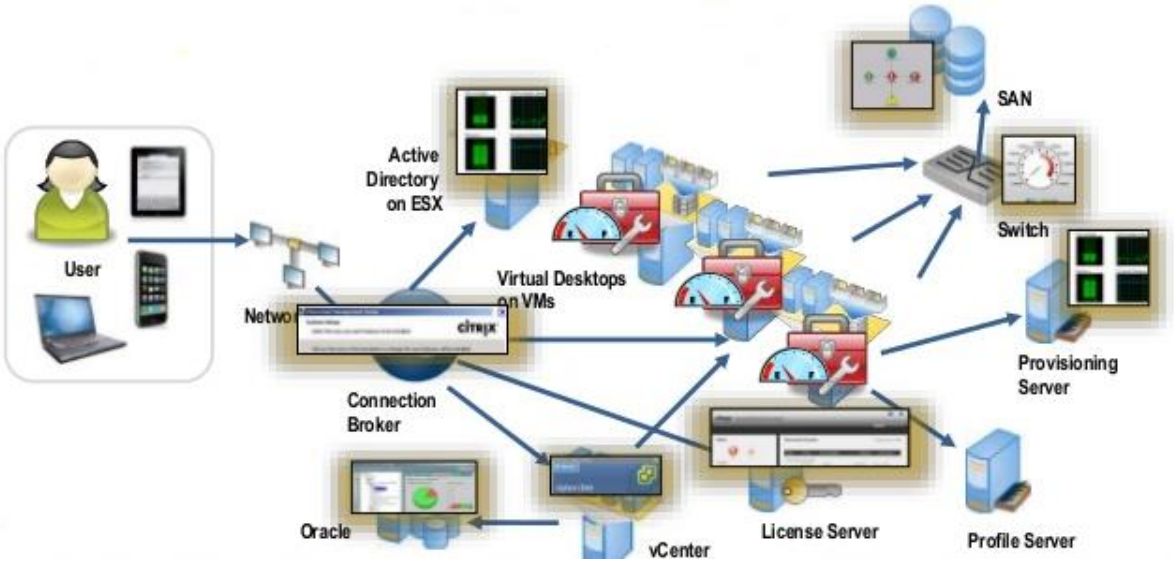
In case if some knowledge workers need user-installed apps only for temporary use, they can use nonpersistent desktops and save all their data outside the VM, on a file server or application database.

Kiosk Mode/Lockdown Client Desktops

Such desktops have very limited user operations. Examples are airline check-in stations, medical data entry kiosks, classrooms/libraries, customer self-service kiosks. Here users do not need to login to use the service, though they still can be required to provide some credentials for some applications. Here stateless desktop images are used.

To some up, you can choose your virtual desktop as per your need, as also you can mix and match between the two and save money.

https://www.clouddesktoponline.com/blog/windows-virtual-desktop-management-tools



Tools for Windows Virtual Desktop Management

Managing a virtual desktop deployment is not always easy; the same could be the Windows 10 Virtual Desktop management. Setting up a Windows Virtual Desktop (WVD) tenant could be challenging if you are not comfortable with writing the PowerShell scripts. We will take you through the management tools available for Windows Virtual Desktop (without using PowerShell), where you can get them, and what you can do should you need deep management features.
A couple of Microsoft management tool options are available. However, they need to be deployed manually, and you will have to get an App service plan at an extra cost. As of now, this is the best choice you have.

Microsoft Developed Windows Virtual Desktop Management Tools

WVD Management UX

You can get it at GitHub. Once you deploy the ARM template, it will create the App Service Plan and 2 web apps apart from a temporary automation account that runs a one-time runbook for configuring the app for your tenant.

With this app you can a) Create a new host pool b) Add new hosts to the pool c) Block/allow new connections to a host d) Create App groups for Desktops or RemoteApp e) Assign permission to App groups.

These are basic management tasks but will help you a lot with routine WVD management. Particularly useful for organizations with substantial WVD deployments.

It has a GUI interface and completely bypasses the need to use PowerShell and removes the risk/human error elements.

1. You will need a separate deployment for each Azure Active Directory (AAD) tenant subscription.

2. Don't use old browser versions as there would be compatibility issues.

WVD Diagnostic Tool

Another recently released tool fully managed by Microsoft is the Diagnostics tool. The tool will help in managing the issues related to Connections broker, Gateway, Session Hosts, failing connections, and more. You can troubleshoot the issues now using your browser.

However, you will have to deploy another app for this with a new App Service Plan for which you will need to pay additional fees each month along with additional storage for the log files.

The tool will help you among others to a) review the performance details of virtual machine for a particular host b) see the sign-in details of users on a specific session host and c) send messages to the active users d) sign-out users of a session host e) collect session host information from log analytics workspace.

Vendor Developed Virtual Desktop Management Tools to Evaluate

It could be possible that you need advanced management like multi-environment configurations, database back ends, changing individual settings including various changes to multiple user profiles or manage thousands of profiles, etc.

In that case, you may need to consider third-party / more advanced user profile management tools.

Here is a rundown of a few vendor tools…

Liquidware

Liquidware brings a pool of tools like ProfileUnity, Stratusphere UX and FlexApp to help in monitoring and managing deployments, improving user experience, managing application layering, and user environments, image management and more.

Login VSI

Its monitoring tool Login PI checks the performance of Windows applications through metrics like the use of the legacy applications, logon times. The monitoring happens continuously along with its application programming interface (API) that integrates with the other analytics tools.

PolicyPak

PolicyPak helps in various management tasks like assigning admin rights, configuring security, compliance settings, Windows 10 settings management like the Start Menu, taskbar, Group Policy Objects, and file associations.

ControlUp

ControlUp helps in monitoring user experience and resource consumption. Through UX metrics like application load time and logon duration, it sends alerts in case of concern. Constantly monitoring input delay, it can account for performance issues, automates actions for Windows Virtual Desktop management through user-created scripts.

Lakeside Software

The company's monitoring tool SysTrack monitors the activities of the virtual machines hosting the desktops, apps, and managed client-devices. Its end-user-experience score helps to capture user issues(e.g. low disk space, latency, or the application crashes). Its free assessment tool helps in planning the migration to Windows Virtual Desktop.

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https://www.clouddesktoponline.com/blog/windows-7-virtual-desktop-support

Windows 7 Support in Windows Virtual Desktop: Things to Know

January 14, 2020, will bid farewell to Windows 7 "free security updates".

With Windows 7 support to end, what it means is, it will be prone to attacks without the latest security solutions guarding the vulnerable elements.

However, if you are a Windows 7 user, no need to panic with the end of Windows 7 support. You can keep running Windows 7 through Windows Virtual Desktop.
We will take a stroll here on the present and future of Microsoft Windows 7 post-Windows 7 support ending and if your business still prefers Windows 7, what options you have and what to expect in the future.

Why Microsoft is Doing Away with Windows 7

There are a couple of practical issues that Microsoft is facing with Windows 7. It is not viable for the company engineers to remain endlessly tied up in maintaining, updating, patching old/legacy operating systems. Neither the company has the best people to make it work safe and sound on newer versions.

The Crisis You Face Without Windows 7 Latest Security Updates

In one sentence, it's a security risk.

Cybercriminals are aware of the End of Win 7 support and are fully geared up to take upon businesses running on Windows 7 without the latest security protection.

New vulnerabilities and malware will be created to take advantage of the unsupported Windows 7 OS to take over the holes in the software and vulnerabilities as there will nothing to stop them. The old security systems will not be good enough to safeguard against the latest vulnerability. Forget the real-time attacks.

Why Businesses Still Use Windows 7?

There are many reasons. In the first place, there could be many old user applications that will no longer run on Windows 10, and a good replacement application may not be available. Even if replacement-applications are available, migrating could bring issues with data conversion, retraining, etc.

Secondly, the user interface has changed in Windows 10 and needs a large bandwidth to run well. It can be a matter of choice for some users who prefer the fast and easy Windows 7 interface.

What Windows 7 Existing Customers Can Do?

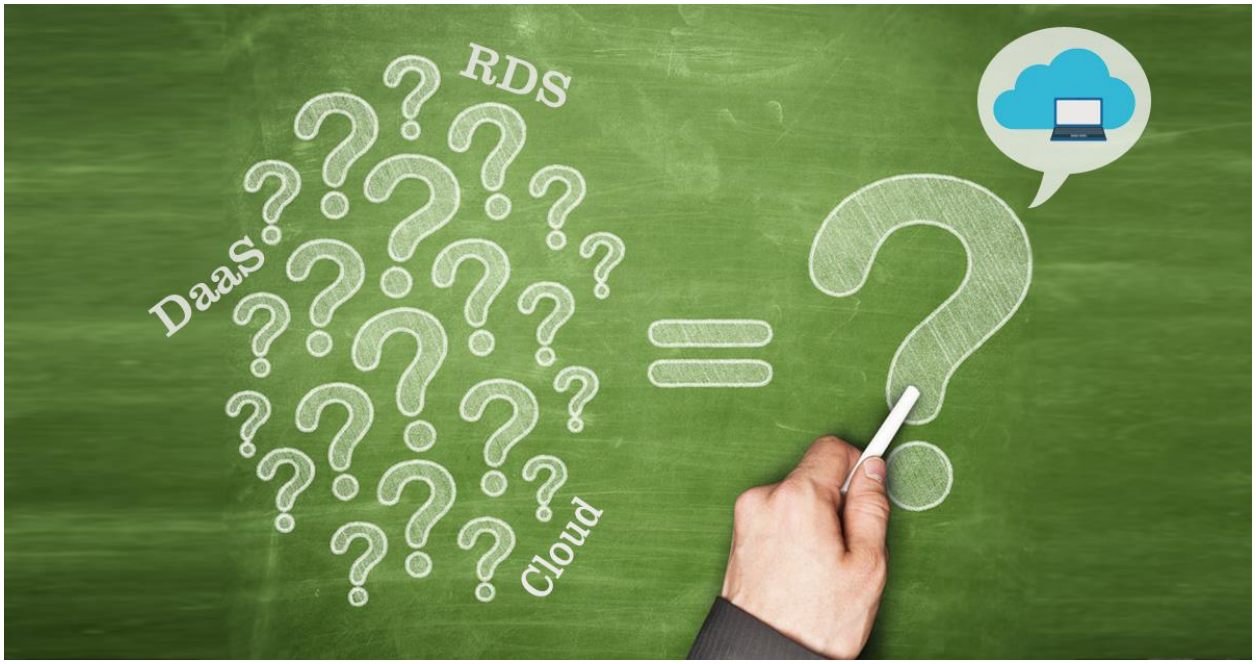
They have two options.

Customers who don't wish to upgrade to Windows 10, can purchase the Windows 7 security updates separately. It has a per-device price tag.

The best option for Windows 7 customers and the most cost-effective one is to move to the Windows Virtual Desktop (WVD) the desktop as a service (DaaS) from Microsoft. It will allow you to run Windows 7 on Azure Cloud along with security updates. Else, you can run individual apps with virtual Windows 7 and using Windows 10 for everything else.

You get 3 years of security updates; all applications can use the same OneDrive for files, you can copy-paste between virtual and local applications, use the clipboard together.
You can run the same Windows VM from anywhere while traveling using any smart device. Then slowly you can discard the old machines that are just kept for running Windows 7 or upgrade to Windows 10.
To conclude, the legacy applications not supported by a modern OS will have to be replaced ultimately. Windows 7 virtualization is not a permanent solution. What virtual Windows 7 will do for you is, to buy you some time to make your transition easy.

https://www.clouddesktoponline.com/blog/questions-to-ask-desktop-as-a-service-vendors



Questions To Ask Your Desktop-as-a-Service Vendors

In the past, for 30-35 years, we have known personal computers (PCs) or personal desktops as our work partners. Physical machines that we purchased and came with the familiar Windows interface and applications that were tied to the physical machine; one did not have a reason to exist without the other.

All that is becoming a history fast.

The Future of the Desktop is Virtual and, in the Cloud

Businesses (and often solopreneurs too) now want to be free from the IT-related hassle right from purchasing the machines, servers, installation, maintenance, timely upgradations (and hiring staff for the job as well).

With virtualization software from cloud desktop services vendors such as Microsoft, Citrix, and VMware, physical machines can be divided into virtual machines that behave like their physical counterparts in all respects.

We have hot selling products such as Cloud Desktops from various vendors including large ones like Microsoft and Citrix. Microsoft now offers an Azure version as the Microsoft Windows Virtual Desktop (WVD) and Citrix brings Citrix virtual desktop – the Citrix XenDesktop.
Virtual machines are better suited than physical machines to the changing needs of businesses. They are easier to manage and utilize and optimize. Lower capital and operating cost per virtual desktop is the result.
A Cloud Solution Provider takes a cluster of physical machines, builds many virtual machines with software; makes them accessible (with security) from the internet. Finally, combines them with provisioning, management and billing control panels.

The entire bundle is offered with services and support at a monthly price per desktop to users.

This service is known as a hosted Virtual Desktop or Desktop as a service (DaaS) which businesses from across the globe are now preferring.

Your DaaS Takeaways

What you do with DaaS is, opt for virtual desktops from a third-party service provider. Then access them from anywhere in the world from any smart device like smartphones, tablets.

The third-party service vendors or providers of desktop as a service supply these cloud desktop services to clients as per their needs.
It is your service provider who will take care of the IT support, hardware maintenance, patching, updating everything. You hand over the control of your desktop to a cloud service provider.

Precisely this is where you need to be careful and make an informed decision. Because all your data and application henceforth will be there hosted on their servers.

Here is a rundown of questions that you must ask your DaaS provider before finalizing a deal.

Questions to Ask Your DaaS Provider

- **Wallet Safety?**

1. Are you getting flexible pricing?
2. Do you get an array of plans to choose from as per your need?
3. Can the plans be customized as per your choice?
4. What discounts are you getting? (you should get a discount if you are opting for an annual plan)
5. Are you getting a free trial to experience for yourself?

- **Customer Support / Handholding?**

You will need them whether you are a newbie or a pro. Ensure that you get them wherever you are located in the world, round the clock 24/7*365.

Additionally, ask them…

1. What are their average response and resolution time?
2. Their availability on multiple platforms…call, chat, email?

- **Robust Security?**

Important enough to occupy first place in the checklist. You are trusting them with all your data and application. Check with them all the meticulously all the security aspects. Some questions to ask…

1. What are the security methods deployed by them like data encryption, multi-authentication, firewall, intrusion detection and prevention in real-time, data monitoring, etc.?
2. What is the access control process?

- **Expertise Level?**

Just being in the business does not prove the experience level and depth. Although DaaS is a niche and relatively nascent domain, the providers who are in the business from the very beginning will definitely have a better edge over new entrants.

1. Get to know their customers, study the reviews. Are the customers happy?
2. Do they have experts in cloud computing and virtualization?

- **SLA Clauses?**

Study in-depth the terms and conditions of the Service Level Agreement (SLA). Be aware. There could be clauses that you might not be willing to agree with.

- **Virtual Desktop (VD) Types?**

You need to ascertain the kind of virtual desktops you will need…*Non-persistent* and *Persistent*.
Persistent virtual desktop saves all your user settings before you logout. You get the same user settings once you restart.
The non-persistent virtual desktop is just the opposite. The user settings are not saved, and a random desktop is assigned each time a user logs in.

- **Uptime Value?**

This is the 'guaranteed' complete availability of the virtual desktops given by your service provider. Reliable companies offer at least 99.9% uptime, meaning the virtual desktops are available throughout the year, almost.

- **Performance Level?**

a. What kind of infrastructure do they deploy so that you get high-performance server services and SSD storage?

b. What would be the quality of graphics of the virtual desktops?

c. How are you ensuring low latency?

- **Backup Services?**

Do not compromise on this ever (even if you have your local backup system). Just check…

a. What kind of data backup they are offering and the duration?

b. Automated backup solutions available

Shifting to cloud desktop will free you up from the headaches of maintaining systems, related IT issues, blocked capital and operational costs that you can use elsewhere.

Choosing the right hosted desktop as a service provider, however, does need some prior homework so that you get the best of your money spent.