



CLOUD DESKTOPS- THE WAY TO DIGITAL WORKPLACES



Abstract

The only constant with Information Technology practices is the continuous change and innovative evolution. With the advancement of virtualization technologies, the industry witnesses a paradigm shift in the way the modern workplace is envisaged. This enables the enterprises to concentrate on their core business functions, leaving the intricacies of managing their workplace platform to digital workplace specialists.

“Cloud Virtual Desktops, the landmark innovation, in workplace virtualization offer the 3 Es crucial for business growth - Efficiency, Elasticity and Experience. Efficiency in cost, evergreen & elastic modern workplace environment and excellent user experience.”

– **Aneesh M.S, Senior Technology Architect** –
Digital Workplace Services, Infosys

Evergreen platform ensures the environment is up to date with latest OS features and security, making it robust to withstand evolving security challenges. The elasticity enables enterprises to scale up or down the environment rapidly by automated provisioning or de-provisioning of Virtual Desktops and onboarding or off-boarding users.

According to a recent study, **Gartner forecasts that the worldwide end-user spending on public cloud services is expected to grow 18.4% in 2021 to total \$304.9 billion, up from \$257.5 billion in 2020***. This growth in public cloud is expected to be sustained through 2024. This would aid to the adoption of Cloud Desktops.

The new normal demands enabling employees to work from anywhere and any device, and cloud desktops best suit this requirement. This method of workplace platform delivery ensures enterprise security compliance along with quality compute resources and scalable infrastructure. From end user perspective, the cloud delivered desktops are easy to adopt and offer them flexibility to work from anywhere and from a device of their choice.

Cloud Virtual Desktop is the modern go-to technology to provision workplace compute on cloud. This is an effective alternative to the traditional on premises hosted Virtual Desktop Infrastructure (VDI) or corporate owned devices, for a variety of use cases such as employee remote access, contractor onboarding, business continuity & disaster recovery, development environments, test beds and many more. This transformation is even

more relevant in current scenario, given the new normal requirement of enabling employee productivity from home due to the pandemic. Cloud VDIs ensure productivity while offering the flexibility to telecommute to work, which also reduces operations costs due to dependency on physical office locations.

“With enterprises moving to gig economy and hybrid workstyle, cloud desktop is now an integral & essential component of Digital workplace strategy. The pandemic has helped reveal beyond doubt the agility and value cloud desktops can deliver.” - Vivin George, Senior Principal Technology Architect – Digital Workplace Services, Infosys

There are certain scenarios which demand on-premises footprint, for which a hybrid cloud approach is recommended. This fits well for organizations with legacy applications, user data hosting compliance requirements such as financial institutions, brokerage houses, those who have a dependency to keep some of their workloads on- premises. This allows the enterprises to host part of their workloads on public cloud and part of their workloads on- premises. This also gives such enterprises benefits of public cloud while remaining compliant on data hosting and privacy regulations.

Cloud Virtual Desktop addresses three-dimensional enterprise requirements:

- End-user choice - Provides a secure, anywhere- any device access to their business applications and data
- Simplified IT management - Abstracts many of the complex workplace infrastructure management activities from the IT teams
- Agility for Businesses – Improved end user productivity, scalability on demand, security compliance and optimal cost of operations

Cloud desktops also offer the following additional features-

- User profile and data stored on cloud, thus securing user data from data loss due to hardware failures and making it accessible from anywhere
- Flexible and cost- effective pricing with reserved as well as pay as you go pricing models
- Reduced Capex

There are a few challenges as well with cloud virtual desktops. Performance tuning for different use cases with optimum costs is a challenging design consideration. Also, certain organizations find it difficult to host workloads and user data on cloud while complying with local data

privacy regulations. End users with limited connectivity find it difficult to connect to the cloud workloads.

The prominent cloud virtual desktop solutions available in market are Microsoft Azure Windows Virtual Desktop (WVD), Citrix Cloud Virtual Apps and Desktops (CVADS), VMWare Horizon Cloud and AWS Workspaces.

Microsoft offers Windows 10 multisession capability on Azure, which can be leveraged by WVD, CVADS and Horizon Cloud solutions. With this, enterprise IT benefits from optimal resources utilization with Windows 10 multisession while the end users get a native Windows 10 client experience. This also enables enterprises to host all compatible applications on Windows 10 clients thus reducing the server OS and RDS CAL license costs. The new Windows 10 multisession client also eliminates the limitation of hosting only sever compatible applications remotely.

The evolution of Cloud Virtual Desktop technology presents an opportunity for global system integrators like Infosys to offer bundled virtual-desktop-as-a-service (vDaaS) solutions. This offers secure and optimal compute performance at lower costs affordable to a vast majority of potential customers exploring lower cost workplace solutions. Following are the building blocks of such an offering-

A typical vDaaS offering provides virtual desktops with a wide range of T- Shirt sizes inclusive of the following-

- Compute at pay-as-you-go pricing
- License- leveraging Cloud Solution Provider license model
- Evergreen platform
- Managed Support- A 24x7 global managed support coverage to ensure continuous service with minimal disruption.

“Virtualization is helping organizations address many business needs around flexibility, security, compliance, and employee-specific requirements. Azure Windows Virtual Desktop (WVD) is a comprehensive desktop and app virtualization service running in the cloud and offers organizations an option to optimize their desktop virtualization experience and leverage the power of a modern cloud. Azure WVD enables a secure, remote desktop experience from anywhere and provides employees the best virtualized experience with the only solution fully optimized for Windows 10 and Office 365.”

- Pramod Vasanth, Principal Cloud Solution Architect, Microsoft

The solution will offer managed virtual desktops and remote application hosting services for enterprises, without the need of having their own cloud infrastructure. An integrated ITSM solution will ensure BAU support access to end users provided by Infosys shared managed support team. The solution also provides choice

for enterprises to bring their custom OS images or avail the standard image. A flexible pricing model based on requirements, will provide client value, enabling them to rapidly scale up or down their workplace capacity without worrying about IT infrastructure and CAPEX. For Infosys, such a vDaaS offering will be

another rapid growth avenue with the growing adoption of cloud services under the Cobalt brand. Tapping into this growth opportunity and tailoring custom vDaaS offerings for large, medium, and small-scale enterprises will help us increase and diversify our client footprint and pave the way for future businesses.



About the Authors



Ayush Trivedi

Ayush is a Technology Lead working in Infosys Digital Workplace Services. He has over 10 years of work experience in Banking, Financial, Pharmaceutical and Retail industry. His area of specialization includes workplace transformation, virtualization technologies including Azure WVD, VMWare and Citrix, Application Packaging, Application Development in Microsoft ASP .NET, and C#. Ayush takes interest in learning new cloud technologies and creating solutions which can be used in cloud implementations.



Indira Chittela

Indira is a Technology Lead working for Infosys Digital Workplace Services. She has about 10 years of experience in end user computing operations and transformation projects which encompassed implementations like modern desktop management, Windows Deployment Readiness, Application Readiness and Microsoft Azure WVD Implementation. She has extensive knowledge in Windows Virtual Desktop, Windows evergreen servicing, Windows client and server migrations and packaging end-to-end lifecycle.

Reference

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Infosys Cobalt is a set of services, solutions and platforms for enterprises to accelerate their cloud journey. It offers over 14,000 cloud assets, over 200 industry cloud solution blueprints and a thriving community of cloud business and technology practitioners to drive increased business value. With Infosys Cobalt, regulatory and security compliance, along with technical and financial governance comes baked into every solution delivered.

For more information, contact askus@infosys.com



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