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HPE GreenLake for VDI: The Optimal Choice for On-premises Cloud Services

Why HPE GreenLake for VDI is the best value for meeting today's foremost VDI challenges

Q4 2021

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Published: October 2021

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INTRODUCTION

Computing, for many years, has been fairly inflexible. Enterprise organizations had to pay thousands of dollars for workstations for employees. System administrators also spent time on hardware and software updates, as well as instituting measures to keep data protected. But in the last few years, this accepted system, based largely on the "way we've always done things" principle, has quickly changed, and quite significantly.

Virtual Desktop Infrastructure (VDI) is gaining wider acceptance as organizations must fully adapt to the digital workplace demands of the post-pandemic work from home (WFH) and hybrid cloud era. IT decision makers are using VDI to provide the workforce secure access to desktops, applications, and data from any employee device regardless of location. In addition, IT decision makers are using VDI to secure desktops and devices from their data centers to improve performance and price performance advantages especially for the highest priority workloads.

The market for desktop virtualization has grown steadily in the last five years. **According to a recent survey**, the market is expected to reach over $13 Billion by 2022 up from $7 Billion in 2017. With more organizations choosing to move to VDI, now is the right time to consider all of the options available in the market and find the right partner who can provide strategic guidance.

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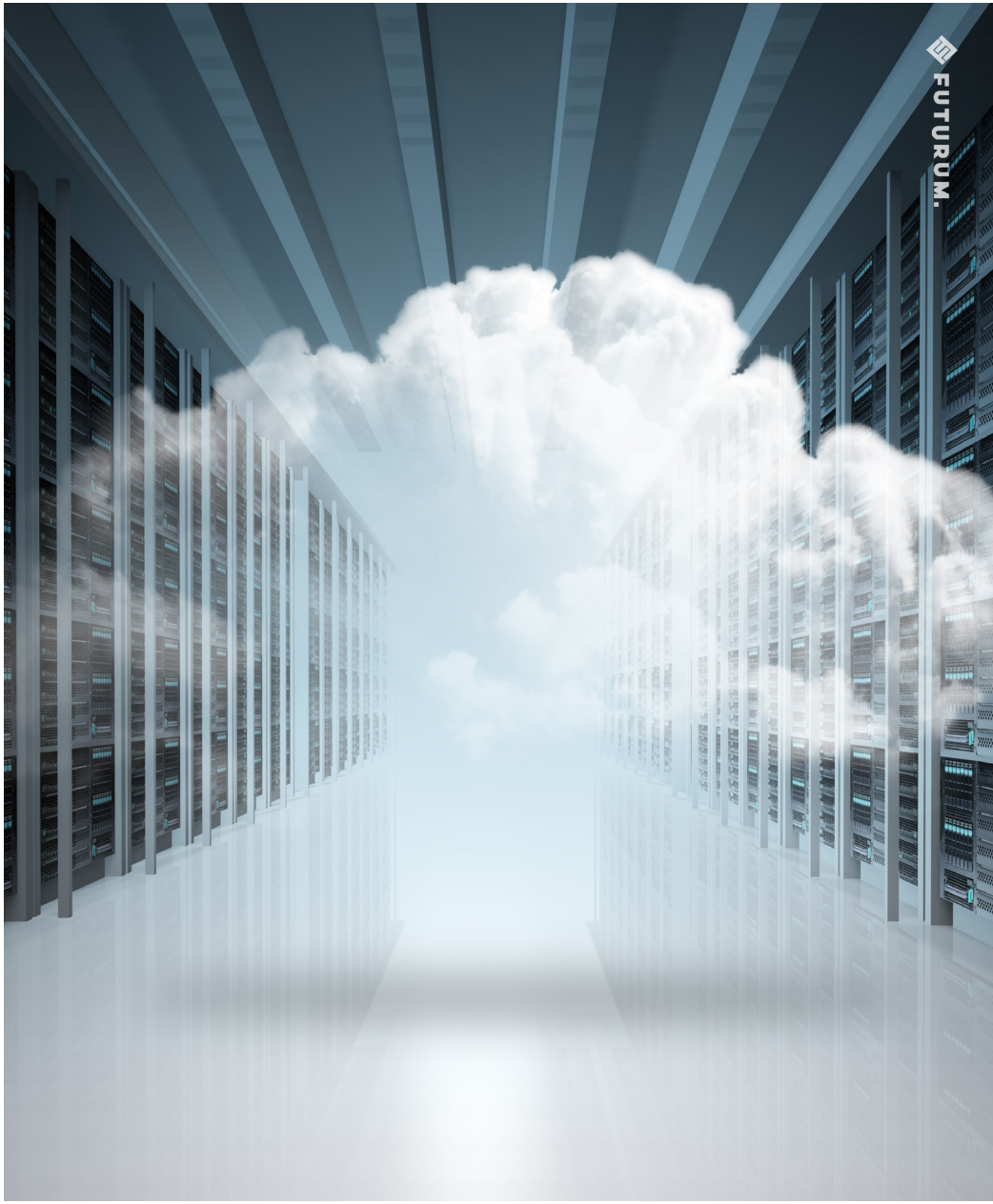

CURRENT VDI CHALLENGES

VDI solutions have been around for over a decade, however overall IT adoption proved slow and uneven for many years. IT decision makers believed workforce productivity would be compromised by allowing employees to work remotely and that trade-off was deemed unacceptable. We see the productivity concern as applying to End-User Computing (EUC) environments that use VDI as well as Desktop-as-a-Service (DaaS) solutions.

Cost Overhead. Initial technology and services costs can prove substantial as infrastructure management requires dedicated IT specialist oversight. In addition, scaling costs can prove unpredictable adding to overall cost uncertainty.

Prolonged Adoption Cycles. EUC pilots can require extended testing periods and scaling to production can take more time. Factor in time-consuming updates and the adoption of VDI can be slowed considerably.

Uncertain Security and Availability. End users are encumbered by frequent failures and limited to no disaster recovery.

Unsatisfactory User Experience. Over one-third of EUC projects are unable to fulfill user requirements with a significant portion of deployments resulting in performance issues.

In VDI's first decade, many organizations operated VDI from only a single data center, or in some instances two or three. This frequently resulted in diminished performance since VDI workloads are usually complex due to the interworking of audio, video, and graphics workloads that require massive bandwidth that people usually lacked with unreliable remote internet connections. As such, it is not at all surprising that previous attempts at VDI implementation led to VDI receiving a bad, but ultimately unwarranted, reputation.

Today, many organizations have adopted long-term WFH policies due to key considerations such as boosting workforce satisfaction, advancing environmental objectives by reducing or eliminating work commutes, and protecting employee health through reduced exposure risk to the COVID-19 virus. Moreover, many work settings are intrinsically remote or portable, such as medical offices, smart factory floors, manufacturing operations, salesforces, facility consultants, and first responders who require access from different locations on a regular or frequent basis.

As a result, IT decision makers have their work cut out for them. They must devise VDI strategies that assure desktop applications perform without disruption while also being administered, upgraded, and secured centrally. And that's driving some significant change. In fact, we anticipate that more organizations will choose to offload the complexities of VDI implementation and management to a trusted partner, consuming it 'as a service' to enable them to accelerate the adoption and deployment of their VDI platform.

PROVIDING UNIQUE SOLUTIONS THAT OPTIMIZE VDI OUTCOMES

HPE GreenLake for VDI is specifically developed to meet the unique VDI demands of today's digital workplaces. HPE's solution is altogether separate and distinct in that it is not deployed in the public cloud and not a DaaS offering. HPE's approach enables customers to select predefined virtual desktop types in any combination. Moreover, VDI can decrease desktop management and support costs by optimizing facilities utilization and generating 50% lower cost per virtual desktop.

What is new and different from prior generations of VDI is that HPE GreenLake for VDI is deployed directly into the customer data center or colocation facility, combining the software and hardware needed to keep desktops close to users and applications, assuring an optimized desktop experience. HPE GreenLake is the edge-to-cloud platform that supports an array of distributed cloud services offering HPE-managed, pay-per-use and elastic scaling flexibility. HPE's tailored approach delivers cloud flexibility on-premises, while enabling customers to maintain control of performance and security.

The HPE GreenLake for VDI service manages the platform on a full-time reliable basis while enabling IT teams to exercise full administrative control over the desktop application and virtual machines (VMs) environment. Even better, HPE GreenLake for VDI customers can select their preferred VDI solution, such as Citrix or VMware. For instance, customers can use Citrix Cloud Virtual Apps & Desktops as their VDI control plane with the option to interwork with the public cloud. In addition, HPE GreenLake for VDI still supports an all on-premises implementation using Citrix Virtual Apps and Desktop (CVAD) or VMware Horizon.

To fulfill diverse customer desktop requirements, HPE GreenLake for VDI supports the following:

Task workers. The HPE solution delivers the price performance needed to support low-volume, low-compute intensity applications with built-in security that assures isolation of the applications from the device itself.

Knowledge workers. These critical workers merit high-priority use of office productivity applications who gain the same VDI experience as task workers predicated on a more robust infrastructure to provide the best-suited user experience at optimal cost.

Power users. Key decision makers that drive more intensive use of office applications, graphics requirements, or development platforms have VDI that can be NVIDIA GPU-assisted and delivered on a persistent or non-persistent basis.

Engineering professionals. These employees have intensive graphics requirements including CAD-type applications supported by NVIDIA GPU-assisted compute.

Through HPE Pointnext Services, HPE GreenLake for VDI can build a comprehensive model that manages the design, implementation, operations, and administration of the entire VDI deployment, requiring customers to only pay for what they use at inception. This includes building the VDI that is right-sized for the organization to eliminate guesswork and cost overruns.

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PARTNERSHIPS STRENGTHEN CUSTOMER CHOICES

In addition, HPE partnerships such as HPE GreenLake with Nutanix for EUC augment demanding VDI implementations by offering deployments with streamlined management, advantageous scalability, and unparalleled return on investment (ROI). The built-in support for Citrix Virtual Apps and Desktops (CVAD) and VMware Horizon View ensures customers can fulfill the experience objectives of all their users, use pay-as-you-grow flexibility, avoid rearchitecting when starting small and scaling to thousands of users, and lower TCO (Total Cost of Ownership).

HPE's alliances with top-tier systems integrators Accenture and WiPro provide their own digital workforce services that use HPE GreenLake to enhance VDI capabilities. The NVIDIA relationship ensures GPU-assisted compute horsepower in meeting the most demanding desktop requirements of power users and engineering professionals.

USE CASES VALIDATE HPE GREENLAKE READINESS

The COVID-19 crisis permanently altered the IT landscape and Kern County Information Technology Services (ITS) was no exception. For Kern County ITS, the lockdowns necessitated by the pandemic, required immediate action without risking employee health as the county government provides a vast array of essential services to residences.

Through HPE GreenLake, Kern Country met its prime mission of providing vital services while protecting its workforce by fulfilling and scaling the swift demand for VDI access. Kern County successfully encouraged its departments to work remotely while also supporting community businesses with new remote work demands. The HPE GreenLake pay-as-you-grow model enabled Kern County to quickly meet these fast-moving changes, especially in supporting the digital service needs of socially isolated residents.

HPE managed Kern County's VDI requirements during the most challenging stretches of the COVID-19 crisis which enabled the county government to focus first and foremost on developing the digital experiences best aligned to resident needs. HPE GreenLake played an integral role to streamline their IT stack, attain cost-effective, flexible IT systems, and provide reliable digital services anywhere and anytime to residents.

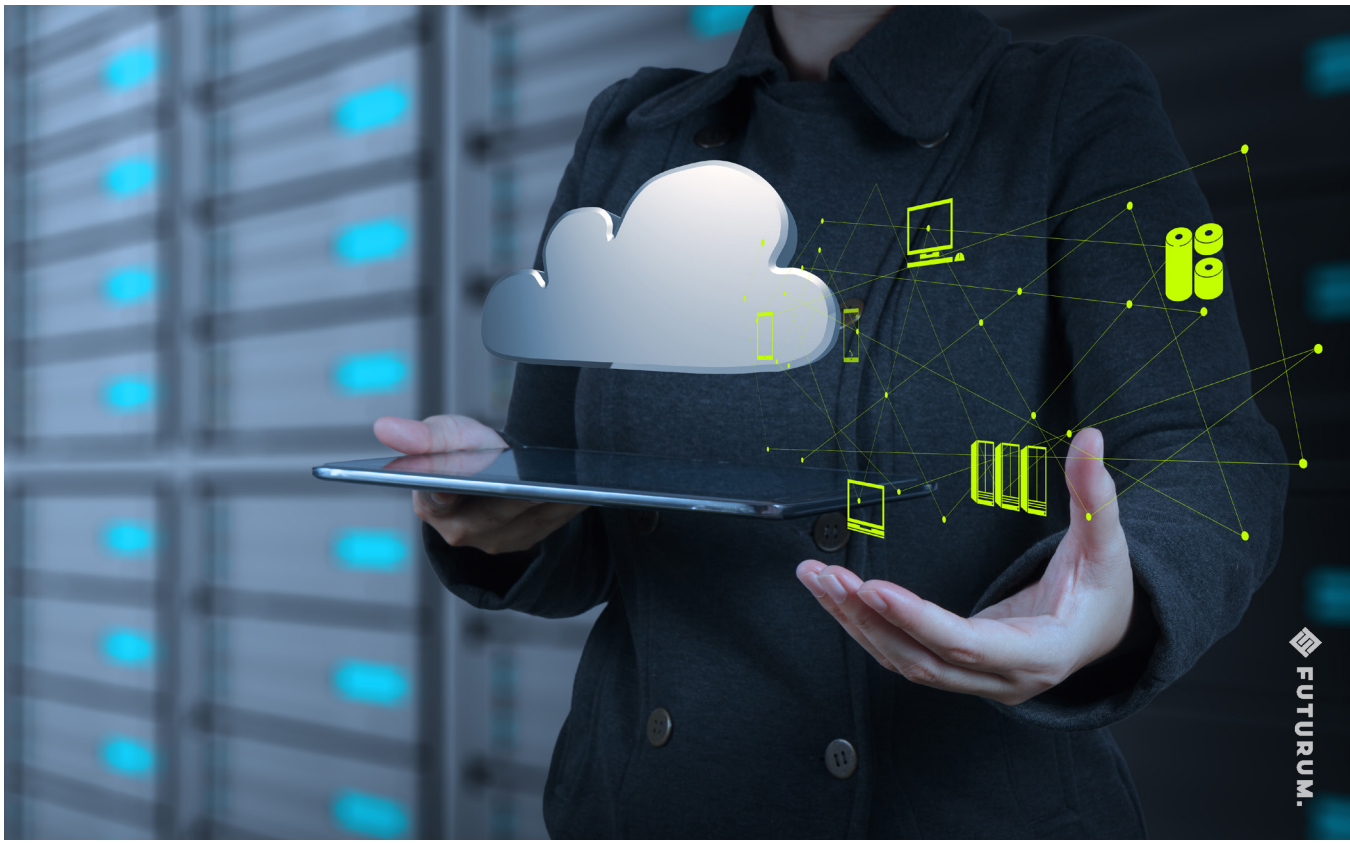
WHAT TO LOOK FOR IN A VDI SOLUTION

It is clear that hybrid work is not simply a pandemic-inspired trend, it's a reality of the workplace and it's here to stay. This means that VDI solutions aren't simply nice to have, they're an important part of IT operations. In the hybrid work world, VDI solutions help ensure the workforce has secure access to desktops, applications, and data from any employee device regardless of location. From an IT administrative standpoint, streamlined IT solutions, where admin and support are handled by a trusted vendor partner, enable personnel to focus on organization-wide business priorities and not infrastructure management. Pay-per-use options allow flexibility, including the ability to scale out rapidly when the situation requires, and also deliver significant benefits from an IT cost management standpoint.

From our perspective, the HPE GreenLake for VDI delivers streamlined IT benefits and is a compelling proposition for meeting the VDI requirements of organizations across their digital workplace and hybrid cloud environments. The HPE GreenLake for VDI proposition and HPE GreenLake with Nutanix for EUC deliver the full range of outcome-based IT consumption benefits that are unattainable from solutions built exclusively from scratch or consumed on the public cloud.

From an economic standpoint, HPE GreenLake provides a flexible, pay-per-use model that streamlines payment decision-making and financial clarity to VDI and EUC applications.

As you evaluate VDI solutions for your organization, we suggest consideration be given to HPE GreenLake for VDI. It will support any organization's workforce across both trusted and non-trusted environments, keep the data close to the application for reliable performance, and preserve data assets in the data center to safeguard intellectual property and employee privacy. In sum, to accomplish peace of mind IT decisions makers should strongly consider HPE GreenLake for VDI.



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ABOUT HPE
The HPE GreenLake edge-to-cloud platform provides customers with a powerful foundation to drive digital transformation. The HPE GreenLake platform can run on-premises, at the edge, or in a colocation facility, and combines the simplicity and agility of the cloud with the governance, compliance, and visibility that comes with hybrid IT. HPE GreenLake offers a range of cloud services that accelerate innovation, including cloud services for bare metal, compute, container management, core payment systems, data protection, electronic medical records, 5G, HCI, high performance compute, machine learning operations, networking, risk management, SAP HANA, storage, VDI, and VMs. For more information on HPE GreenLake, please visit: **https://www.hpe.com/us/en/greenlake.html**.

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