VMware Horizon 7, Horizon Air, and Horizon FLEX Advantages over Microsoft RDS and Azure RemoteApp

IDC

VMware a leader in the 2015 IDC MarketScape for Client Virtualization.

Mobile and cloud deployment issues are dominating the concerns of organizations today. End-user mobility and flexibility versus IT control and visibility are the opposing requirements challenging even the most nimble of environments. Organizations are searching for several key capabilities to address this dichotomy:

- Infrastructure that is optimized for end users to drive down costs, simplify acquisition, upgrade easily, and support policy management
- Flexibility in delivering workspaces to users—on-premises, cloud, and offline—all within a unified workspace
- Management capabilities encompassing the entire ecosystem and providing security, compliance, and management of day-to-day end-user environments

VMware addresses these needs more effectively than Microsoft RDS with the VMware mobile-cloud architecture tailored to the specific needs of end-user mobility and IT management.

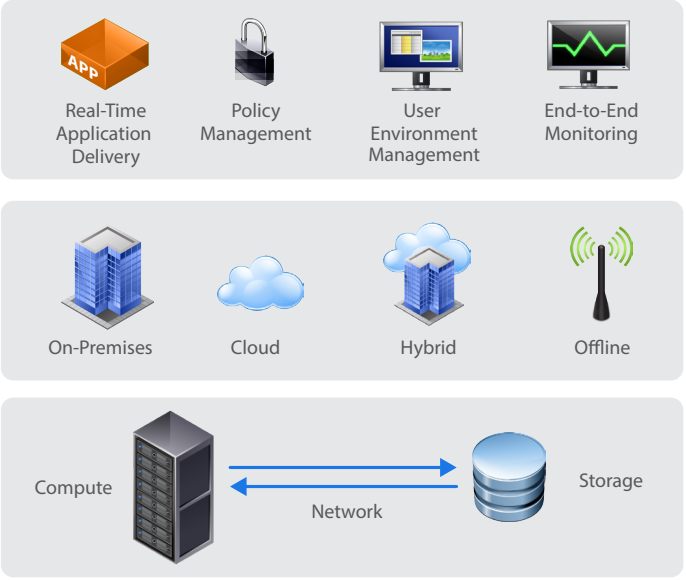


Figure 1: VMware Mobile-Cloud Architecture

One Trusted Platform for the Entire Organization

If given the choice, most IT administrators would prefer to use one platform throughout their environment and not spend time installing and managing separate management infrastructures. With VMware, they can do that. The VMware software-defined data center (SDDC) is the only platform optimized for VMware Horizon® 7 and other end-user computing (EUC) products.

A single platform provides the following unique advantages:

- Reduced CapEx and streamlined management
- Trusted brand with leading statistics for reliability, performance, robustness, and security
- Reduced support costs and increased uptime

2015 READERS CHOICE AWARDS ★★★★ WINNER ★★★★ VIRTUALIZATION REVIEW

Horizon voted best desktop virtualization five years in a row.

"By virtualizing our server and desktop estate with VMware, we've cut costs, dramatically simplified our IT infrastructure, and transformed how we support over 1,000 desktops in our service center in Dublin."

– Paul Bermingham, Staff Vice President, Information Technology Services, Hertz International

The industry's leading virtualization platform brings together three critical technologies under one umbrella: storage, computing, and networking. This powerful trio provides tailored integration with EUC, resulting in real benefits for customers, including reduced storage costs of up to 50 percent, simplified network provisioning and micro-segmentation, and extensive 3D graphics support that includes vGPU with NVIDIA, vSGA, and vDGA.

Microsoft does not support the VMware SDDC (VMware vSphere®, VMware Virtual SAN™, and VMware NSX™) and therefore will lack key innovations in the platform. VMware EUC was built with integration points to VMware SDDC that provide cost savings in storage, computing, and the networking infrastructure. Microsoft Hyper-V lacks large-scale success stories for data center as well as virtual desktop infrastructure (VDI) deployments. The Microsoft cloud strategy is embedded in Azure, constraining it in many dimensions for most customers.

Only VMware provides an enterprise-grade virtualization management platform that spans across end-user needs by managing applications, images, and desktops. The solution provides industry-leading policy management, security, and compliance in addition to time-saving management capabilities such as monitoring and automating offline and connected use cases. Whether the need is to manage workspaces, control access, deliver applications, or meet security and compliance requirements, the extensive management capabilities offered by the VMware platform provide more control and visibility than other, more-restricted products.

VMware leads in innovation with Instant-Clone Technology. This revolutionary capability, built into vSphere, allows a booted-up parent virtual machine (VM) to be quiesced and "hot-cloned" to produce derivative VMs rapidly. Instant Clone leverages the same disk and memory of the parent, with the clone starting in an already "booted-up" state. This process bypasses the cycle time incurred with traditional cloning where several power cycle and reconfiguration calls are usually made. Microsoft does not offer the time-saving capabilities available from Instant Clone.

VMware offers reduced complexity and cost on a unified platform for VDI on Windows and Linux desktops. Microsoft does not support Linux desktops.

Flexible Delivery for the Best End-User Experience

End users simply don't want to be tied to a physical computer during their entire workday. They need multiple means of access and types of workspaces for maximum productivity and satisfaction. To address this demand, VMware Horizon 7 delivers the broadest set of workspaces in the industry, including applications, hosted applications, persistent desktops, nonpersistent desktops, just-in-time desktops, and hosted desktops. Horizon 7 also provides the most innovative hybrid delivery system with VMware Horizon Air™. Horizon 7 and Horizon Air together allow organizations to deploy and manage their VDI infrastructure on-premises, in the cloud, or a hybrid of both.

Customers gain additional choice and flexibility from the VMware approach to display protocols. Adding to the existing PCoIP and RDP protocols, the new VMware Blast Extreme display technology is built on the industry-standard H.264 protocol and supports the broadest range of client devices that are already H.264 capable. Customers can choose a display protocol based on their use cases and client device choices. No other vendor provides this much agility in adapting to challenging network, environmental, and demanding use-case conditions.

Frost & Sullivan awards VMware with the Visionary Innovation Leadership Award in End-User Computing.

"VMware won us over with their depth of knowledge about end-user computing. They were able to articulate a clear vision for enterprise space desktop virtualization."

– Kevin Moll,
Desktop Operations Manager,
Foley

For offline users who are not always connected to the network, VMware Horizon FLEX™ provides the endpoint security and central management needed to effectively support offline users who can not get to the network every time they need to work. Microsoft does not offer a solution for offline work.

VMware is the only vendor to offer flexible on- and off-premises deployment of VDI or RDS-hosted desktops and apps, enabling users to mix and match public cloud desktops and on-premises Horizon 7 virtual desktops. Microsoft offers on-premises VDI deployments, but Azure RemoteApp does not include a VDI option.

Microsoft provides support for physical Windows desktops, including image management. However, the legacy System Center Configuration Manager (SCCM) image management solution is complex and difficult to set up. VMware Horizon 7 provides a more unified solution, with VMware Mirage™ enabling end-to-end image management, including the ability to dynamically move images across physical and virtual desktops and patch, update, and manage them from a single console.

Workspace Environment Management

Only VMware provides end-to-end application and workspace management that encompasses the following capabilities:

- **Diverse application support** enabling customers to leverage business vertical applications, key enterprise applications, and SaaS solutions
- **App isolation** from the operating system with containerized applications
- **Real-time app delivery** to virtual or physical desktops
- **Policy management and smart policies** to deliver a real-time, policy-based system with intelligent, contextual, role-based management
- **Monitoring** of in-guest metrics for EUC performance
- **User environment management** for a consistent, personalized, and dynamic desktop experience across all devices
- **Image management** with built-in disaster recovery

Diverse Application Support

Horizon 7 supports all types and brands of applications—not just Microsoft Office. Many business vertical solutions for healthcare, education, government, and more are supported by Horizon but not supported by a Microsoft solution. Further, VMware has relationships with key enterprise application and SaaS vendors, allowing VMware to support critical third-party productivity applications that Microsoft cannot support.

"The combination of App Volumes and VMware Horizon allows customers to build a real-time application delivery system that enables all applications to be centrally managed, delivered, updated, and maintained to virtualized environments for desktop, server, or cloud on demand."

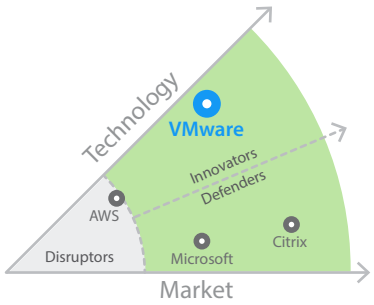
– IDC MarketScape:
Worldwide Virtual Client Computing Software 2015 Vendor Assessment

App Isolation

VMware ThinApp® provides packaged apps that customers can run from almost anywhere because they do not need to install software or device drivers. ThinApp takes an agentless, package-centric approach to app virtualization, increasing portability and deployment flexibility. Microsoft App-V is an agent-based solution that needs a dedicated infrastructure and database. ThinApp can be used without these, reducing administrative overhead.

App Delivery

VMware App Volumes™ eases the burden of getting the right apps to the right people throughout an application's lifecycle. From creation to delivery, through updates and into retirement, App Volumes provides the only real-time application management and delivery solution. Microsoft SCCM delivers applications, but they must be installed on the end user's device, using more resources, and SCCM does not provide real-time application delivery.



"VMware stands out as the enterprise end-user computing leader."

– Taneja Group Technology Analysts, July 2015

Policy Management and Smart Policies
VMware Workspace™ ONE™ enables users to use one login to access licensed apps across different deployment methods. Microsoft has a weak self-service solution, requiring Windows Azure Pack to implement the portal and SCCM to build the enterprise app store, which can be costly for customers not under a Microsoft Enterprise Agreement. The Microsoft enterprise app store does not support single-sign-on capabilities. In addition, the apps cannot be visually represented in the app store. Rather, they are shown in the type of list you would traditionally find in a System Center interface. Further, VMware Access Point provides a more complete security solution that supports RADIUS, SecurID, and SmartCard and is built upon a hardened Linux appliance that is optimized for a customer's DMZ. And, for federal and public sector agencies, Horizon is FIPS 140-2 compliant.

App Monitoring
VMware monitoring and automation capabilities provide end-to-end visibility from the data center to the end user. VMware vRealize® Operations Manager™ for Horizon employs a heatmap to enable administrators to visually monitor the health, performance, and configuration of large-scale deployments, including visibility into infrastructure, apps, users, and sessions. vRealize Operations Manager provides individualized monitoring for business-critical apps and correlates the monitoring with underlying storage. The solution also connects performance data with change events. Unlike vRealize Operations Manager, Microsoft RDS 2012 Management Pack for System Center cannot provide log management, scenario modeling, or proactive analysis, nor the end-to-end visibility from data center to remote desktop or app.

User Environment Management
VMware User Environment Manager™ allows desktop and application virtualization users to maintain consistent personalized settings, such as desktop wallpaper and browser bookmarks, from session to session and from one device to another. User Environment Manager provides a consistent and dynamic desktop experience that is independent of the operating system, device, and location, enabling true "business mobility." User Environment Manager supports a broader range of use cases than Microsoft UE-V and delivers a consistent experience across multiple platforms during OS migrations and between on-premises and cloud-based environments. Microsoft UE-V has a rudimentary user interface, and it does not have the ability to dynamically apply user settings based on context.

Image Management
Mirage dynamically moves images across physical and virtual desktops, and VMware Virtual SAN provides virtual disk–level quality of service and per-virtual-machine storage services, such as snapshots and backups. Image management in a Microsoft environment can be relatively complex at scale.

Additional Advantages

Consider these additional advantages of choosing Horizon 7 over Microsoft RDS:

Superior Network Management
VMware NSX provides VDI and mobile users with fast, easy, and extensible networking and security. Customers enjoy more efficient firewalls with fewer hops and more precise virtual machine networking. Micro-segmentation provides more granular control, and network virtualization allows for elasticity and agility to spin new pools up or down or expand existing ones.

AirWatch is recognized as a LEADER in the Gartner Magic Quadrant for Enterprise Mobility Management.

VMware and F5, the leader in the application delivery controller market, together provide best-of-breed VDI and network management and security. F5 is the leader in the Application Delivery Controller market and the integration of Horizon 7 and F5 BIG-IP Access Policy Manager (APM) brings a new level of security capabilities to a virtual desktop deployment.

Enterprise Mobility Management

AirWatch® by VMware provides the market-leading enterprise mobility management (EMM) solution. AirWatch EMM has the largest installed base, highest product quality, most scalable architecture, immediate support of new operating systems, and a fully integrated, unified single-pane-of-glass management system. Microsoft Intune is relatively unproven and lacking several important capabilities for large-scale enterprise deployments.

Horizon 7 Is the Best Choice

VMware Horizon 7 is the most complete solution for delivering, managing, and protecting Windows desktops, applications, and online services across devices, locations, media, and connections.

vmware®

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