Published App Environments: Why We Need a Fresh Approach

At a glance

Reduce the management time and infrastructure costs of published apps deployments.

Traditional approaches to published VDI app deployments create management complexity and overhead for the IT teams that rely on them. Tasks such as updates, patches, and management of apps, operating systems (OS) and images can easily become overwhelming.

These solutions also rely on machine-level user entitlements that limit app rollout flexibility and compromise user experience. What's more, they require that infrastructure has the capacity to support peak workloads at all times, no matter the level of usage. As the demand for both legacy and cloud native apps grows exponentially, so do the costs associated with providing for peak performance. And modernizing legacy apps while adopting new ones only creates more challenges resulting from app incompatibility, dependencies and distributions.

Now is the time for a fresh approach to published app deployments that reduces management time and infrastructure costs, which the new Apps on Demand feature from VMware App Volumes™ delivers.

Modernize traditional published app deployments with Apps on Demand powered by App Volumes

The Apps on Demand feature from VMware App Volumes is a new approach to published app deployments that addresses four key challenges of maintaining published app environments.

App Publishing Challenges	Apps on Demand Solutions
• Overwhelming app and OS management • Complex user entitlement management • Underutilized infrastructure • Multiple approaches for packaging legacy and modern apps	• Simplified app and OS management • User-based entitlement management • Optimized farm infrastructure utilization • One solution that captures 99 percent of all apps

Challenge 1: Overwhelming app and OS management

The traditional deployment model for app publishing is based on dedicated "farms" or "silos." These are logical collections of physical hosts that provide dedicated capacity to an app or group of apps. Each host in the farm has the underlying OS with the needed apps installed on it. Because apps are tied to specific farms, traditional app management in published app environments is extremely complex.

Given that app updates can only be rolled out with OS updates, app administrators and IT must coordinate their efforts, which inevitably limits update opportunities. Additionally, updating to a new version of an app suite, such as Microsoft Office, means that all host images of a specific farm must be updated. As a result, users must be moved to a temporary farm during the update process and are unable to use the apps until the update is completed. And should an update fail, or the app does not perform as expected, or the app admin loads the wrong version, reverting to the last known good state is extremely difficult because legacy published apps do not support rollback.

Simplify app and OS management with Apps on Demand

Apps on Demand features an abstraction layer that separates the app from the host OS (as shown in Figure 1). Because the app runs in its own virtual container, it can be updated independently of the OS image. This helps IT admins and app teams operate more efficiently. Using Apps on Demand, IT can also capture an app once, then deliver it to multiple RDSH hosts and VDI desktops at the same time, which saves time and prevents manual errors during deployment.

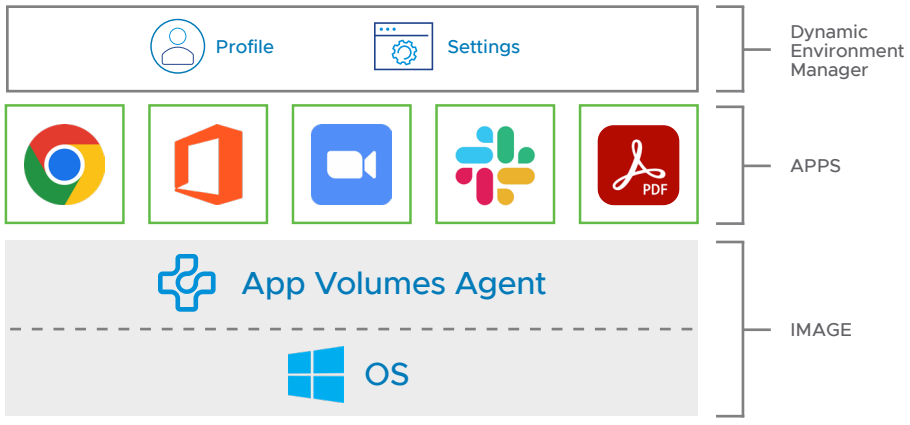

Figure 1: Support all end users with a single copy of an app, update apps without the need to reboot hosts, and move apps seamlessly across OS versions.

Challenge 2: Complex user entitlement management

Entitlement management requires balancing the needs of users with management of images and apps. Before users can access remote desktops or apps, they must be entitled to use a desktop or app pool on the hosts in the farms where their specific apps reside. When there are multiple app combinations that require specific apps to be deployed in multiple farms, users need entitlement to the farms with the specific combination of apps needed.

With traditional approaches, app publishing is often provisioned to users on a machine-based model. This method requires entitlement for users on each host. If there are any changes, the admin needs to re-rationalize the entitlements. As the server farms grow, machine-level entitlements and complex app management limit app flexibility. And if an admin misses a user when moving hosts or adding an app, or a new machine, that user would lose access because entitlements don't travel with them.

Implement user-based entitlement management with Apps on Demand

Apps on Demand solves these challenges through user-based entitlements, which save admin time and ensure that users can access the apps they are entitled to when logged in. Thus, IT can

- Eliminate the need to manage entitlements on each host.
- Improve employee experience.
- Support all entitled users with a single copy of an app.

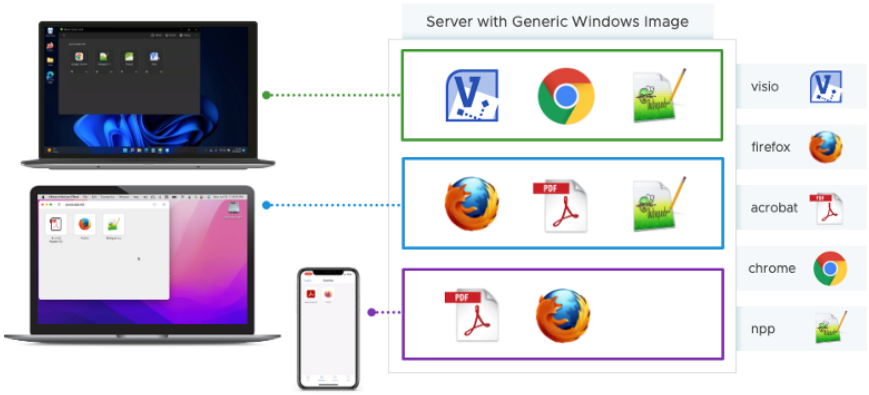

Figure 2: User-based entitlement eliminates managing entitlements on each host.

Challenge 3: Underutilized infrastructure

The traditional farm-based approach to published app environments requires sufficient capacity to support peak workloads, or all entitled users using an app at the same time.

This creates the need to purchase and dedicate servers for peak usage for every app, and to ensure adequate IT personnel to manage even more image and entitlement management burdens. It defeats the very purpose of virtualization, which is to optimize infrastructure for *expected* usage. And many farms are overbuilt and operate far below capacity leading to wasted budget.

Optimize farm infrastructure utilization with Apps on Demand

Apps on Demand helps to reduce published app infrastructure costs by consolidating legacy app farms and servers while implementing an on-demand model. New app servers are deployed only when a user needs the app. Instead of spinning up new servers for every new app, admins can fully leverage the existing capacity before adding more. This frees up capital expenditure budget for additional IT needs.

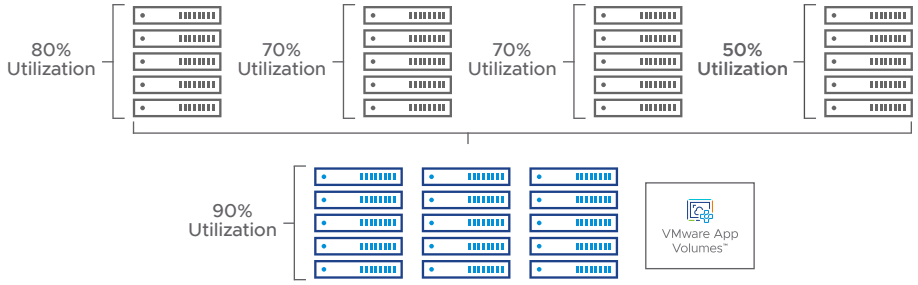

Figure 3: Optimize utilization by collapsing multiple farms into one farm powered by App Volumes.

Challenge 4: Multiple approaches for packaging legacy and modern apps

Oftentimes, legacy data center apps can't be updated, such as when the developer who created them has left the organization, and nobody has the knowledge required to re-code them for cloud compatibility.

These apps must be delivered from on-premises data centers via app publishing, which leads to latency challenges for distributed users. But traditional app publishing approaches don't support modern apps, which increases complexity and cost. Moreover, high availability/disaster recovery may not be possible for legacy apps, which negatively impacts business continuity efforts.

Capture the complete app portfolio with Apps on Demand

With Apps on Demand, admins can manage modern and legacy apps with 99 percent app compatibility. Thus, it's not necessary to develop different packages for different users or subsets of users, which delivers significant capacity and time savings.

App Volumes also supports MSIX app attach natively for modern Microsoft apps. In addition, VMware ThinApp® comes with App Volumes and can run isolated apps on many legacy operating systems including Windows XP, Windows Vista and Windows 7. With this feature IT can:

- Simplify app packaging for all types of apps.
- Run isolated apps on legacy XP, Vista and Windows 7 OS.
- Manage modern and legacy apps with 99 percent app compatibility.

Learn more about VMware App Volumes and Apps on Demand

- Visit the App Volumes product page on the VMware website.
- Take Apps on Demand for a test-drive.
- Contact your VMware representative.

Item No: FY24-7283-VMW-APPS-ON-DEMAND-FRESH-APPROACH-SB-USLET-WEB-20230421 4/23