#1 Start by sorting your applications into tiers

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#3 Figure what delivery technology will work best for you and your applications

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Top 5 Tips When Considering Your Application Delivery Strategy for VDI

Management of applications can be one of the biggest challenges of a desktop administrator's existence—conflicting requirements, hardware incompatibilities and so on. Yet, application delivery and management often gets overlooked when planning and deploying a virtualized desktop infrastructure (VDI.)

Typically, organizations deploying VDI concentrate on ensuring that desktop images are optimized, the correct corporate security settings are applied to the operating system, the underlying architecture is built to scale appropriately, and the guaranteed end-user performance is acceptable. These are all important goals that require attention, but the application delivery strategy is frequently missed, or forgotten.

Application delivery tends to be viewed as the basic mechanism of getting applications installed on the desktop. But with the emergence of new technologies, the definition has evolved and application delivery considerations have expanded, including the following approaches:

• Installing applications directly on the virtual desktop, either manually or by using software such as Microsoft SCCM

• Application virtualization using VMware ThinApp or Microsoft App-V

• Delivering applications to the desktop using technologies such as VMware App Volumes or Liquidware Labs FlexApp

• Application presentation using RDS Hosted Applications in VMware Horizon 6

End users need applications delivered in a fast and efficient manner; failing to think strategically about app delivery can cause the VDI project to quickly become a bottleneck. Given that, here are five things to keep in mind as you develop your strategy for application delivery.

#1. Start by sorting your applications into tiers

As a first step, divide your apps into tiers according to/based on application criticality, or how important is the application to your business; Tier 1 being the most critical or most important, and so on. Then figure out which tier, or tiers, of apps need to be provided to all end-users and which will be required by only a small subset of users. This will help you determine which applications to install in the base image. Microsoft Office, for example, will likely be needed by all users, and so belongs naturally in the base image. But an accounting package may only be required by the accounting team and can be delivered another, cheaper way.

#2. Figure out if you'll need full virtual machines or linked clone desktops

Next, ask whether the virtual desktops that you're creating will all be full virtual machine desktops, or if all will be linked clone desktops? You may even find that you need to have a mix of both. Full virtual machine desktops can provide the user with the exact same experience as a physical desktop, giving them the potential ability to fully customize their experience, install their own applications, etc. Linked clone desktops are better for central image management, storage requirement reduction, and rapid desktop provisioning.

Which you choose, though, will impact your delivery strategy. If you've decided to use all full virtual machine desktops, you can very likely use an application delivery strategy already developed for physical PCs. But doing that with linked clones can quickly lead to bottlenecks – so if you are taking this route, you'll very likely need to develop an entirely new delivery approachWhen using Enhanced Linked Mode, VMware always recommends that an External Platform Services controller is used. This ensures that backups can be easily performed and, more importantly, restored in a consistent state, and that future upgrades can be more easily performed as well.

#3. Figure what delivery technology will work best for you and your applications

At this point it's also essential to evaluate the pros and cons of your application delivery options, both to ensure that the needs of your end-users are met and that you do it efficiently. Application virtualization using a tool like VMware ThinApp might be a good mechanism. Alternatively, using RDS Hosted Applications in Horizon 6 might be a more viable choice. VMware App Volumes may satisfy your application delivery needs. Or your best option might be a combination of technologies. One question to ask here is, "Are my end-users able to install their own applications?" If they are, you must either select a technology that supports user-installed applications, or change, not only corporate policy but also corporate culture, so that end users can no longer install, and no longer NEED to install, their own applications.

#4. Decide what level of high availability is required

There will always be the one user, or a small group of users, who require a specialized application that will be difficult, impossible, or prohibitively expensive to deliver via your standard application delivery mechanisms. Determine in advance how you will address these rare but also predictable situations and you'll both satisfy that specific constituency and save yourself time and energy when their unusual requirements need to be addressed. In our experience, these kinds of apps can often be delivered by using Horizon 6 RDS Hosted Applications. However, every application is different and should be evaluated accordingly. There will be scenarios where another delivery method is better suited.

#5. Before starting, do a desktop and application assessment

As a final point, don't forget to do a desktop and application assessment before beginning any VDI design effort. There are a number of tools available for this such as Lakeside SysTrack and Liquidware Labs Stratusphere Fit. An assessment not only provides a wealth of performance metrics on which you can base your VDI design, but it also contains a complete inventory of the applications being used in your environment, who is using them, and how often they are being used. The information garnered from an assessment often corrects and realigns the "perceived" understanding of applications deployed in your environment, and lessens the risk of a critical application being missed. It would be safe to say that the assessment can provide the basis for almost all of the decisions discussed above.

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