

E-Guide

The State of Desktop Virtualization in 2013:

Brian Madden analyzes uses cases, preferred vendors and effective tools

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Why have virtual desktops been positioned as a cure-all for many of today's endpoint issues, particularly BYOD issues? We reached out to our users for answers – and to investigate the true impact of current end user computing trends on the way we deliver desktops and on the age-old dominance of Windows in the enterprise – by surveying a select group of SearchVirtualDesktop.com members who have already bought, or who plan to buy, desktop virtualization in the next 12 months. Hear from independent industry expert, Brian Madden, as he analyzes the results below.

What type of desktop virtualization is in use today? What about 12 months from now?

By: Brian Madden

October 2013 – We targeted our survey towards users at organizations who are already using some form of desktop virtualization today or who plan to within the next 12 months. In our case 88% of the respondents are currently using some form of desktop virtualization (which we define as VDI, RDSH, client-based VMs, or app virtualization), with 100% of respondents planning to purchase more or expand their desktop virtualization in the next 12 months. (This doesn't mean that every company in North America is planning to expand their desktop virtualization, rather, this is how we defined our survey audience. We only looked for people planning on buying desktop virtualization in the next 12 months.) This paper digs into what they're doing and thinking about.

In looking at the 88% of our respondents who are using desktop virtualization today, we found that VDI (64%) was actually more prevalent than RDSH / Terminal Services (52%). This is interesting to us because we always assumed that RDSH was "everywhere" and VDI was very limited. To be fair, this specific data point doesn't tell us how much VDI or RDSH is in use at a

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company. An organization with 10,000 users with a single VDI server for 20 users would technically qualify as a “yes” when asked if they used VDI. When it comes to the hypervisor for VDI, as expected VMware vSphere is the most popular, powering 66% of all VDI environments. What’s somewhat surprising though is that Citrix XenServer is in second place with 28% versus Hyper-V’s 21%, showing that when it comes to desktops, many customers still are fine with the bundled product that comes with Citrix XenDesktop. (These percentages do not add up to 100 because we allowed respondents to select multiple options if they were using multiple hypervisors.)

We also wanted to understand how big these different types of desktop virtualization environments are. When it comes to VDI, we’re seeing significant growth in the size of the deployments, with 30% of those who reported having some VDI telling us that their VDI environments are in excess of 500 users. (Again, we don’t know what overall percentage of their users are using VDI, we just know that there are a lot of 500+ seat environments out there!) That said, we also still have 33% VDI users with small environments (under 100 seats) and the remaining third in the 100-500 range. So we’re seeing a solid spread across the board, which is interesting as we would have thought it would have skewed more heavily on the smaller side.

We already mentioned that 100% of our respondents would be expanding or adding to their desktop virtualization environments—but since “desktop virtualization” is an umbrella term that covers many different technologies, what will our respondents be buying specifically? For 80% of them, they’re planning to expand their VDI environments—a huge number which shows the growth potential of VDI in the next 12 months.

Second is app virtualization, with 44% of respondents planning on increasing that, followed by RDSH and client VMs, each with 26%. So again, the growth of desktop virtualization will be in VDI.

Reasons for expanding desktop virtualization

We asked our survey takers why they were looking to expand their desktop virtualization environments, and we found two answers which were overwhelmingly selected: 80% are looking to simplify management, and 70%

want to enable end users to work from anywhere. This is not surprising to us and is consistent with the top advantages of desktop virtualization that we talk about.

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What is interesting is that the next most common reason for expansion (51%) is from people who are expanding their desktop virtualization environments in order to enable users to work with tablets and phones. That's surprising to us because the end user experience of a Windows desktop delivered to a phone or tablet via desktop virtualization is not that great. In other words, this is something that we also believe most organizations want, but it doesn't solve the actual needs of the business. We worry that this could lead to disappointment among buyers (though it's also an opportunity for those vendors with products that specifically address VDI from tablets and phones). Finally, our survey showed that 46% of respondents want to adopt desktop virtualization to save money, and 49% want to do it to increase security. We are not convinced that either of those is a valid business driver for VDI, so we hope that those who are looking to save money or increase security know what they're getting into.

Finally, 45% of respondents are looking to desktop virtualization to help them with BYOD. It's hard to know exactly how each respondent interprets the term "BYOD" since it means different things to different people. In general we like desktop virtualization for "BYO" when it comes to users bringing in their own laptops. But when it comes to tablets and phones, VDI is not typically the best fit. (As mentioned above.)

How do customers pick their desktop virtualization vendors?

We asked our respondents some questions about how they decide which desktop virtualization product to buy. For example, we allowed them to specify up to three features that were important to them when picking a new desktop virtualization product: 47% claimed that having one solution for all users was important, while 43% told us that the product needs to work well over the LAN.

Below those top 2 features, we next had a three-way tie for "app virtualization," "profile management or user virtualization," and "iPad / iPhone

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/ Android / mobile client support.” We interpret this to mean these are important features that customers add on to desktop virtualization products, since there isn't too much differentiation amongst the top three desktop virtualization vendors in any of these areas.

Moving on, one of the most interesting questions we asked was whether people were considering switching hypervisors, and an overwhelming 82% said “no.” Of those who said they would consider switching hypervisors, it was almost evenly split between those thinking about moving to vSphere and those considering Hyper-V. The number one reason for considering a switch is cost (60%), which we assume accounts for the people moving away from VMware.

Concerns about Desktop Virtualization

We wanted to understand what concerns and fears our survey takers had about future desktop virtualization purchases, so we asked a few specific questions.

When it comes to the network, not surprisingly 43% of our respondents are nervous about VDI performance over the WAN, followed closely by those nervous about printing, file transfers, and USB devices over the network (38%). One positive is that only 10% of respondents are nervous about a user-owned device taking down the network or negatively impacting other users. That's good news, because today's networking gear can handle the QoS, shaping, and VLANs that companies need to protect users from one-another, so we're glad to hear that folks aren't too worried about that. When it comes to concerns around storage, the biggest surprise to us was that the largest group of users (32%) had no concerns with storage for desktop virtualization. Amazing! Hopefully it's because they've had a few years to play with VDI and they've looked at today's lower-cost, high-performance storage systems. (We're hoping that's the case rather than the respondents being ignorant about the storage challenges with desktop virtualization.)

Of course having 32% of our respondents with no concerns about storage means that 68% do have concerns. Of those who do, the biggest group

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(46%) is nervous about storage performance, with 40% nervous about capacity. No surprises there. We did find a small portion of respondents (9%) were nervous about having to go with a small or unknown vendor for their storage for VDI. The fact that that number is so low is surprising (in a good way), because we were worried that all these new storage vendors were relatively small and unknown and holding the industry back, but it seems like this is not the case.

Current pain points

Finally, we asked all of our respondents if they've experienced any pain with their current desktop virtualization solution in the past, and a whopping 46% confirmed they'd had issues with the user experience not being good. 41% had issues with poor performance over slow networks, 35% had issues with some peripherals not being supported, and 32% had bad video performance. So there are really no surprises there—it's all the same stuff we've been talking about for years, and we're seeing it almost everywhere. Luckily most of these issues have been addressed in more recent versions of the leading desktop virtualization products.

Conclusion

The main takeaway from this survey is that organizations are starting to use desktop virtualization—not just VDI, but all versions of desktop virtualization—in big ways. Many of the historical balances are starting to shift, and the traditional fears are melting away as organizations try more and bigger things with their desktop virtualization environments. This survey also confirmed that many customers have “been around the block before” when it comes to desktop virtualization, so now they're on their second or third time around and they have a better sense of what to expect and what to do. (In other words, organizations now have the battle scars, so they are able to be more precise and focus on the important issues.)



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About the Author

Brian Madden: Founder of web community and blog BrianMadden.com, a leading source for conversation, debate and discourse about the application and desktop virtualization industry, and creator of BriForum, the premier independent application delivery technical conference.

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