Discovering DaaS

Hosted virtual desktops offer service providers a stronger client relationship and, potentially, a profitable line of business. Deciding how to enter the market, however, demands a thorough assessment of available options. BY ESTHER SHEIN
Sizing Up the Hosted Virtual Desktop Trend

Virtual desktop infrastructure surfaced a few years ago to cut the cost of conventional desktop administration and provide greater security through centralization. But there was a problem: While the desktop got thinner, the data center got thicker—particularly in the storage department.

Enter the hosted virtual desktop, or desktop as a service (DaaS), a technology that eliminates a customer’s back-end infrastructure by moving it to the cloud.

This handbook aims to help channel partners address the emerging DaaS opportunity. Esther Shein’s introductory story on how to enter the hosted virtual desktop market details two strategies: build your own DaaS capability or rely on a partner for DaaS software, services and infrastructure. The decision hinges on whether the would-be DaaS provider has the time and money to build out the necessary data center capabilities.

Shein follows that article with an outline of the DaaS market’s potential, noting that managed service providers rank DaaS as their top-planned virtualization offering. Shein wraps up with a case study on the DaaS partnering strategy, focusing on EarthLink’s alliance with IndependenceIT.

DaaS can benefit small and medium-sized business customers who lack the resources to create a virtual desktop infrastructure, or VDI, environment. It can also benefit enterprise customers who may have other places to invest their capital budget dollars.

Read on to get a handle on this emerging market.

John Moore
Site Editor
SearchITChannel
Getting Started: The Data Center Question

New service areas are always top of mind for managed service providers, and interest is growing in the hosted virtual desktop, or desktop as a service, market due to the benefits it can provide around security, functionality and ease of use.

In fact, desktop as a service (DaaS) is the top planned virtualization offering by managed service providers (MSPs)—beating out network, storage, virtual desktop infrastructure, data center, application and server virtualization—according to a 2014 Techaisle survey. In addition, 45% of MSPs are currently offering a hosted virtual desktop service to small and medium-sized businesses SMBs. Another 27% are planning to offer it this year, according to a Techaisle survey of 684 channel partners, which included 147 MSPs. Half of the respondent MSPs said they are expecting an increase in their desktop virtualization revenue in 2015. TechTarget’s North American IT Priorities survey found more modest results, with almost 11% of respondents saying they are planning to adopt DaaS in 2015.

“DaaS is continuing to grow steadily, primarily in the SMB space,” observed Kevin Rhone, senior partnering consultant in the Channel Acceleration Practice of Enterprise Strategy Group. “It’s all about a lower [total cost of ownership] and the view that managing desktops is not core; it's a ‘relatively’ low-value task [that] they can and should outsource.”

The cloud-orientation of DaaS is a primary driver behind the growth VDC Research is seeing, especially as it delivers on its promise of higher availability, and most importantly, the ability to reduce hardware costs, said Matthew Hopkins, a research associate.

Another key advantage of DaaS solutions is their ability to provide a very fast desktop experience without the maintenance and cost of an on-site data center—these efficiencies
come through the availability of more reliable, and faster, network connections,” he said.

Yet, at the same time, it has not been easy for MSPs to deliver DaaS, since it is a hosted offering and many service providers do not have their own data centers, Hopkins said. As a result, they need to either invest in a data center technology or use one from companies like Amazon Web Services (AWS) or Microsoft, said Anurag Agrawal, an analyst at Techaisle.

So, how can MSPs enter the hosted virtual desktop/DaaS market? According to Rhone, the options are:

- Continue to support their clients’ desktops as a traditional managed service, where the clients continue to own and pay for the IT infrastructure and the partner provides all services and support. While this approach is still common, Rhone sees it declining.
- Resell DaaS providers such as AWS and VMware that offer a hosted virtual desktop service.
- Resell DaaS from a vendor and have the app hosted by an independent cloud service provider.
- Set up their own data center and license DaaS from a vendor, and then host the software on their own equipment.

NETWORK MEDICS BUILDS ITS OWN DATA CENTER
IT managed services company Network Medics has its own data center and offers two services—on-premises and hosted DaaS—but in both cases, it owns the equipment, explained Kevin Calgren, partner. For software, Network Medics uses Horizon FLEX from VMware. The company also provides hardware as a service—down to the actual unit on the desk, which is now a thin client, he said.

Another consideration is storage, and Calgren said Network Medics uses hard disk drives for VMware’s virtual storage area network as well as regular hard drives for standard storage.

The amount of personnel needed to administer a DaaS offering will depend on the number of clients an MSP has, he said.

“What’s really nice is you need to hire less,” thanks to the virtualization aspect, Calgren said. “Overall for us, with more of these hosted
solutions, there’s less overhead required.”

Clients with on-site needs are a different story, he added, so Network Medics spreads the load and has about 20 clients per technician, “which is about right if we’re going to provide a good experience. That may sound low, but we would like to make sure that person is there for the client.”

Certifications are also important, such as VMware’s VMware Certified Professional Data Center Virtualization certification, which Calgren said is “a very difficult certification to get.” Other appropriate certifications include Cisco Systems’ Cisco Certified Network Associate, storage certifications from vendors such as HP and Dell, and Microsoft’s Microsoft Certified Solutions Associate.

Network Medics invested roughly $250,000 to start its Tier 3 data center, he said, but wasn’t sure of the exact annual maintenance and data center licensing costs.

Like anything, Calgren said there are pros and cons to building your own data center. Key among the benefits is “having full control when a client has a bad experience,” and being able to go into a server and fix it without having to do ticketing and waiting on a response from Microsoft.

“We’re super-stable and have higher margins for monthly recurring revenue,” he added.

The negatives includes having to do more troubleshooting, as well as finding funding for the up-front costs—not to mention stress. “Without having investors, and being wealthy, that was difficult,” Calgren noted.

The other downside is having too few clients to cover your costs.

“If you’re using someone else’s service, it doesn’t matter—you can start with one or five and the more you add, the bigger the discount the other provider gives you. ... That didn’t happen for us until [after] almost three years.”

DinCloud’s Channel Partnerships

Based in Los Angeles, dinCloud is a cloud services provider that works with MSPs, value-added resellers and end-user companies. DinCloud automates the entire lifecycle of provisioning—something it maintains is disrupting the traditional sale of services, according to David Graffia, vice president of sales.
In addition to the capital expense of building from scratch, many companies don’t end up with “the latest and greatest infrastructure to host that [DaaS] environment on, and it was probably built by someone doing it for very first time,” he maintained. “You spend millions of dollars, and the result is a big question mark and users aren’t happy.”

Users also want redundant data centers, noted Ali Din, senior vice president and chief marketing officer at dinCloud. The company resells a cloud automation console for DaaS that an MSP can decide to give to customers to log in to and manage and provision services or the MSP can assume that control.

In some cases, MSPs layer services such as monitoring and patch management on top of dinCloud’s cloud service.

Profit margins for MSPs will vary based on their level of involvement, Din said.

“We have some partners that refer us [to clients] that are one-man consultants, and they’ll get 5% for that referral,” Din explained. Authorized resellers that provide leads can earn 10%.

“Folks who come in and provide leads, provision the environment and provide ancillary services can make more because we don’t have to outsource that and it’s nice complement to what they do.”

**ACCELERA’S JOURNEY TO THE HOSTED VIRTUAL DESKTOP MARKET**

Accelera Solutions takes a different partnering approach. The company works with Citrix to deliver a virtual desktop offering for customers on premises as well as in a public cloud model, said Joe Brown, president and COO. It is marketed under its own brand, Accelera Secure Optimized DaaS.

“We built our own capability many years ago by buying our own hardware and standing it up in a data center, and now we leverage Microsoft Azure for that service,” he said.

Accelera purchased hardware, storage and networking equipment and put it in an Equinix data center, using Citrix as the primary technology to support DaaS from its platform.

“Over the years, we’ve transitioned into a fully cloud-based version,” leveraging existing cloud infrastructure from Azure and AWS.

Because Accelera already understood virtual
desktops, the only personnel the company has hired is for capacity purposes to support customers, he said.

Echoing Calgren, Brown concurred that certifications are important and said the company has staff certified in Citrix XenDesktop and XenApp, as well as VMware vSphere, Azure and AWS.

Up-front expenses were very costly for Accelera’s initial hosted virtual desktop service: around $500,000 in hardware to get the base technology up and running.

“I would not do it again, and that’s why we’re leveraging the cloud,” Brown said, in reference to the price tag. “The public cloud wasn’t available when we set off on this journey.”

Today, they have been able to leverage licensing programs from key software providers like Citrix and VMware, “and you only have to pay for licensing consumed by end users, so it’s a very utilitarian structure that enables you to build out your environment without having to buy licenses until you get customers running on it,” he explained.

Despite the public cloud transition, Accelera continues to employ its own data center infrastructure in the DaaS market. Brown noted the advantages of the latter approach: In addition to having ultimate control over all components when building your own data center, you can also develop a customized configuration for customers that might not be possible in the public cloud.

“The investment we made in the past we still have running. We didn’t throw it away,” Brown said. “But we put as many new people in the public cloud as we can so we don’t have to continue to make hardware investments.”

Having your own infrastructure also enables an MSP to segment users for compliance reasons, he added. “You simply can’t do that on the public cloud infrastructure.”

In terms of economics, “I would say we’re seeing fairly equivalent profit margins from our personally owned and public cloud infrastructures after you get past the first couple of years of owning your own,” since the capital expenditure is amortized after a couple of years, Brown said.

Accelera has a service desk that consists of three tiers of resources: general support technicians (level 1), senior support technicians (level
2) and subject matter experts (level 3). “Escalation criteria are defined for all types of issues reported and technicians are measured on effectiveness of solving the issues in a timely fashion,” Brown said.

Accelera also has the ability to escalate to their software and hardware manufacturer partners when needed. The firm subscribes to industry standard ITIL process for service desk support and has a systems administrator who acts as a customer advocate for tier two and three escalation for issues.

**COMPUTERSUPPORT.COM LEVERAGES AWS**

ComputerSupport.com, meanwhile, provides managed services wrapped around its DaaS offering, working directly with end-user companies, said Kirill Bensonoff, CEO and managing partner. It built its own cloud platform, ITAnywhereCloud, a few years ago.

ComputerSupport.com opted not to own its own data center and relies instead on AWS. “We, as a lot smaller company, cannot compete with the resources AWS was throwing at their data center,” he explained.

In terms of support, the first call is usually handled by an IT person at the customer company. “Then if it becomes an issue for the MSP, it goes to them, and then we act as the third level to close that ticket for them. We’re just another extension of what they have.”

A customer company does not have to “throw away” what it has already purchased, he stressed. “An end customer can tunnel in to us. We just become a node on their existing environment,” and it can use ComputerSupport.com on a consumption-based model, Bensonoff said.

For MSPs looking to enter the DaaS market, it’s important to find a provider “that understands and embraces the partner community/channel,” he said. They should also “look to a cloud provider that will provide ... continuous innovation.”

VDC Research’s Hopkins agreed. “MSPs looking to enter this market will need support from key participating vendors ... specifically around market guidance and sales training. These vendors have put partner programs in place that include training, marketing materials and many other helpful tools.”
The Evolving Hosted Virtual Desktop Market

**MANAGED SERVICES PROVIDERS** rank hosted virtual desktops, or desktop as a service, as their top planned virtualization offering—beating out network, storage, data center, application and server virtualization—according to a 2014 report by market research company Techaisle.

Hosted virtual desktop and **desktop as a service** (DaaS) also outpaced virtual desktop infrastructure (VDI) in the survey. VDI involves hosting a desktop operating system as a virtual machine on a centralized server at the customer’s location. DaaS, in contrast, moves the server side of VDI to a cloud service provider.

Forty-five percent of managed service providers (MSPs) are currently offering DaaS to small and medium-sized businesses (SMBs) and another 27% are planning to offer it this year, according to Techaisle’s survey of 684 channel partners, which included 147 MSPs.

Half of the respondent MSPs said they are expecting an increase in their desktop virtualization revenue in 2015.

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**GROWING DEMAND AMONG SMBs**

There is growing demand within the small and mid-market segments for desktop virtualization, which offers flexibility and scalability among several other benefits, said Anurag Agrawal, an analyst at Techaisle. “[SMBs] want to be able to reduce operating costs, enable mobility, utilize the current infrastructure, have much more robust backup and disaster recovery systems, and secure data in their infrastructure,” he explained.

About one-quarter of the respondents cited...
better, more efficient management options available in hosted environments, coupled with concerns over current staff skill levels, as a primary reason for electing to use a hosted product, Agrawal said.

“If reduced complexity and ease of implementation is added to management and internal skills, the proportion of firms looking to hosting as a means of smoothing the path to client virtualization increases to 35%,” he said.

Access to better security or other features is the primary driver for 18% of those using or considering hosted VDI/DaaS, while 19% consider hosted the “best option” or cite other reasons for going with an off-premises technology, according to Agrawal.

The results are not surprising, given that SMBs have already witnessed the benefits of server virtualization. DaaS is the next logical step for partners to focus on to help meet their customers’ needs, Agrawal said.

“SMB customers’ key issues are support for mobility solutions [and] improving productivity ... so when looking at how quickly mobility and cloud are being adopted within small and mid-markets, it is not surprising to see this type of virtualization is ... on the radar of SMBs as well as the channel partners,” Agrawal said.

SMBs have already witnessed the benefits of server virtualization. DaaS is the next logical step for partners to focus on to help meet their customers’ needs.

Yet, at the same time, it has not been easy for MSPs to deliver DaaS, Agrawal noted, since it is a hosted offering and many services providers do not have their own data centers. As a result, they need to either invest in a data center offering or use one from companies like Amazon or Microsoft, he said.

Many of the smaller MSPs, Agrawal said, “do not have those capabilities and that’s the reason why you’ll see IBM is actively trying to go after [them], saying, ‘Hey, you’ve got the customer [and] we have the platform. Come and host your solution on our platform and we will help you build up your MSP business.’”
MATURING TECHNOLOGY

Accelera Solutions, which has offered hosted virtual desktops for about five years, is utilizing both Microsoft Azure and Amazon Web Services (AWS) in lieu of having its own data center, said Joe Brown, president and COO at the Fairfax, Va.-based IT service provider. While last year Accelera saw interest from some companies trying to understand DaaS, “this quarter we’ve seen probably eight to 10 opportunities of fairly substantial size, which we think is a fairly good indicator of what this year will offer,” he said.

Brown attributes the growing interest, in part, to the fact that the technology has matured and large providers like AWS are starting to invest in this service.

Training staff on DaaS has not been an issue for the company, he said, since Accelera has been offering virtualization for 13 years. The greater challenge was the company’s decision to create a DaaS offering and the resulting transition from consulting partner to service provider.

“Quite frankly, it’s a different type of support,” Brown said. As consultants, the company’s subject matter experts would work with customers on how to build and configure a technology, which the customer would then support internally. “When we became service providers, we [took on] the whole lifecycle—build it, change management, support it—and we had to learn to be service providers to customers in terms of supporting and doing revisions,” Brown said.

CHALLENGE: IMPROVING THE USER EXPERIENCE

The biggest lesson learned is figuring out how to optimize the VDI platform to give the customer the best experience and price, Brown said. He said it’s also key to make sure that staff learns to use some of the newer technologies, like virtual storage area networks and software-defined networking, to minimize costs.

Unlike Accelera, Network Medics has its own data center and finds the main challenge of hosted virtual desktops to be user experience, said Kevin Calgren, a partner at the Minneapolis-based company. Some of its clients
are trying to use computer-aided design (CAD) or Photoshop, which he said is fine if they can handle a delay.

“For anything creative, I don’t feel [DaaS is] there yet,” Calgren said

Network Medics has an onboarding process with new clients and Calgren said it’s critical to learn about their workflows and ask a lot of questions, like why they’re interested in virtual desktops and what their recovery time objective (RTO) is.

“Some companies’ RTO is one minute, some is a day, depending on the industry,” Calgren noted.

He also said Network Medics has a “try before you buy” model when it comes to companies that are considering migrating to a new platform.

VDI is ideal for staffs that do a lot of basic tasks, Calgren added.

“VDI is a great solution for them because they still have a workstation-like environment,” he said. “Some people don’t even know they’re on thin clients, especially when they’re on a LAN, because it’s so fast and the experience the same.”

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Many partners are using desktop virtualization as a conduit to offering Windows as a Service, Agrawal added, so that regardless of the device someone is using, they are delivered the same interface they would expect when working in the office. “Windows as a service is one of the key services coming out from channel partners and being adopted by small and mid-market businesses.”

DaaS: A Partnership

Hosted desktop as a service is an ideal technology for companies that have a geographically dispersed workforce and a dynamic business model that requires them to scale up and down as their employee needs change.

That’s what Student Transportation Inc. (STI) discovered. The provider of bus services transports more than one million students a day on 9,500 vehicles and 130 bus terminals throughout the U.S. and Canada. The company, which uses more than 60 applications to run its business, partnered with EarthLink, which uses Cloud Workspace Suite from IndependenceIT as its desktop-as-a-service (DaaS) offering.

“For companies that want very rapid deployment of [apps] and have security issues and ... don’t want to have the hassle of doing all that manually with hardware, desktop as a service is great solution,” said Stephen Currie, vice president of managed services product management at EarthLink, which provides the EarthLink Cloud Workspace DaaS platform to STI. “We’ve seen a huge increase of customers going in that direction.”

Indeed, cloud represents the greatest promise for delivering new value “as a service,” according to a newly released report fromAccenture and HfS Research. One in four buyers (27%) believes they will see significant progress from current investments in plug-and-play resources. Forty-four percent of senior executives said they would be willing to write off legacy IT investments and move straight to the cloud if they could find the right product that gives them speed to value, the report found.

How EarthLink Deploys Hosted Desktop Services
EarthLink began offering a DaaS service about three years ago, and Currie believes that while
still in the early stages of adoption, Daas makes sense for companies that want to avoid the hassle of configuring their own desktops and laptops, ensuring they are secure, shipping them to employees in remote locations and dealing with getting the hardware back.

STI was already an IndependenceIT customer when the Daas software company was in the managed services business, and Currie said it was a seamless and transparent transition when EarthLink took over the software vendor’s customers, since EarthLink was already a channel partner offering the Daas platform.

The IndependenceIT platform gave EarthLink the ability to rapidly deploy the necessary infrastructure, including the servers and virtual machines required to deliver the desktop offering, said Seth Bostock, CEO of IndependenceIT. As a result, EarthLink can more easily manage its customers, he added.

“If you think about what it takes to solve a problem, you have to have the infrastructure to run a product and you have to have a support organization to be able to offer support to end users,” as well as a distribution channel to sell the product, Currie said.

IndependenceIT also provides a management console so STI can make administrative changes such as permissions to access apps or provide new apps through a single pane of glass, Currie said. EarthLink offers Tier 1 and Tier 2 support to the company, and if issues cannot be resolved at EarthLink they are escalated back to IndependenceIT on STI’s behalf.

One example of an escalation would be if the bus company built a custom app that isn’t working properly.

“IndependenceIT has more experience with that than EarthLink does,” Currie said, who noted that EarthLink takes care of things like password support and latency issues.

EarthLink charges a monthly recurring fee per seat per desktop, and pays IndependenceIT
a monthly core licensing fee also based on a per seat per desktop model. IndependenceIT also hosts some of its DaaS platform on EarthLink and pays it a cloud hosting fee.

**DaaS SERVICE PROVIDERS NAVIGATE SALES CHALLENGES**

Currie said there have been no major barriers for EarthLink entering the DaaS market, but he believes it is still early in the evolution of hosted desktop as a service.

“Where there have been barriers is around the sales motion and getting customers more comfortable with the concept of desktop as a service,” he explained. “For people using it like Student Transportation, they love it and I think it’s hard for them imaging using something else.”

For a company exploring DaaS, whose IT department “isn’t there yet and not thinking about that, going to them and trying to convince them it’s a better solution for them—there’s been some challenge around that.”

STI, however, needed less convincing. The transportation company’s previous association with IndependenceIT helped pave the way for the DaaS service.

Working with Independence IT over the years “opened our eyes to the strategic benefits of the cloud,” said Keith Engelbert, STI’s CTO, in a prepared statement.
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