Delivering the Promise of the Cloud: Desktop as a Service

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Today at VMware Partner Exchange 2015, (PEX), EMC and VMware said they have plans to offer a Desktop as a Service (DaaS) Reference Architecture (RA) that will be available soon. The "EMC Desktop as a Service with EMC XtremIO All-Flash Array for VMware Horizon DaaS" RA brings together the power of the VMware Horizon DaaS platform with the exceptional performance of the EMC XtremIO All-Flash array.

This reference architecture demonstrates the ongoing commitment of both VMware and EMC to deliver the most flexible and agile solutions for cloud-based desktops. It enables service providers (SPs) and organizations both large and small to take advantage of top-of-the-line cloud-based desktops tailored to their needs and their budgets.

This RA helps to speed deployment of DaaS environments and allows organizations to realize increased operational efficiencies. It enables service providers to gain time-to-market efficiency while DaaS consumers can respond quickly to changing end-user computing demands.

The reference architecture is based on the EMC XtremIO All-Flash Array and the VMware Horizon DaaS platform.

The XtremIO all-flash array enhances the desktop user experience while driving down the overall cost of a DaaS solution when compared to traditional storage arrays. This enables SPs and larger organizations to reduce the overall cost of infrastructure leading to reduced desktop costs.

The design supports the EMC XtremIO Starter X-Brick up to a six X-Brick cluster. (The X-Brick is the building block of XtremIO storage.) The Starter X-Brick can support up to 1,250 full-clone virtual desktops which can be upgraded with zero downtime to a full X-Brick supporting up to 2,500 full-clone virtual desktops. Additional X-bricks can be added to scale out linearly as demand increases while still meeting SLAs.

The EMC XtremIO all-flash array provides consistent performance from the first virtual desktop to the last. This means that noisy neighbors don't impact other user's experience.

As part of the reference architecture, EMC is developing sizing tools for costing and pricing of different DaaS configurations. These tools enable SPs and organizations considering DaaS to deliver sensibly priced desktops that are responsive and efficient.

With powerful infrastructure running the VMware Horizon DaaS platform, organizations can become elastic in desktop consumption allowing just-in-time delivery of desktops to end-users. It also means users are able to gain access to their desktops wherever they are and whenever they need to, providing a premium end-user experience.
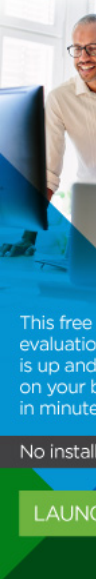
 The VMware Horizon DaaS platform simplifies desktops and applications by removing the complexity of deploying and managing desktop virtualization infrastructure. Which

means with just a few clicks it is possible to deliver cloud-hosted virtual desktops and RDS-hosted shared desktops and apps to end users.

By moving to cloud-hosted virtual desktops, costs become more predictable by reducing upfront costs. This allows organizations to move from a CapEx to OpEx for desktops, making a clear impact on the bottom line.

VMware Horizon DaaS provides integrated security and control. IT can manage virtual desktop and hosted app security just like they manage their existing infrastructure today, with the same credentials and permissions. With built-in security capabilities such as secure point-to-point network connectivity, dedicated compute, and network isolation, IT can have the confidence that their corporate data and applications are secure.

User data leverages either EMC VNX or Isilon storage providing users with a reliable location for all of their files whether in the datacenter or in the cloud.

Tenants groups using DaaS can each have their own access zone on EMC Isilon storage without the cost and complexity of setting up virtual file servers. This allows users to access data more efficiently making them more productive and providing a better user experience. This also allows cloud providers a faster more efficient way to deliver file storage for DaaS for tenants, which in turn helps keep storage and administrative costs low.

Not only is the EMC DaaS with XtremIO solution powerful, it is also simple to use from the ground up. The EMC XtremIO interface requires minimal effort to manage and guarantees maximum performance. Horizon Air tenants can configure and provision desktops to users without having knowledge of VMware Horizon with View. Lastly, users can connect to their desktops from a browser on any of their devices. This means users and IT can skip having to update a client in order to connect to their desktop.

Many Paths to DaaS

Image 2

There are several ways organizations can leverage this reference architecture. Desktops can be consumed from a service provider's cloud, a hybrid cloud, on premises cloud managed, or an on premise solution. The first three of these solutions are managed by service providers and the last one is managed by the organization.

In a cloud solution, the service provider manages 100% of the infrastructure, allowing organizations to create DR solutions for the desktops in the cloud while still having all the benefits of EMC storage with no hardware or other upfront CapEx costs.

With a hybrid cloud model the infrastructure can exist both on premise and in the cloud. Organizations can leverage the operational advantages of both. This also enables elastic growth that is ideal for seasonal businesses. This provides all of the advantages of EMC XtremIO in the cloud and datacenter.

Using an on premise cloud managed solution alleviates the management constraints and is ideal for remote sites, lights-out locations, and for mergers and acquisitions (M&A). This can make it ideal for organizations looking to take on the role of an internal service provider.

On premise solutions offer the power of the cloud without the need for a service provider. This gives organizations maximum flexibility in their DaaS design while leveraging the advanced features of EMC XtremIO.

Journey to DaaS: The Service Provider Perspective

EMC continues working with service providers to help them deliver comprehensive DaaS offerings that can provide a full range of services for their existing and potential enterprise customers. As an example, ScanPlus [Link: http://www.scanplus.de], a managed service provider in Germany, collaborated with Deutsche Telekom to launch an innovative VDI offering, "Büro-To-Go" (Telekom Managed Workplace), leveraging the company's own business cloud services, VMware Horizon Suite and EMC XtremIO.

They needed a competitive DaaS solution that can be deployed quickly and effectively. ScanPlus had to deliver a no-compromise, highly responsive, fully-customizable cloud desktop solution while achieving a lower cost per user than traditional managed desktops.

XtremIO played a pivotal role in ScanPlus' success of delivering this DaaS solution. In the words of CEO Jürgen Hörmann: "[XtremIO] is very compact in the data center, very energy saving, and the user experience with essentially a zero latency system is unbeatable both in the server and desktop environment." He continued, "In addition, because of inline deduplication and compression we can achieve a financially viable storage price, and that is fantastic; it is a high-performance environment that delivers a very competitive price per gigabyte. What's

more, I can scale horizontally, so I can expand the system in the current operation without any performance problems."

The "EMC Desktop as a Service with EMC XtremIO All-Flash Array for VMware Horizon DaaS" reference architecture, tools, and more will be launching soon. To learn more about VMware Horizon DaaS, visit www.vmware.com/products/daas-vspp. To discover more about XtremIO visit www.XtremIO.com.. For an additional post about this RA visit www.XtremIO.com/blog.

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