

VMworld - Keynote and Announcements



This is going to be an incredible few days as we wrap together all the information about the keynote and the big announcements that just came out. So let's talk about what we've heard from the morning keynote.

vSphere 5.5

The new version of the flagship VMware vSphere ESXi platform is the new version 5.5 that adds many new features which include amazing capacity increases. How about doubling everything? Sounds good right? That's exactly what VMware has done for us.

With vSphere 5.5 you can now increase your host RAM to 4 TB, 4096 vCPUs versus 2048, and we now have up to 16 NUMA nodes versus the previous 8 in 5.1 hosts.



While this may not have been a limit for some of the small to medium business space, there are a lot of organizations that were near or at the limits of the previous iterations.

On the guest side, you have huge increases too, and most prominently on the disk side. The 2 TB limit on VMDK files has been lifted for vSphere 5.5 up to 64 TB on both VMFS and NFS! RDM connections to your guests is also available up to 64 TB, so growth limits are really not an issue on the storage side.

For an amazing recap of the guest storage changes, check out Chris Wahl's post on the VMDK changes

here: <http://wahlnetwork.com/2013/08/26/vsphere-5-5-improvements-part-3-lions-tigers-and-62tb-vm-dks/>

Flash cache support with hot-plug SSD at the host is now in place for server side caching which will be a big advantage to customers now that we can leverage flash for those high performance workloads. The ability to do vMotion consistent caching in flash will be a significant improvement for your vSphere cluster efficiency and performance.

Support for 40 GB Ethernet at the host has also been added. For a lot of us, 10 GB Ethernet on the host side is more common, but the future compatibility for 40 GB is welcome as we are seeing some big increases in hardware availability on the server side. 40 GB isn't just for the backbone network anymore!

Clouds in the forecast with vCloud Suite 5.5

The new ESXi OS comes with many other VMware products, and most prominently the vCloud ecosystem has been updated to version 5.5 also.

Improvements on vCloud include big changes on the vCloud networking side. The integration of the Nicira technologies into the vCloud suite is the most active change to the platform, and in my opinion, the most positive.



NSX is a phenomenal technology, and as we see the full integration come over the next short while, we will see big changes in how we manage our physical and virtual networking.

For more on the operational changes and improvements in vCloud Director, Julian Wood has a nice post over here: <http://www.wooditwork.com/2013/08/16/whats-new-vcloud-suite-5-5-vcloud-director/>

VMware Virtual SAN (VSAN)

This exciting new software-defined storage (SDS) product evolved from the vSphere Distributed Storage product into the VSAN environment offered with the vSphere 5.5 environment.

VSAN instances Leveraging the JBOD deployment method, we can now distribute our storage across hosts, storage hardware, and the ability to apply policy to storage and fully leverage



On-premise Cloud Foundry

Now, all of the advantages of the Cloud Foundry ecosystem can be brought into your datacenter, and the hybrid deployment capability will bring flexibility for your application virtualization using this really great product. I'll refer you back to my predictions post from early this year, because this was one of the key products that I felt was going to be featured for VMware this year.

OpenStack

Obviously, you've seen some OpenStack stuff coming out of the blog here and from my Twitter feed, so the increase in OpenStack integration into the VMware ecosystem is a particularly exciting. By adding multi-hypervisor support in the networking layer with NSX, we can build out incredibly flexible cloud designs. This will be an exciting year in this area for sure.



vCloud Hybrid Service (vCHS) is now General Availability

Looking back to my previous post on vCHS (VMware Hybrid Cloud Launch Day), this a really exciting and directionally interesting product from VMware. The move from being a software and hypervisor provider to being a full-service physical and logical cloud host is new to VMware, and this is a sign of their commitment to cloud development.

Customers can use their vCloud Connector to leverage the vCHS environment to move workloads on-premises and to the cloud, plus they have different models of consumption in the public side for either dedicated cloud or private cloud.




image courtesy of VMware

The addition of two new physical datacenters to their vCHS offering, and a roadmap to expand to European markets is a start to this great offering.

So with all of that, we can clearly see that VMware has thrown down the gauntlet to industry competitors, and in fact this puts them in a class all their own.

There will be much more information that comes out through this week and I will do some more deep dives on the specifics, and some other key announcements that are happening with partner products to the VMware ecosystem.

2013 Predictions in Virtualization and Server Technology

 Well folks, it's that time of year. Usually people are putting together their best of 2012 stuff now, but I'm taking the different tactic and putting myself out there to predict some changes which will come in 2013.

The usual disclaimer: As with any predictions, these are my own and have no basis on NDA content, inside knowledge nor do they represent those of my sponsors, employer or vendors.

Mostly, I just wanted to put out my thoughts on what will be hot in 2013 and it's sprinkled a little with the hope for what I would love to have come out this year. I've avoided anyone else's prediction posts to ensure that these are formed from my own desk, and as a result I have to apologize if you see some duplication with other bloggers and vendors who may have said the same thing. With all that said, here we go!

2012 in a Paragraph

There were a lot of really exciting changes in 2012 around virtualization technology in server and cloud environments. Some of the significant events came with strong acquisitions by the big players including Dell, VMware, Cisco, HP and EMC. Clearly the innovation game has been stepped up by not only creating, but in integrating technologies together. Acquisitions dominated the news and the push towards cloud technologies was the top focus for software and hardware vendors alike.

Hot Trends in 2013

The forecast is cloudy. Just like every year seems to be "The Year of VDI", there is going to be an aggressive drive towards the "cloud". What will become more apparent in 2013 is the real definition of the cloud, and products that can simplify the path to get there.

Converged Platforms

This is quickly becoming a more populated market. Where Cisco UCS was the pioneer in an untouched region of the datacenter, they have new players in the game with IBM, HP and Dell

recently announcing their converged infrastructure platforms.

With converged hardware platforms we will see much more of the true concept of compute node versus servers, networking and storage being treated as independent parts of the server infrastructure.

The growth in this area will come with better pricing in the mid-range customer space. This is clearly one of the fastest growing sectors of the marketplace as we see more and more small to medium customers latching on to virtualization.

And in the large scale customer space we may see some new competitors where Vblock has reigned in its lone presence of the large scale converged infrastructure platforms.

SDDC and SDN

The Software Defined Datacenter (SDDC) and Software Defined Networking (SDN) are clearly getting lots of focus into 2013. One word: Nicira. We were all impressed with the great integration of Cisco networking into the vSphere platform with the Cisco N1000v, so the announcement of the acquisition of Nicira by VMware was clearly a shot across the bow of Cisco.

Beware the buzzword marketers of course because there will be a glut of “software defined datacenter” products that hit the shelves riding the wave of popularity. But while the words drip from the tongues of marketing departments, we have to be aggressive in our research to truly measure the place of these products in the class of the SDDC.

1. OpenStack

If you haven't already taken a look at the OpenStack platform, you should. Even if it isn't what is on your radar for deployment in 2013, it is a really important infrastructure movement that will aggressively take hold in 2013. Multiple vendors are jumping in and for those who are looking at cloud technology but don't want vendor lock-in, this is definitely one of the hottest pieces of technology that people are looking at.

2. Stretched Clustering

Although the cloud platforms are clearly the hottest trends, they may be just that for most. Trends aren't necessarily the way that many businesses want to lean with their technology. VXLAN and stretched clusters will become a much more common infrastructure design for companies that want to leverage metropolitan sites. This is like the dance lesson before we take on the full cloud design. The key with this is that it moves the networking beyond the physical boundary and makes SDN part of the day-to-day infrastructure.

3. PaaS will catch up to IaaS

With Infrastructure as a Service (IaaS) becoming part of the vocabulary in 2012, the next step is for customers to look towards Platform as a Service (PaaS) options as we head into 2013. The ability to develop applications to be deployed without the encumbrances of being platform aware will be something that becomes part of the normal course of doing business. The PaaS movement is fairly new, and I encourage you to take a look at what is out there and prepare for the almost inevitable integration into your environment. Very cool stuff for sure!

VMworld 2013 Predictions

This will be a really exciting year for VMworld with some great announcements and new product enhancements across the whole spectrum. These are as much hopes as predictions, but this is what I can imagine we will see this year at the VMworld events.

1. vSphere 6.0

There will be a new version of vSphere in the pipeline which will either be 6.0 or 5.1, but with my prediction of the full Nicira integration it seems that 6.0 will be fitting as it is a major release. Features that were introduced with 5.1 will also be next generation in 2013, so you will see some impressive gains with technology like vSphere Data Protection, vSphere Replication and with efficiencies in the VDI implementation from the View camp.

2. Horizon Data finally will be released

We've been watching since the announcement of Project Octopus for this to be released, and with the Horizon platform being steadily pushed out, the much sought after Horizon Data product will make its debut. For those who are in the Financial Services and Health Care Services, this is going to be exciting. Private cloud data storage with mobility features has been a long awaited feature.

3. vCenter Server Appliance will add Microsoft SQL support

While the vCenter Server appliance is a great option for the small to medium business, but with the more limited database support, and limit of 5 managed vSphere hosts, it isn't quite ready for prime time in larger environments. This year may be the year which will see the addition of support for Microsoft SQL as a back end database engine and support for larger datacenter implementations. Perhaps we may even see Linked Mode support added ☐

4. Licensing

This will be a very interesting year for licensing of the VMware suite of products. I am predicting that there will be a drop in pricing of many of the products and more promotions to migrate customers to the vCloud suites.

I can also imagine that there will be either a merger of some of the traditional vSphere editions or we will see features which were only available to the Enterprise+ category becoming available in more editions.

The fight for adoption will be won in the licensing arena. Having the greatest feature sets in your product is one thing, but getting more customers to integrate those features is the key to real marketplace dominance.

5. Focus on vFabric

Much like the increase in focus on the SDN area, I imagine that VMware will be getting more features and more education and application reference architectures in their vFabric product space. The vFabric offering is very exciting

6. Cloud Foundry hits prime time and will get Private Cloud support

The PaaS market space is the next area where vendors will get aggressive. If VMware wants to

really throw down the gauntlet to bring application environments on board, the growth of Cloud Foundry support will be a great way to lead the charge. Because the Cloud Foundry community is a fast growing group, it will be a great addition to the Private/Hybrid Cloud offering to bring this product to the fore.

Certification, Education and Community

Education is (as it should be) getting real focus from corporations, vendors and by consultants and independent staffers everywhere; and this is with good reason. The attention to education and certification is helping to drive people to be on top of their game and when that happens, everybody wins. Companies are going to see their IT workforce become more involved and with more competition comes better knowledge, better processes and better service.

Community groups have become increasingly popular, and this will also increase in 2013. I am personally involved with the VMUG organization and I do as much as I can to contribute for the PowerShell community by sharing information. More and more of the blogger community today will become prominent (hopefully including me!) and there will be more, and better information sharing through the technology communities in 2013.

Automation and Orchestration

As Cody Bunch says: "Orchestrate all the things!". Don't fear the script, because it will not replace you, but it will actually enable you to do things better, easier and advance your skills and also add to the standard practices in technology for your organization. Although scripting and automation has been a staple among mainframe and Unix since the 70s, the move from process scripting to full datacenter automation and the addition of the Service Catalog will be the real win for you and your organization going forward.

Thank You for a great 2012

This has been a great year for me and DiscoPosse.com thanks to all of my readers, my great sponsors and the amazing communities that I've been involved with. I've been very lucky to be able to surround myself with the greats of technology and I hope I've done well to add value with the things that I've done here.

2013 will bring some great new posts, lots of exciting new things for me and for the site and I can't wait to watch the ball drop at midnight New Year's eve and kick into the next year!

Merry Christmas and Happy New Year!

