Home Lab - what is it all about?

Michael White, Director, Product Management & Customer[0], DataGravity

vBrisket, 1/20/15
Agenda

- What is it?
- History
- Let Start at the beginning
- Things to be aware of
- Specific Suggestions
- Miscellaneous
- Appendix
What is it?

- A home lab is an enabler - learn about different software - virtualization, networking, security, in a way that will enable you to do better at a customer, or at your place of work

- Technology - computers and software that together provide you with the ability to ….
History

- My first was maybe 17 years ago - Compaq ProLiant 1600 with Novell Netware - Compaq laptop

- but, Chad Sakac and Michael Webster are big traditional,

- William Lam is the non traditional big - meaning Mac Minis and a big desktop that is used for nested
• 2015
• 2015
Another way to think of it

- Big boxes at home - Proliant 1600
- ‘gifts’ from customers, built by hand
- Dell / SuperMicro boxes from eBay
- Big workstations using Nested
- Mac Minis with ESXi and Nested
- vCloud Air
Lets Start at the beginning!

- What would you like to do? The answer can determine what you end up with and how much it costs!
- Infrastructure like server management, provisioning means you need something different,
- Compared to scripting, OS certs
- Like working with your hands?
Things to be aware of

- Infrastructure hosts are expensive and loud
- Networking is important - LACP is important to learn and need ‘good’ networking gear to practice
- Once you buy, you are committed!
- Really know what you want to do before you start!
Specific Suggestions

- **Infrastructure**
  - Find on eBay, work a deal with customers
  - Find old UPS - even ones that don’t work, and get new batteries - cheap!
  - Cisco SG300 switches recommended - full function and great price
  - This supports vendor specific stuff like OpenManage, or HP Management, UPS, networking, and is great for PSO
  - Maybe mix Tier 1 with no tier - like Mac Mini’s or Intel NUC
Specific Suggestions

- OS learning / testing / certification
  - Big desktop, 32 GB, quad core
  - Use VMware Workstation
  - This supports specific stuff like playing with different OS, script stuff, dev work
Miscellaneous Thoughts

- Hardware - eBay, HP Microservers, Intel NUC, Mac Mini
- Dell R710 are quiet, VGA on front, easy to work on
- Every lab should have remote use - View for example,
- i5, four core with Virtualization support minimum
- Boot to SD or USB
- AutoLab - nice way to build things
Miscellaneous Thoughts

Nested ESXi

- Good way to maximize your capabilities!
- Devil is in the details!
- http://www.virtuallyghetto.com/nested-virtualization
- http://vcloud.vmware.com/
Miscellaneous Thoughts

Licenses

• Microsoft - MSDN

• VMware - VMUG - http://www.vmug.com/p/cm/ld(fid=8792) - finally - 9 products with 365 day NFR

Employers

• Thing is to remember - you might be able to use work licenses at home - but do not make money with them!

• vExpert - easy to get and you get licenses and perks
“Thank you.”

– Michael White - notesfrommwhite.net
Appendix

- Useful Links
Useful Links


• Virtual Geek - http://virtualgeek.typepad.com/virtual_geek/2008/06/building-a-home.html

• Ethan Banks - http://ethancbanks.com/2014/03/15/my-home-lab-esxi-5-5-server-build-and-the-logic-behind-it-all/
Useful Links - Continued

Useful Links - Continued

• Chris Colotti - [http://www.chriscolotti.us/vmware/vsphere/vmware-vcloud-in-a-box-for-your-home-lab/](http://www.chriscolotti.us/vmware/vsphere/vmware-vcloud-in-a-box-for-your-home-lab/)


Useful Links - Continued


• VirtuallyGhetto - Apple - http://www.virtuallyghetto.com/apple

• VirtuallyGhetto - Nested - http://www.virtuallyghetto.com/nested-virtualization
Useful Links - Continued

• HP Microserver - [click here](http://storageioblog.com/server-storage-io-intel-nuc-nick-knack-notes-second-impressions/)


• APC monitoring vSphere - [http://vcdx181.com/stage-xiv-apc-vsphere-integration.html](http://vcdx181.com/stage-xiv-apc-vsphere-integration.html)
“Thank you.”

–Michael White