MACE

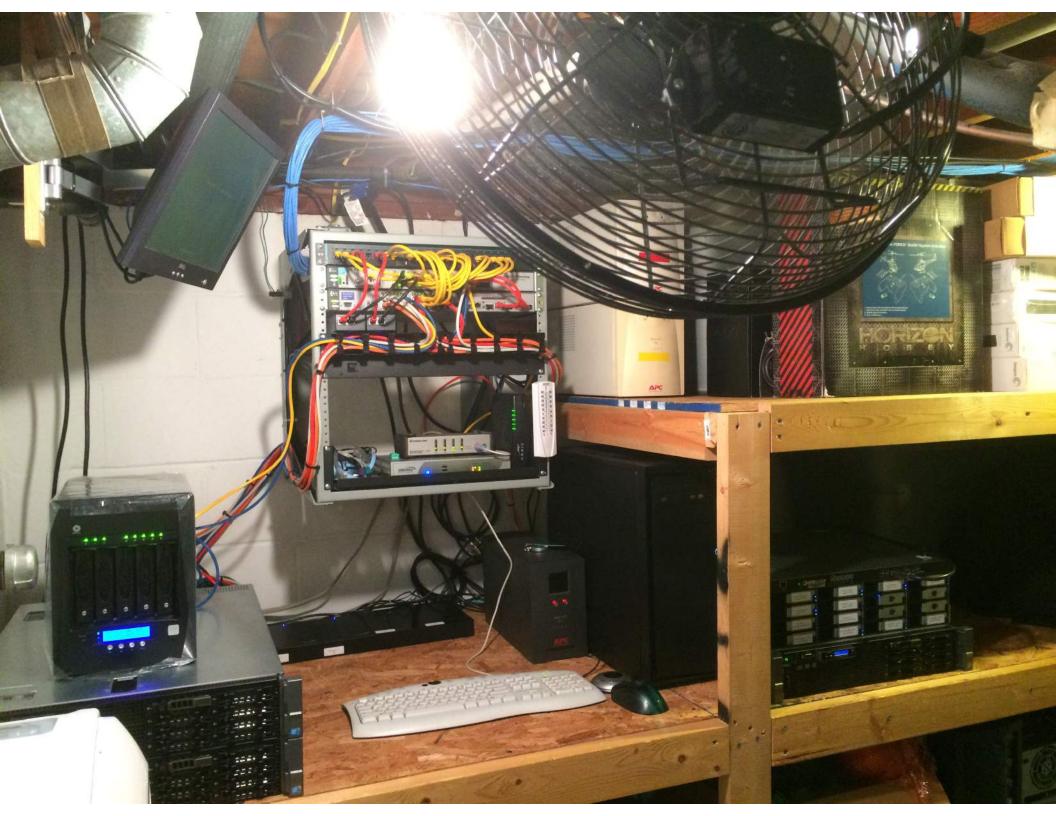
Home vSphere Labs

Tom Breakiron

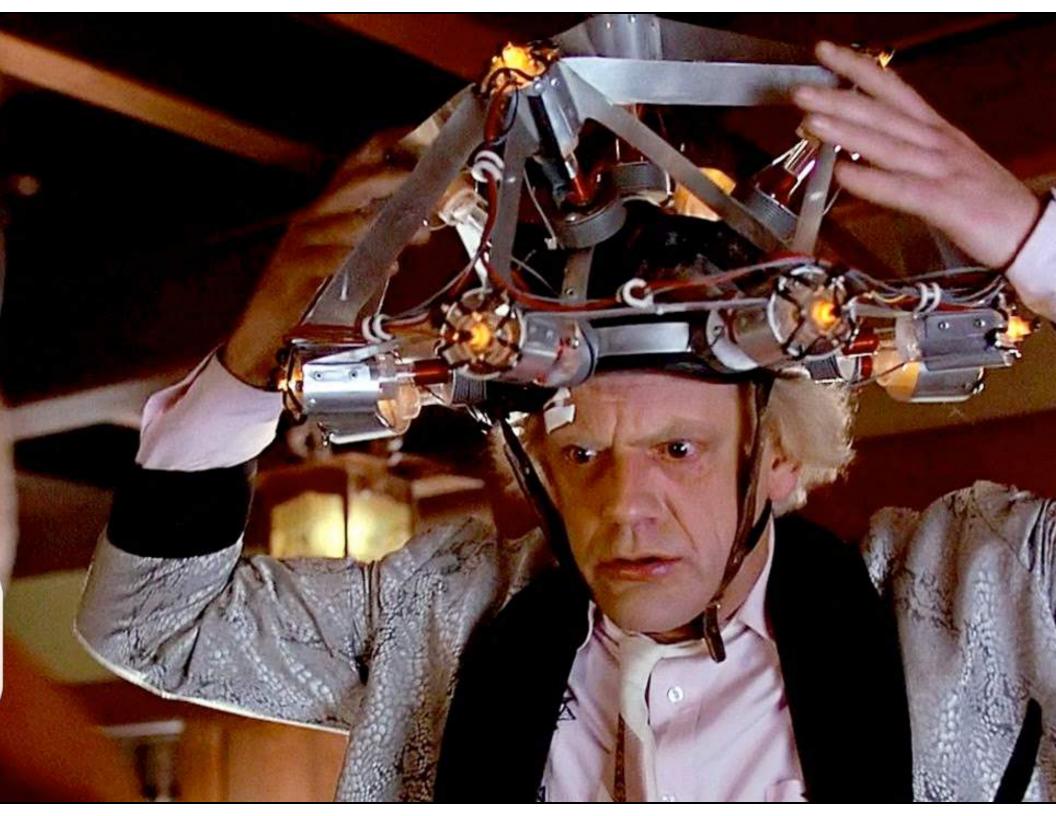
Sr. Consultant, VMware Inc.

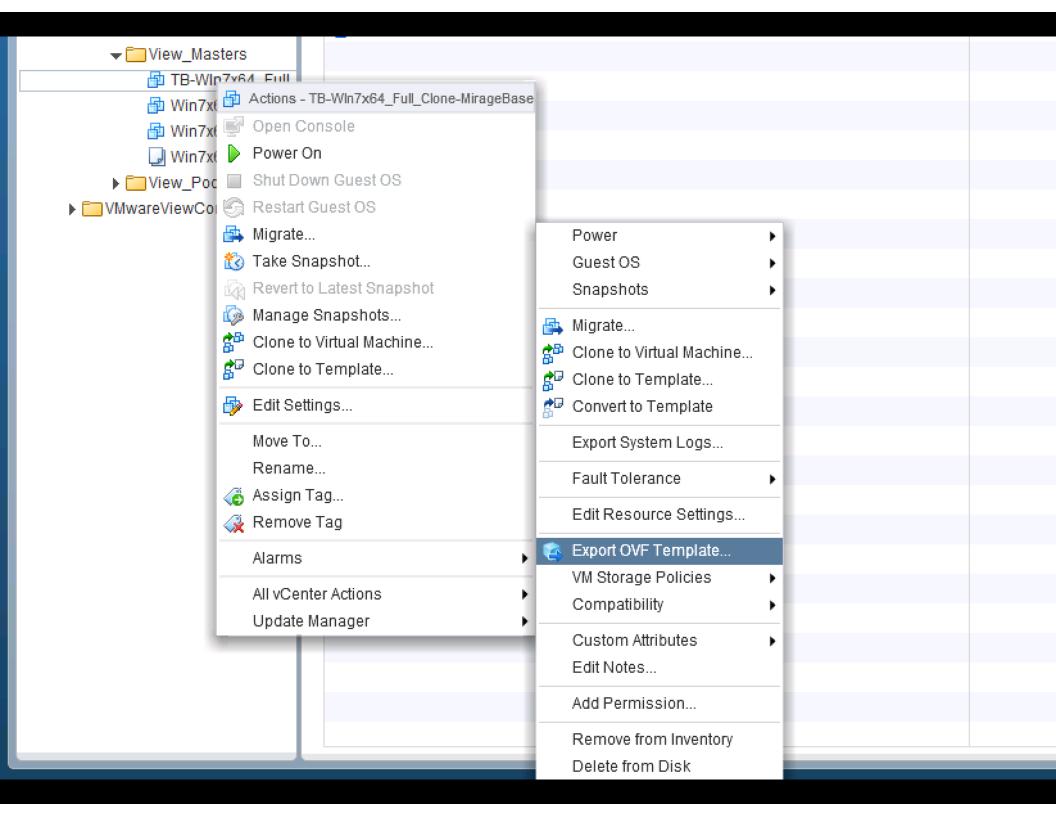






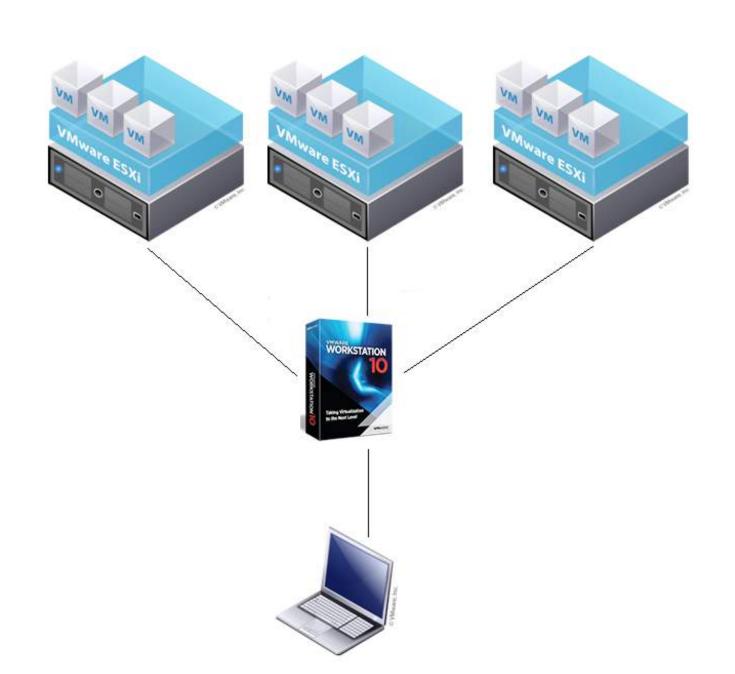




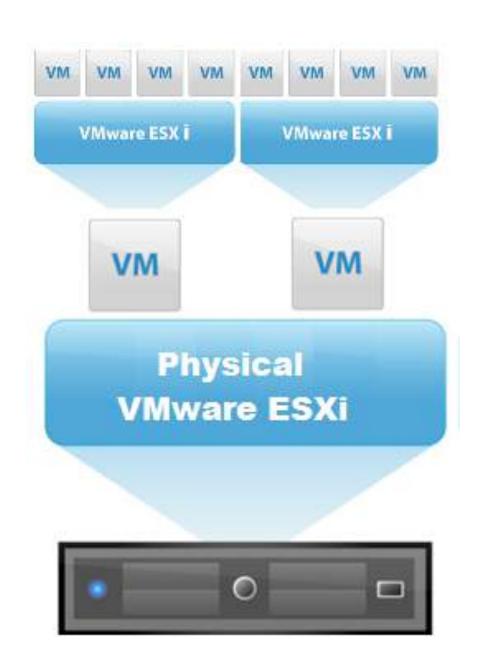


Common Lab Types

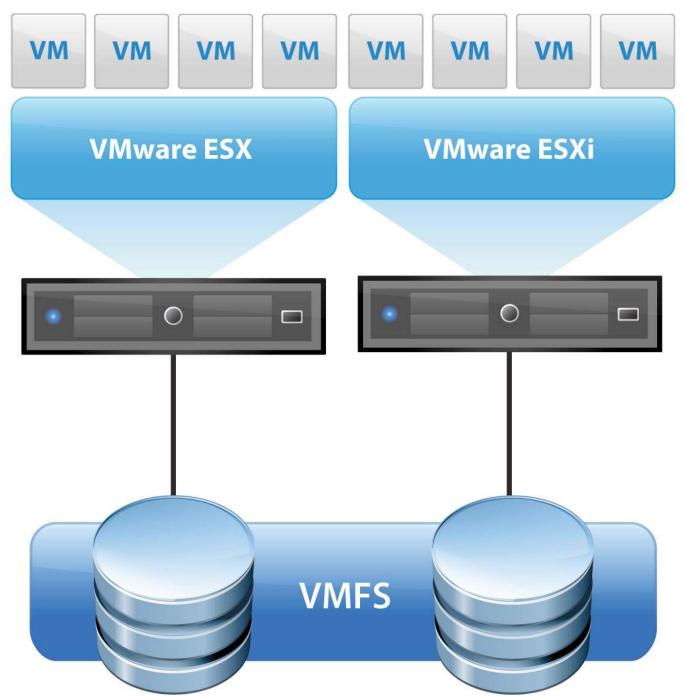
Nested ESXi on Workstation

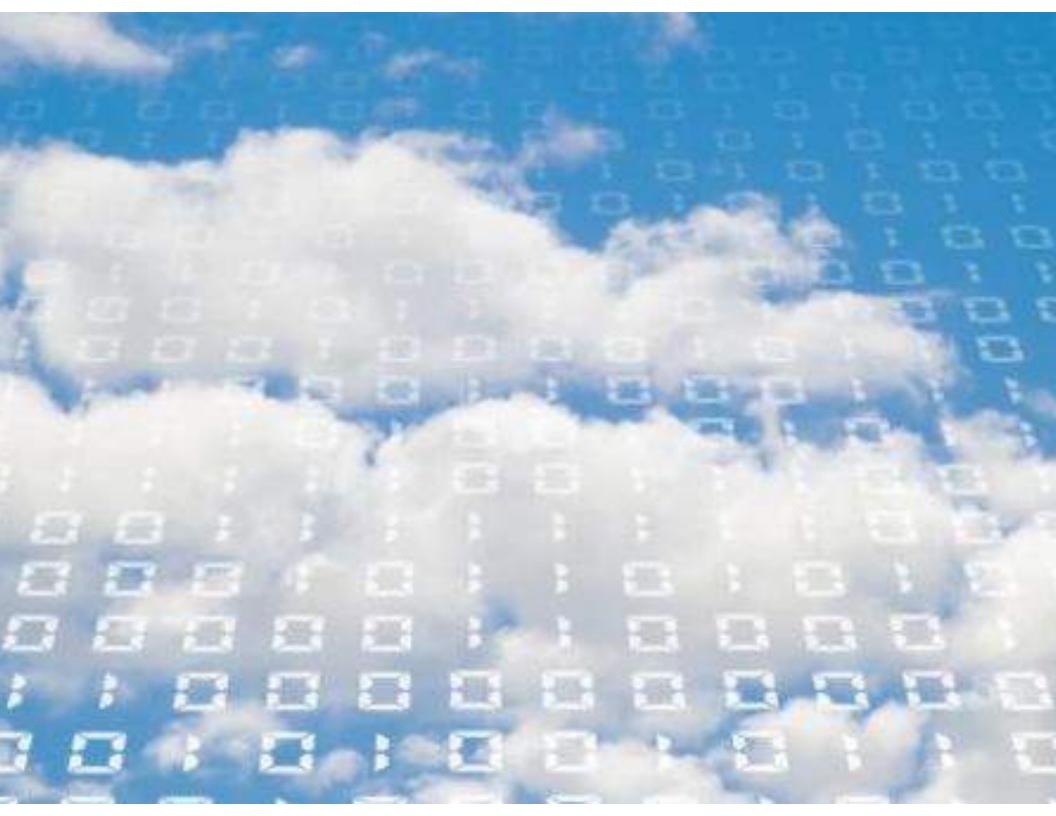


Nested ESXi on ESXi

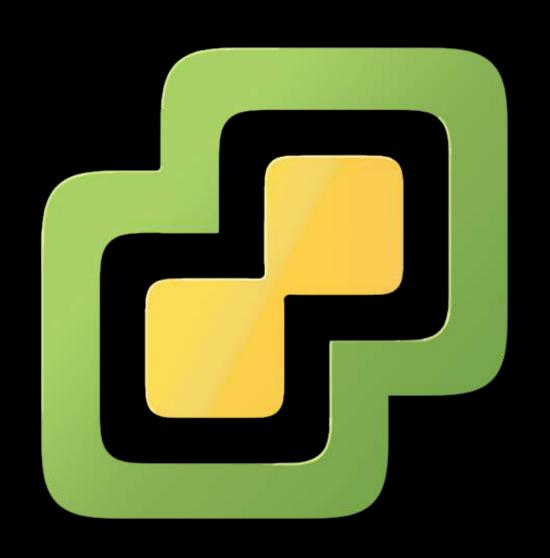


Multi-ESXi & Shared Storage





Nested ESXi

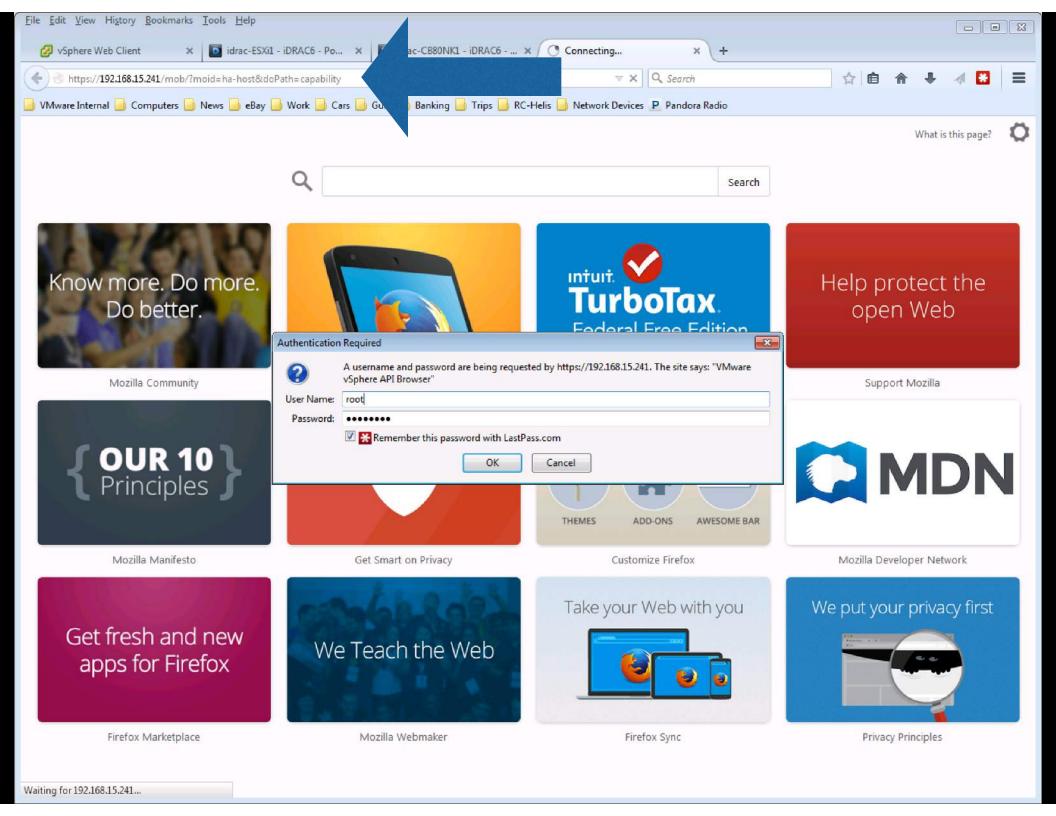


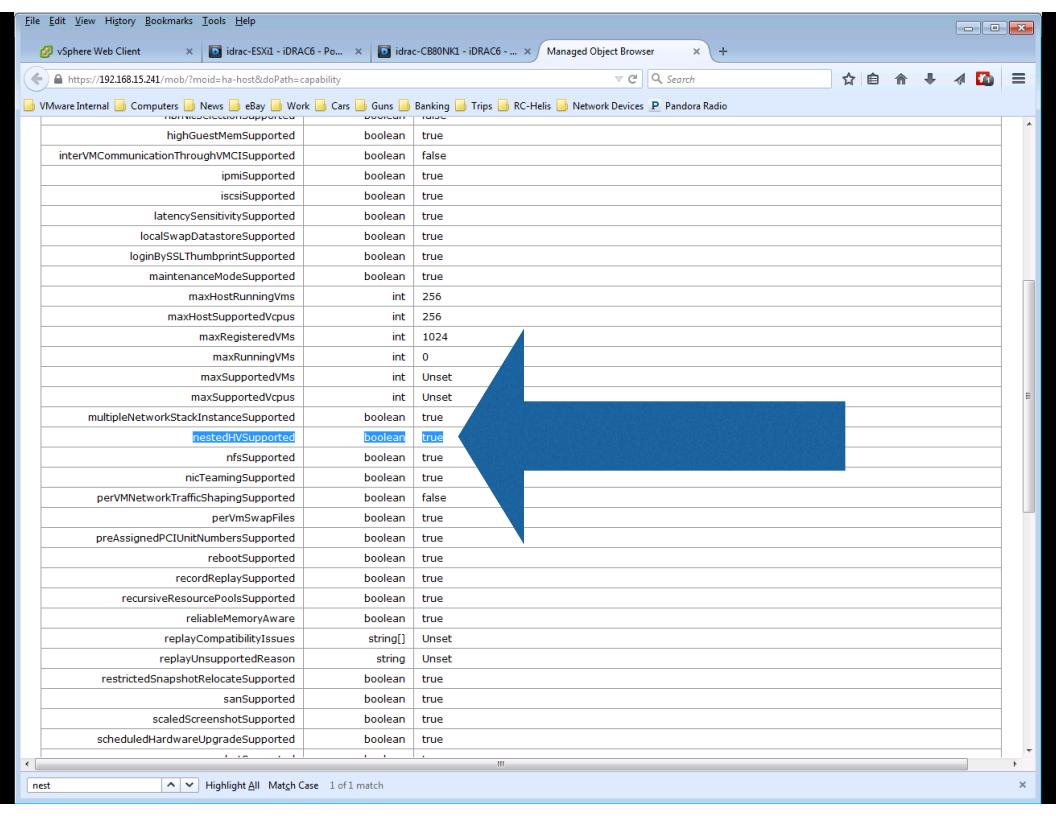
Hardware Assisted Virtualization

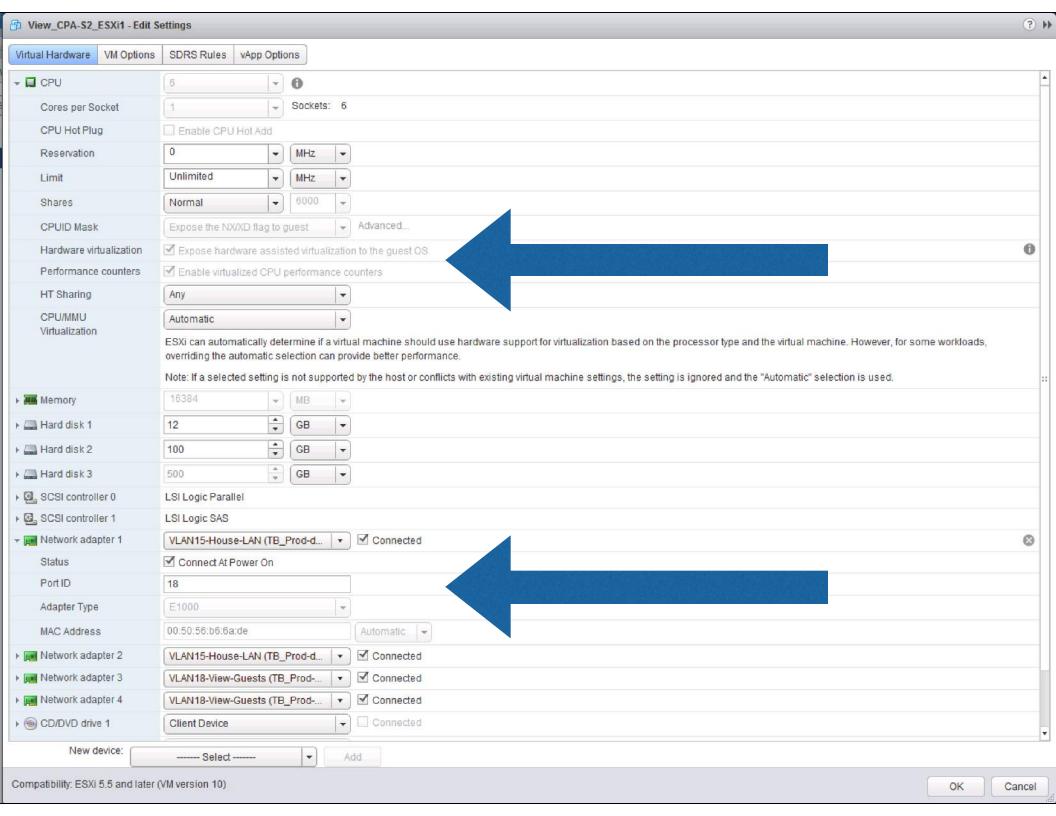
- Intel VT-x
 - •i5/i7/55XX Xeon "Nehalem" & Later (2009)
- AMD-V
 - Athlon 64 "Orleans" & Later (2006)

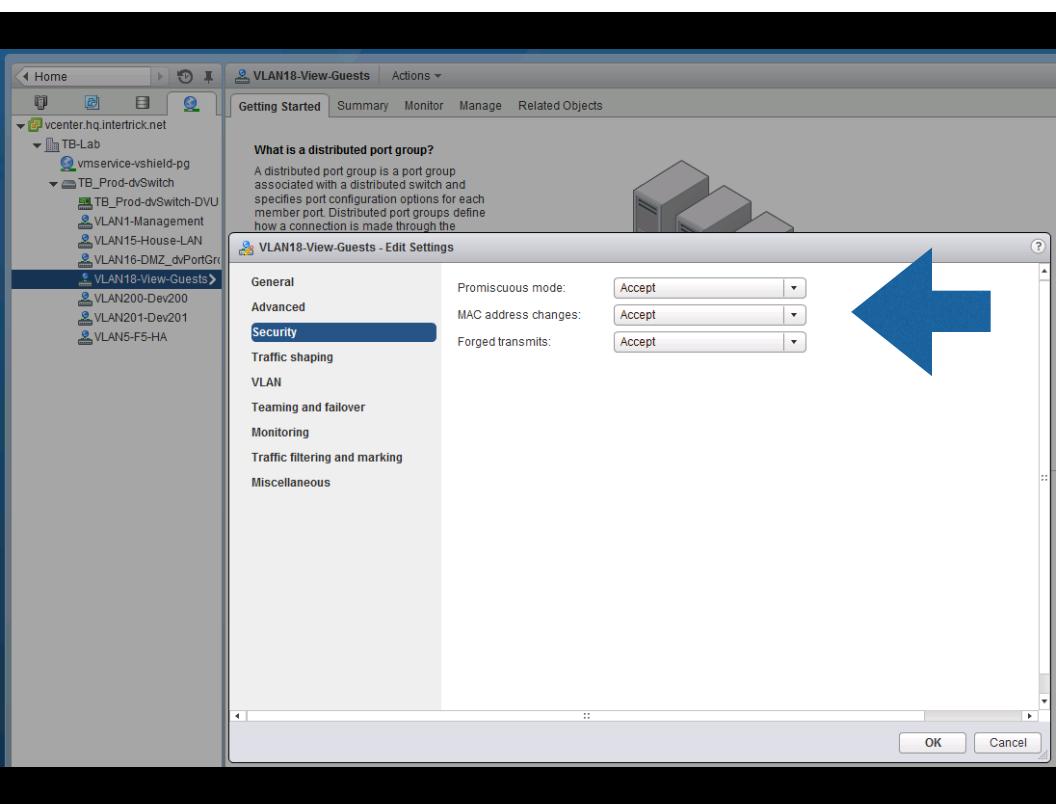
Capabilities Report:

https://192.168.15.241/mob/?moid=ha-host&doPath=capability









VMware Tools!

vmware[®]

Products

Support

Downloads

Consulting

Partner Programs

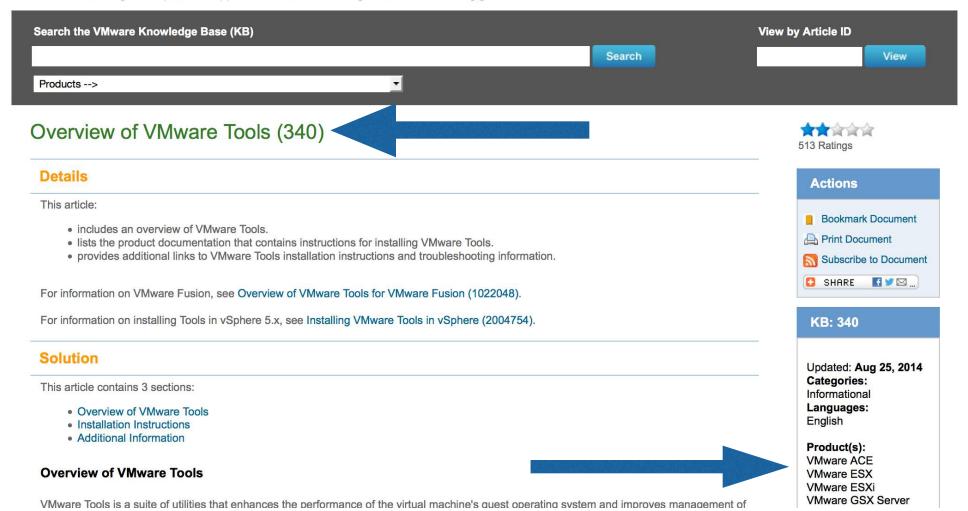
Company

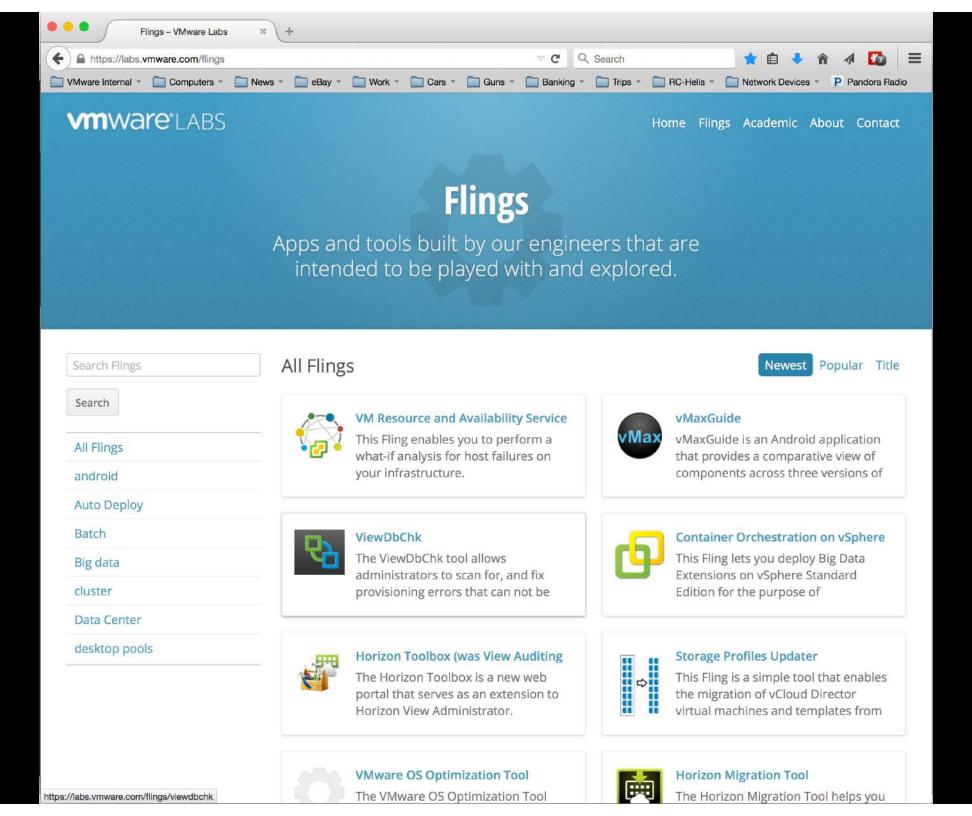
Knowledge Base

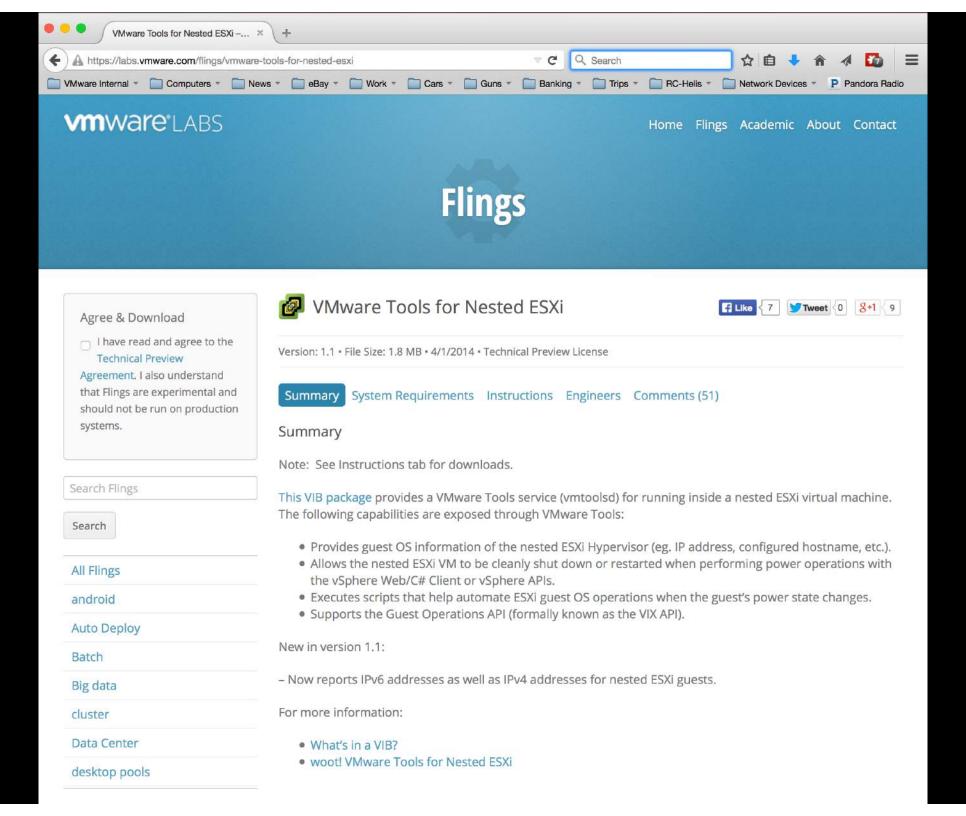
KB Home

Knowledge Base Help

The VMware Knowledge Base provides support solutions, error messages and troubleshooting guides







VMware Tools!

SSH Into the ESXi host and run the following:

esxcli network firewall ruleset set -e true -r httpClient

esxcli software vib install -v http://download3.vmware.com/software/vmw-tools/esxi_tools_for_guests/esx-tools-for-esxi-9.7.1-0.0.00000.i386.vib -f

ESXi Host Hardware









Virtual Media

Record

Macro

Options User List Capture Exit

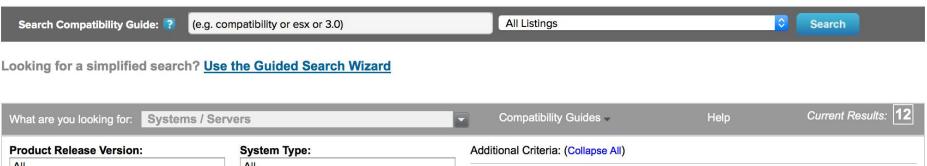
VMware ESXi 5.5.0 [Releasebuild-1331820 x86 64] #PF Exception 14 in world 36019:vmm2:Storage IP 0x41802f210c57 addr 0x0 PTEs:0x0; cr0=0x80050031 cr2=0x0 cr3=0x156e65000 cr4=0x2668 frame=0x4123b2cdd020 ip=0x41802f210c57 err=9 rflags=0x10212 rax=0x0 rbx=0xe5 rcx=0x2 rdi=0x410867b45a40 r8=0x1 r9=0x1 r10=0x41110c9d1080 r11=0x4 r12=0x41000869cef4 r13=0x1 r14=0x4123b2cdd3d8 r15=0x4123b2cdd42c *PCPU2:36019/vmm2:Storage2 PCPU 0: VVVVVVV Code start: 0x41802f000000 VMK uptime: 0:00:12:04.496 0x4123b2cdd4c8:[0x41802f210c57]E1000PollRxRingQvmkernel#nover+0xb73 stack: 0x1 0x4123b2cdd538:[0x41802f213bb5]E1000DevRxQvmkernel#nover+0x3a9 stack: 0x4123b2cdd578 0x4123b2cdd5d8:[0x41802f192164]IOChain ResumeOvmkernel#nover+0x174 stack: 0x4305d 0x4123b2cdd628:[0x41802f179e22]PortOutputOvmkernel#n<u>over+0x136_stack: 0x41087938e780</u> 0x4123b2cdd688:[0x41802f726f58]EtherswitchForwardLeafPortsQuick@<None>#<None>+0x4c stack: 0x4123b2c 0x4123b2cdd8a8:[0x41802f727f51]EtherswitchPortDispatch@<None>#<None>+0xe25 stack: 0x412300000014 0x4123b2cdd918:[0x41802f17a7d2]Port InputResume@vmkernel#nover+0x192 stack: 0x0 0x4123b2cdd968:[0x41802f17ba39]Port Input Committed@vmkernel#nover+0x25 stack: 0x2bcab735 0x4123b2cdd9f8:[0x41802f1cad25]Vmxnet3VMKDevTQDoTxQvmkernel#nover+0x28d stack: 0x0 0x4123b2cdda68:[0x41802f1cec13]Vmxnet3VMKDev AsyncTx@vmkernel#nover+0xa3 stack: 0x4123b2cddbe8 0x4123b2cddad8:[0x41802f1add70]NetWorldletPerVMCBOvmkernel#nover+0x218 stack: 0x0 0x4123b2cddc38:[0x41802f0eae77]WorldletProcessQueueQvmkernel#nover+0xcf stack: 0x4123b2cddc78 0x4123b2cddc78:[0x41802f0eb93c]WorldletBHHandlerQvmkernel#nover+0x54 stack: 0x1ab2bcd8a1a 0x4123b2cddce8:[0x41802f02e5b9]BH Check@vmkernel#nover+0xc9 stack: 0x410851630200 0x4123b2cddd58:[0x41802f24e72d]CpuSchedIdleLoopIntQvmkernel#nover+0x39<u>1 stack: 0x412300000002</u> 0x4123b2cddeb8:[0x41802f254930]CpuSchedDispatch@vmkernel#nover+0x1630 stack: 0x411116ae04c0 0x4123b2cddf28:[0x41802f255c65]CpuSchedWait@vmkernel#nover+0x245 stack: 0xffffffff00000001 0x4123b2cddf98:[0x41802f2561cb]CpuSched VcpuHaltQvmkernel#nover+0x197 stack: 0x418000000000 0x4123b2cddfe8:[0x41802f0cde30]VMMVMKCall CallQvmkernel#nover+0x48c stack: 0x0 0x41802f0cd484:[0xfffffffffc223baa] vmk versionInfo str@<None>#<None>+0xcc3a578a stack: 0x0 base fs=0x0 qs=0x418040800000 Kqs=0x0 Coredump to disk. Slot 1 of 1. Finalized dump header (12/12) DiskDump: Successful. Debugger waiting(world 36019) -- no port for remote debugger. "Escape" for local debugger.

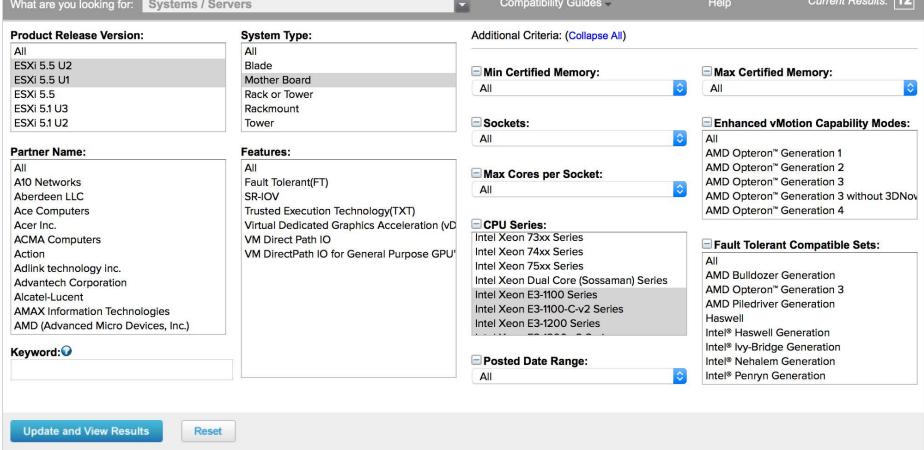
Downloads



Home > Resources > Compatibility Guides

VMware Compatibility Guide





"Good" Host Hardware*

- VMware HCL!
- Capable of supporting at least 32GB of RAM
- PCI-E Slots (I suggest 4)
- Low Power Consumption
- Quiet



Bill Based On: Actual Meter Reading, Prorated

Bill

Billing Period: May 21 to Jun 20, 2014 for 31 days

Bill For:

THOMAS A BREAKIRON

June 24, 2014 Account Number:

Amount Due: \$329.55

Due Date: July 14, 2014

ne 1 of 2 W16

-83.1

To report an emergency or an outage, call 24 hours a day 1-888-544-4877. For Customer Service, call 1-800-686-0021. For Payment Options, call 1-800-736-3404. Pay your bill online at www.firstenergycorp.com Bill issued by: West Penn Power, PO Box 3615, Akron OH 44309-3615

06/03/14 Payment

To avoid a 1	1.25% Late	e Payment	Charge	being	added	to yo	our	bill,
please pay the	e Amount	Due by the	Due Da	te.				

Meseaner

Your current PRICE TO COMPARE for generation and transmission from West Penn Power is listed below. For you to save, a supplier's price must be lower.

Domestic Service -- 6.57 cents per KWH

Customer reserves the right to shop for an electric supplier.

Your next meter reading will be estimated. See the back of the bill to provide a customer reading by Jul 21, 2014.

Your bill includes \$24.52 in PA taxes, of which \$19.44 is PA gross receipts tax.

This bill, based on an actual reading, exceeds your normal estimated bill by at least 50% or \$50, whichever is greater. This is the result of four or more consecutive estimates. Arrangements can be made to extend the time for payment, if desired. For further explanation. contact the office shown above

Generation prices and charges are set by the electric generation supplier you have chosen. The Public Utilities Commission regulates The Federal Energy Regulatory distribution prices and services. Commission regulates transmission prices and services

Effective June 1, 2014, the Energy Efficiency Charges which recover costs associated with the utility's programs to reduce annual electric neet demand for electricity as mandated by the stare has

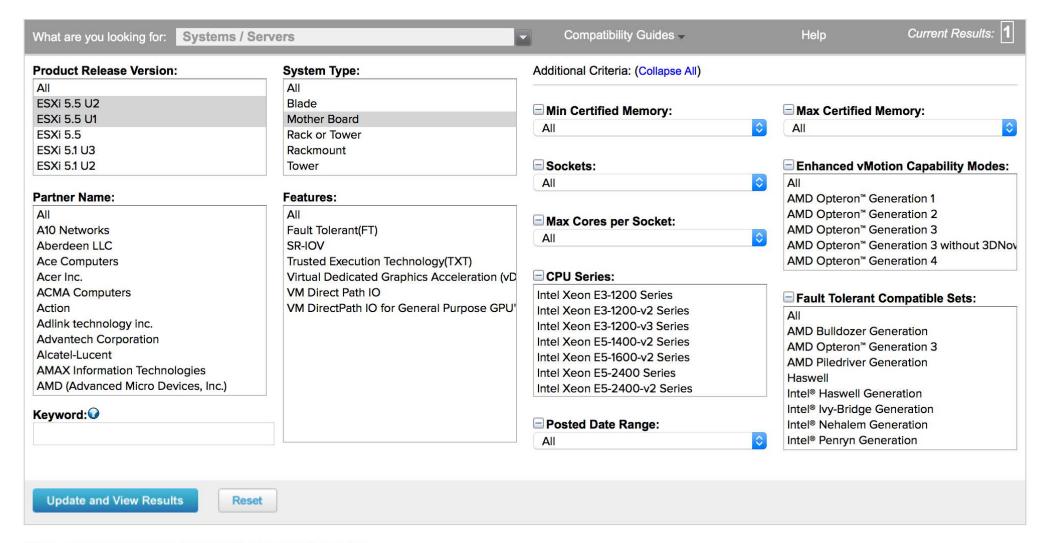
Account	Summary			Amount Due
Previous Balance				83.14
Payments/Adjustments				-83.14
Balance at Billing on Jun 24, 2014				0.00
West Penn Power - Consumption				329.55
Amount Due by Jul 14, 2014		MA		\$329.55
Usage Information	for Meter Numb	er		
Jun 20, 2014 KWH Reading (Actual) May 21, 2014 KWH Reading (Estima KWH used	te)			77,519 73,871 3,648
Charges Fr	om West Penn F	owe	1	
Customer Number: Rate: Domestic Service				
Price to Compare Default Service	2,354 KWH 1,294 KWH	X	0.075140 0.049610	176.88 64.20
Customer Distribution Charge				5.00
Distribution Charge	3,648 KWH	Х	0.019718	71.93
Default Service Support Charge	1,294 KWH	X	0.000900	1.16
	2,354 KWH	X	0.000530	1.25
Smart Meter Charge	3,648 KWH	X	0.003030	11.05
State Tax Surcharge				-1.92
Current Consumption Bill Charge	S			329.55
Detail Payment	and Adjustment	Info	rmation	



The Mac Mini

- 2012 Mac Mini
 - Prices start above \$300 with 4GB of RAM
 - 2012 Mini will max out at 16GB of RAM
 - They seem to work with reasonable stability (or so I am told)
 - Can legally run Mac OS VMs
 - Uses very little power
 - Very quiet
 - Not on HCL
- Current Mac Mini
 - Not upgradeable at all
 - Max of 8GB of RAM
 - Not on HCL





Click here to **Read** Important Support Information.

Server Device and Model Information

The detailed lists show actual vendor devices that are either physically tested or are similar to the devices tested by VMware or VMware partners. VMware provides support only for the devices that are listed in this document

Click on the 'Model' to view more details and to subscribe to RSS feeds.

Bookmark | Print | Export to CSV

Search Results: Your search for " Systems / Servers " returned one result. Back to Top Turn Off Auto Scroll						Display: 10 💲
Partner Name	Model		CPU Series Supported Releases			
RadiSys	COM Express CEQM87	Intel i7-4700-EQ Series	ESXi	5.5 U2	5.5 U1	

Click here to **Read** Important Support Information.

Server Device and Model Information

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Bookmark | Print | Export to CSV

						Booking	inc i i i i i i i i	Export to Ca
Search Results: Your search for " System	ns / Servers " returned 11 results .	Back to Top Turn Off Auto	Scroll				Displa	ay: 20 🗘
Partner Name	Model	CPU Series	Supported Re	eleases				
Acer Inc.	Altos R320 F3	Intel Xeon E3-1200-v3 Series	ESXi	+	5.5 U2	5.5 U1	5.5	5.1 U3
Action	ACTINA SOLAR 100 X6	Intel Xeon E3-1200-v3 Series	ESXi	+	5.5 U2	5.5 U1	5.5	5.1 U3
Advantech Corporation	ASMB-584	Intel Xeon E3-1200-v3 Series	ESXi		5.5 U2			
Advantech Corporation	ASMB-782	Intel Xeon E3-1200-v2 Series	ESXi		5.5 U2			
Advantech Corporation	ASMB-784	Intel Xeon E3-1200-v3 Series	ESXi		5.5 U2			
AMAX Information Technologies	X-11305	Intel Xeon E3-1200-v3 Series	ESXi	+	5.5 U2	5.5 U1	5.5	5.1 U3
Intel	S1200V3RPL	Intel Xeon E3-1200-v3 Series	ESXi	+	5.5 U2	5.5 U1	5.5	5.1 U3
Maguay	QuickServer RP	Intel Xeon E3-1200-v3 Series	ESXi	+	5.5 U2	5.5 U1	5.5	5.1 U3
Quanmax AG	Maxdata Platinum 100 I M11	Intel Xeon E3-1200-v3 Series	ESXi	±	5.5 U2	5.5 U1	5.5	5.1 U3
Quanmax AG	Maxdata Platinum 200 I M11	Intel Xeon E3-1200-v3 Series	ESXi	±	5.5 U2	5.5 U1	5.5	5.1 U3
Tyan Computer	S5532	Intel Xeon E3-1200-v3 Series	ESXi		5.5 U2	5.5 U1		



Intel S1200V3RPL



Hardware Pricing:

(amazon.com)

- \$225 Motherboard
- \$250 QC 3.1Ghz E3 Xeon CPU
- \$400 32GB (8x4) RAM
- \$30 Case
- \$45 Low end Antec 400W PS

Total: \$860

Dell R710



HP DL380 G6



Enterprise Hosts

HP DL380 G6

- 2U Rack Mount
- •Xeon 5500/5600 CPUs
- •12X DIMM Slots (192GB)
- •4x PCI-E Slots
 - Optional 16x Slot
- •HP iLO
- vSphere HCL

Dell R710

- 2U Rack Mount
- Xeon 5500/5600 CPUs
- •18X DIMM Slots (288GB)
- •4x PCI-E Slots
 - Optional 16x Slot
- Dell iDRAC6
- vSphere HCL



DELL POWEREDGE R710 DUAL 2.4 QC 32GB (8X4GB) PERC 6I RPS IDRAC SFF

Item condition: Seller refurbished

"MACHINE IS USED. MINIMAL WEAR UPDATED BIO'S TESTED AND CLEANED"

Ended: Nov 11, 2014, 10:38PM

0 available / 2 sold Quantity:

Price: US \$435.00

Join eBay Bucks and earn % back on this item. See conditions

Shipping: \$35.00 Standard Shipping | See details

Item location: United States

Ships to: United States See exclusions

Delivery: Estimated within 6 business days @

Payments: PayPal VISA

Credit Cards processed by PayPal

See details

Returns: 30 days money back, buyer pays return shipping | See details

Guarantee: COAY MONEY BACK GUARANTEE | See details

Get the item you ordered or get your money back. Covers your purchase price and original shipping.

Mouse over image to zoom

\$ Have one to sell? Sell now

Description

Shipping and payments

Seller assumes all responsibility for this listing.

Item specifics

Condition: Seller refurbished: 2

Seller Notes: "MACHINE IS USED. MINIMAL WEAR UPDATED BIO'S TESTED AND CLEANED"

Product Line: PowerEdge

it-gear

Visit my eBay store



Sign up for newsletter

Search Store

Print | Report i

× f

Seller information

it-gear (2655 🛊) 🗪

99.8% Positive feedback

+ Follow this seller

Visit store: it-gear

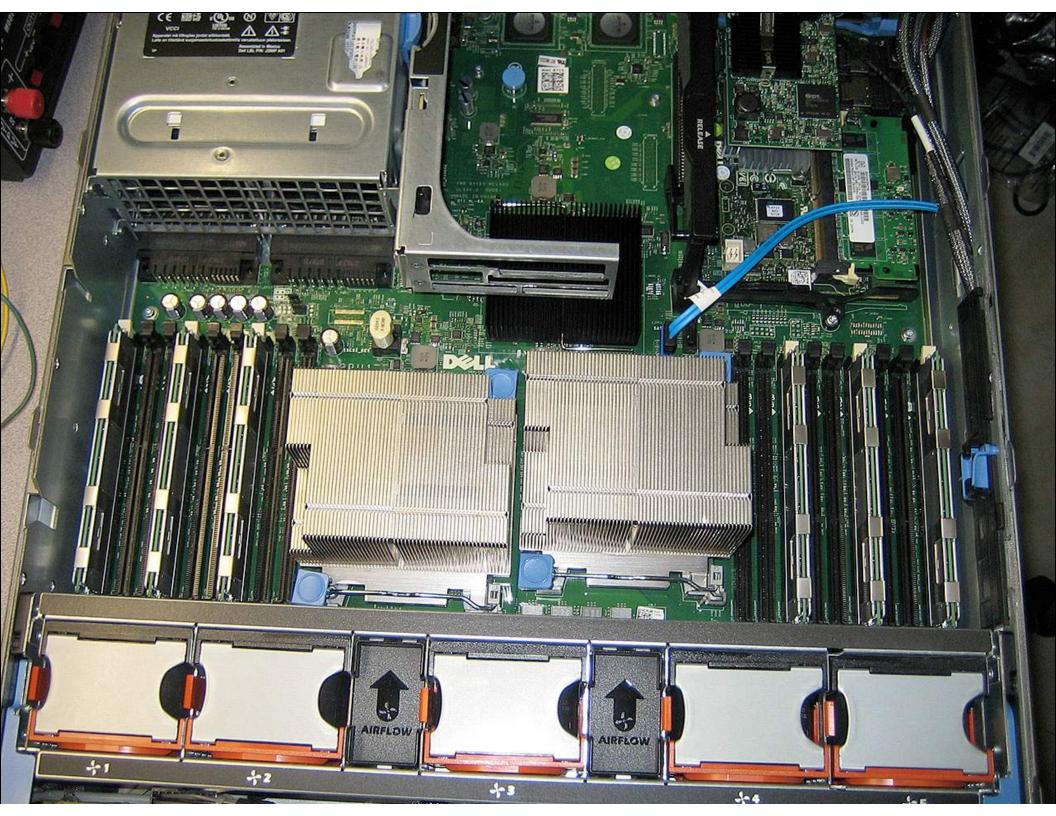
See other items

eBay item number: 20121258898









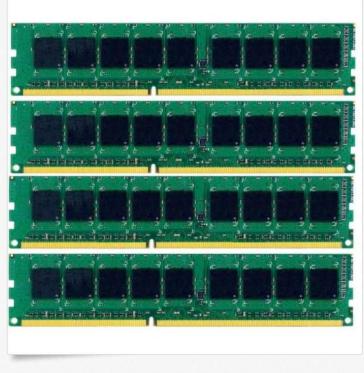


Back to My eBay | Listed in category: Computers/Tablets & Networking > Enterprise Networking, Server > Server Components > Server Memory (RAM)

You have purchased more than one of these items. | View purchase history

Search...

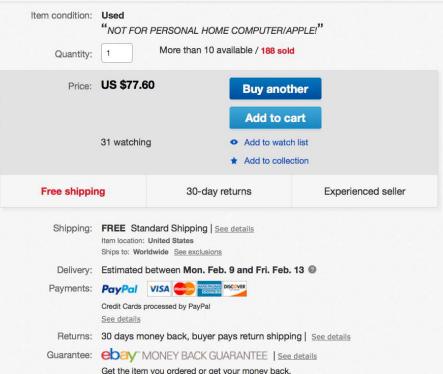
The listing below has been updated by the seller. You can see the items you purchased from the Purchase history.



Mouse over image to zoom

\$ Have one to sell? Sell now

NOT FOR PC/MAC! 16GB (4x4GB) PC3-10600 ECC REGISTERED for Dell PowerEdge R710









People who viewed this item also viewed @



NOT FOR PC/MAC! 8GB (2x4GB) PC3-10600...

39.58

Buy It Now Free shipping



NOT FOR PC/MAC! 4GB Module PC3-10600...

\$22.99

Buy It Now Free shipping



NOT FOR PC/MAC! 16GB (4x4GB)...

\$77.60

Buy It Now Free shipping



Covers your purchase price and original shipping.

NOT FOR PC/MAC! 16GB (4x4GB)...

\$77.60

Buy It Now Free shipping



NOT FOR PC/MAC! 16GB 4X4GB Dell..

\$75.90

Buy It Now Free shipping



NOT FOR PC/ 2X4GB PC3-1

Feedback on our suggestion

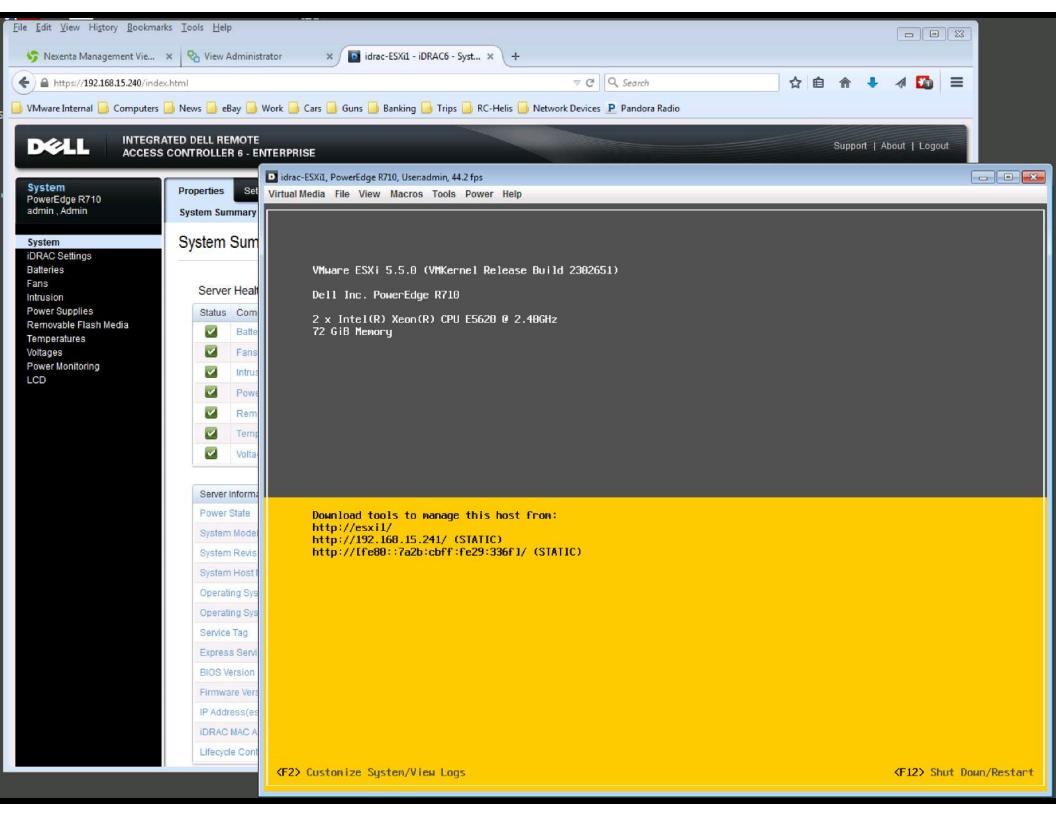
\$39.80

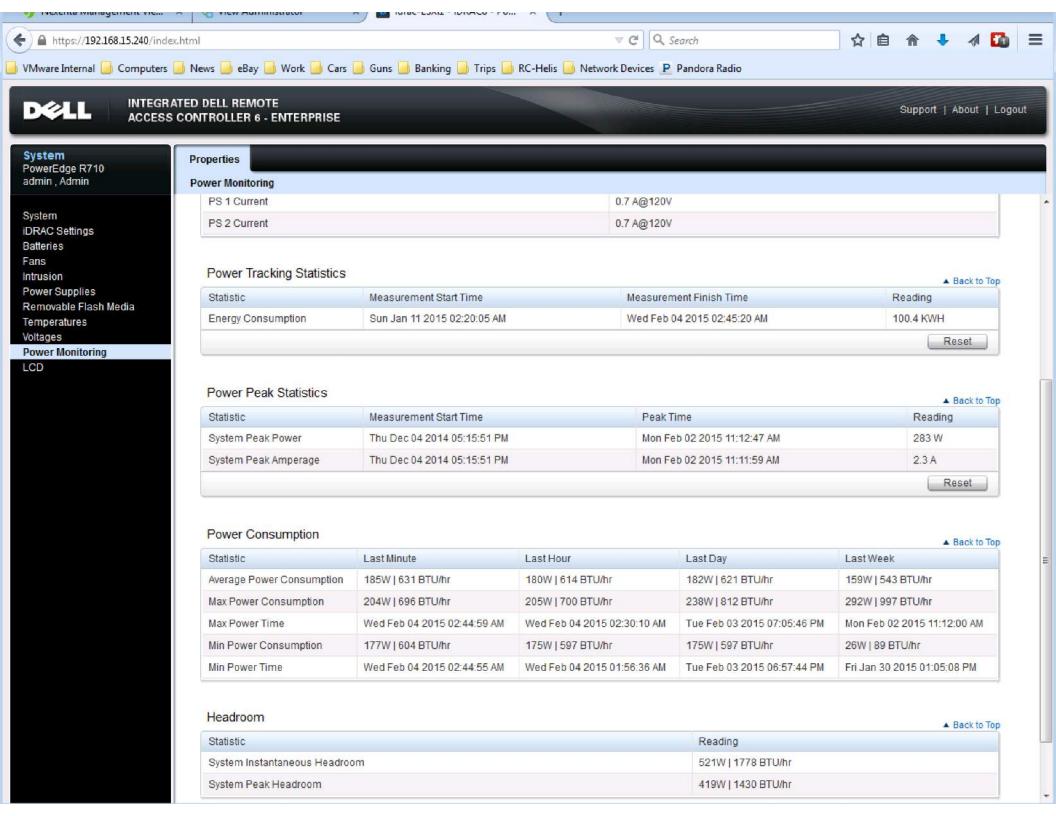
Buy It Now Free shipping

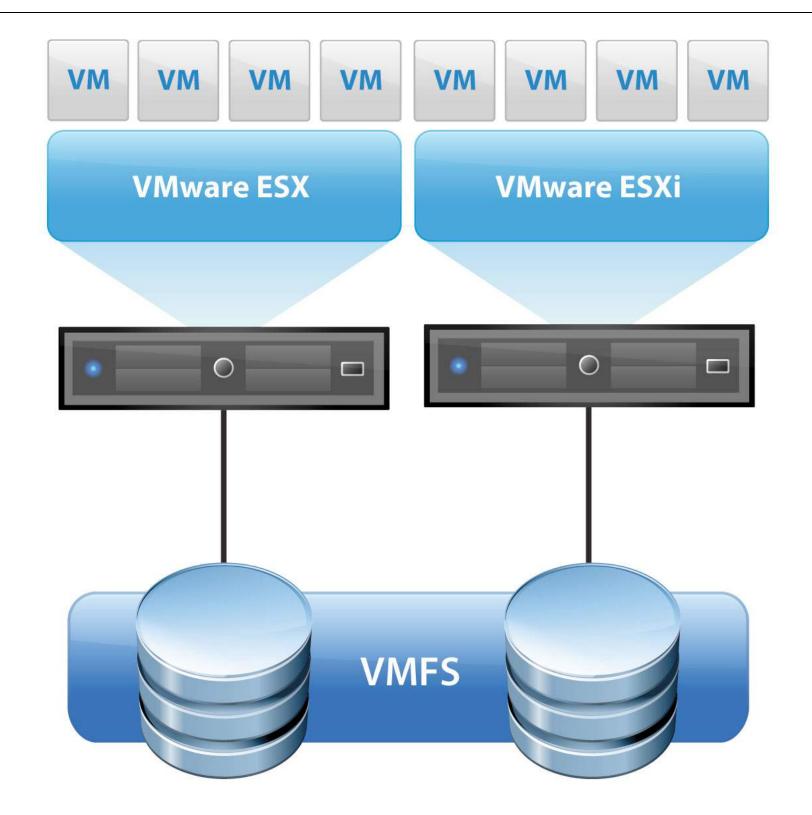
Description

Shipping and payments

Print | Report item







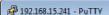
Virtual Media

Record

Macro

Options User List Capture Exit

VMware ESXi 5.5.0 [Releasebuild-1331820 x86 64] #PF Exception 14 in world 36019:vmm2:Storage IP 0x41802f210c57 addr 0x0 PTEs:0x0; cr0=0x80050031 cr2=0x0 cr3=0x156e65000 cr4=0x2668 frame=0x4123b2cdd020 ip=0x41802f210c57 err=9 rflags=0x10212 rax=0x0 rbx=0xe5 rcx=0x2 rdi=0x410867b45a40 r8=0x1 r9=0x1 r10=0x41110c9d1080 r11=0x4 r12=0x41000869cef4 r13=0x1 r14=0x4123b2cdd3d8 r15=0x4123b2cdd42c *PCPU2:36019/vmm2:Storage2 PCPU 0: VVVVVVV Code start: 0x41802f000000 VMK uptime: 0:00:12:04.496 0x4123b2cdd4c8:[0x41802f210c57]E1000PollRxRingQvmkernel#nover+0xb73 stack: 0x1 0x4123b2cdd538:[0x41802f213bb5]E1000DevRxQvmkernel#nover+0x3a9 stack: 0x4123b2cdd578 0x4123b2cdd5d8:[0x41802f192164]IOChain ResumeOvmkernel#nover+0x174 stack: 0x4305d 0x4123b2cdd628:[0x41802f179e22]PortOutputOvmkernel#n<u>over+0x136_stack: 0x41087938e780</u> 0x4123b2cdd688:[0x41802f726f58]EtherswitchForwardLeafPortsQuick@<None>#<None>+0x4c stack: 0x4123b2c 0x4123b2cdd8a8:[0x41802f727f51]EtherswitchPortDispatch@<None>#<None>+0xe25 stack: 0x412300000014 0x4123b2cdd918:[0x41802f17a7d2]Port InputResume@vmkernel#nover+0x192 stack: 0x0 0x4123b2cdd968:[0x41802f17ba39]Port Input Committed@vmkernel#nover+0x25 stack: 0x2bcab735 0x4123b2cdd9f8:[0x41802f1cad25]Vmxnet3VMKDevTQDoTxQvmkernel#nover+0x28d stack: 0x0 0x4123b2cdda68:[0x41802f1cec13]Vmxnet3VMKDev AsyncTx@vmkernel#nover+0xa3 stack: 0x4123b2cddbe8 0x4123b2cddad8:[0x41802f1add70]NetWorldletPerVMCBOvmkernel#nover+0x218 stack: 0x0 0x4123b2cddc38:[0x41802f0eae77]WorldletProcessQueueQvmkernel#nover+0xcf stack: 0x4123b2cddc78 0x4123b2cddc78:[0x41802f0eb93c]WorldletBHHandlerQvmkernel#nover+0x54 stack: 0x1ab2bcd8a1a 0x4123b2cddce8:[0x41802f02e5b9]BH Check@vmkernel#nover+0xc9 stack: 0x410851630200 0x4123b2cddd58:[0x41802f24e72d]CpuSchedIdleLoopIntQvmkernel#nover+0x39<u>1 stack: 0x412300000002</u> 0x4123b2cddeb8:[0x41802f254930]CpuSchedDispatch@vmkernel#nover+0x1630 stack: 0x411116ae04c0 0x4123b2cddf28:[0x41802f255c65]CpuSchedWait@vmkernel#nover+0x245 stack: 0xffffffff00000001 0x4123b2cddf98:[0x41802f2561cb]CpuSched VcpuHaltQvmkernel#nover+0x197 stack: 0x418000000000 0x4123b2cddfe8:[0x41802f0cde30]VMMVMKCall CallQvmkernel#nover+0x48c stack: 0x0 0x41802f0cd484:[0xfffffffffc223baa] vmk versionInfo str@<None>#<None>+0xcc3a578a stack: 0x0 base fs=0x0 qs=0x418040800000 Kqs=0x0 Coredump to disk. Slot 1 of 1. Finalized dump header (12/12) DiskDump: Successful. Debugger waiting(world 36019) -- no port for remote debugger. "Escape" for local debugger.



value of 20231 microseconds to 430928 microseconds.

2015-01-29T01:18:18.215Z cpu0:32797)WARNING: ScsiDeviceI0: 1223: Device t10.94544500000000003160CF76E9DAD80719EEDFCF79274645 performance has deteriorated. I/O latency increased from average value of 20231 microseconds to 965255 microseconds.

2015-01-29T01:18:18.312Z cpu6:32803)ScsiDeviceIO: 1203: Device t10.94544500000000003160CF76E9DAD80719EEDFCF79274645 performance has improved. I/O latency reduced from 965255 microseconds to 188672 microseconds.

2015-01-29T01:18:20.020Z cpu10:1017870)World: 14302: VC opID hostd-5dc0 maps to vmkernel opID bf22b343

2015-01-29T01:18:26.934Z cpu1:32798)ScsiDeviceIO: 1203: Device t10.94544500000000003160CF76E9DAD80719EEDFCF79274645 performance has improved. I/O latency reduced from 188672 microseconds to 40361 microseconds.

2015-01-29T01:18:35.8722 cpu5:32802)WARNING: ScsiDeviceI0: 1223: Device t10.945445000000000003160CF76E9DAD80719EEDFCF79274645 performance has deteriorated. I/O latency increased from average value of 20237 microseconds to 411204 microseconds.

2015-01-29T01:18:35.876Z cpu12:32809)WARNING: ScsiDeviceI0: 1223: Device t10.94544500000000003160CF76E9DAD80719EEDFCF79274645 performance has deteriorated. I/O latency increased from average value of 20237 microseconds to 866292 microseconds.

2015-01-29T01:18:35.885Z cpu0:32797)WARNING: ScsiDeviceIO: 1223: Device t10.94544500000000003160CF76E9DAD80719EEDFCF79274645 performance has deteriorated. I/O latency increased from average value of 20239 microseconds to 1790295 microseconds.
2015-01-29T01:18:35.929Z cpu0:32797)ScsiDeviceIO: 1203: Device t10.9454450000000003160CF76E9DAD80719EEDFCF79274645 performance has improved. I/O latency reduced from 1790295 microseconds to

354137 microseconds.

2015-01-29T01:18:37.115Z cpu10:32807)ScsiDeviceIO: 1203: Device ti0.9454450000000003160CF76E9DAD80719EEDFCF79274645 performance has improved. I/O latency reduced from 354137 microseconds to

70138 microseconds. 2015-01-29T01:18:40.020Z cpu3:1017298)World: 14302: VC opID hostd-4a68 maps to vmkernel opID d3ab44c2

2015-01-29T01:18:46.064Z cpu11:32808)ScsiDeviceIO: 1203: Device t10.945445000000000003160CF76E9DAD80719EEDFCF79274645 performance has improved. I/O latency reduced from 70138 microseconds to 39215 microseconds.

2015-01-29T01:19:00.020Z cpu8:1017139)World: 14302: VC opID hostd-42e4 maps to vmkernel opID 81cf7823

2015-01-29T01:19:00.956Z cpu1:32798)WARNING: ScsiDeviceI0: 1223: Device t10.94544500000000003160CF76E9DAD80719EEDFCF79274645 performance has deteriorated. I/O latency increased from average value of 20247 microseconds to 482250 microseconds.

2015-01-29T01:19:00.960Z cpu1:32798)WARNING: ScsiDeviceIO: 1223: Device t10.94544500000000003160CF76E9DAD80719EEDFCF79274645 performance has deteriorated. I/O latency increased from average value of 20247 microseconds to 1033394 microseconds.

2015-01-29T01:19:01.015Z cpu2:1017298)World: 14302: VC opID hostd-6997 maps to vmkernel opID 84d9dae9

2015-01-29T01:19:01.102Z cpu1:32798)ScsiDeviceIO: 1203: Device t10.945445000000000003160CF76E9DAD80719EEDFCF79274645 performance has improved. I/O latency reduced from 1033394 microseconds to 202275 microseconds.

2015-01-29T01:19:02.582Z cpu13:1017916)ScsiDeviceIO: 1203: Device t10.94544500000000003160CF76E9DAD80719EEDFCF79274645 performance has improved. I/O latency reduced from 202275 microseconds to 40081 microseconds.

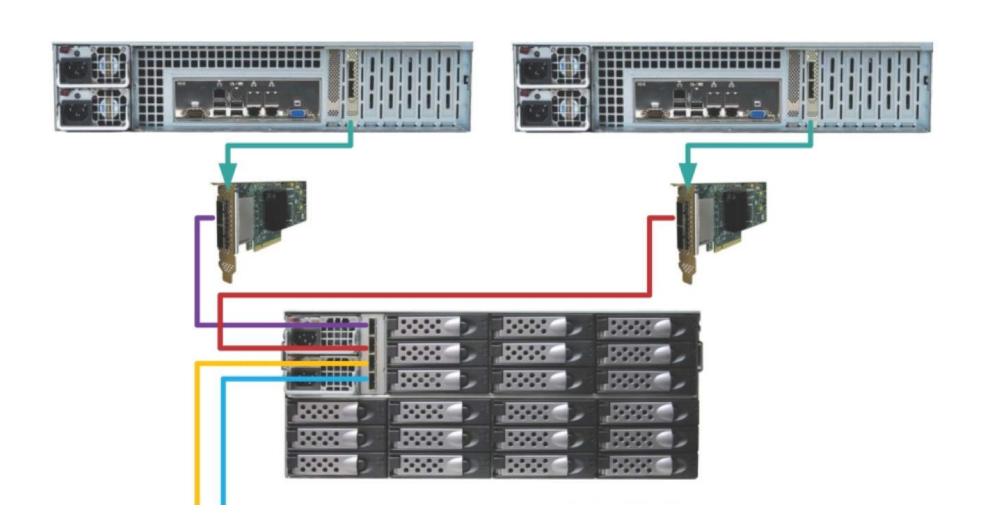
Synology®

DiskStation DS415+

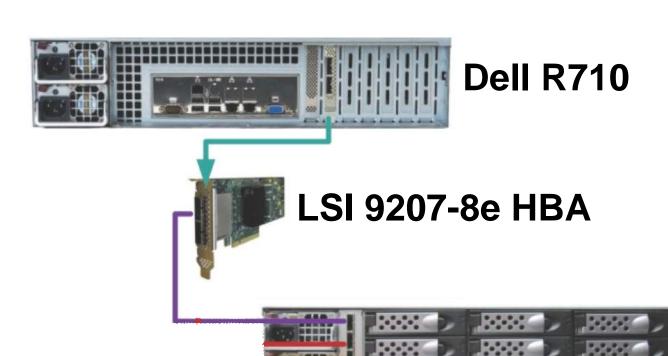












16 Bay JBOD

Slow Hard Drive Storage (RAID-Z2)

Faster SSD Storage (L2ARC)

Fast RAM Storage (ARC)



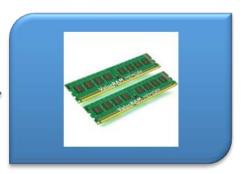
Caching

Automatic with OS/ File system



Caching

Automatic with OS/ File system





Community Edition Features

- 100% Free
- ZFS
- Thin Provisioning
- Replication
- Snapshots
- VAAI
- Multi-Protocol
 - NFS
 - iSCSI
 - Fibre Channel*

```
0 gsb: [[[[[[]]]]]]] ds: _____
          es:
         trp:
                                                                     1c3
                            e err:
                                                  0 rip: fffffffffffe1dc24
          cs:
                           30 rf1:
                                             10282 rsp: ffffff003d6228e0
          55:
                            38
ffffff003d6226d0 unix:die+df ()
ffffff003d6227e0 unix:trap+db3 ()
ffffff003d6227f0 unix:cmntrap+e6 ()
ffffff003d622900 ahci:ahci_add_doneq+14 ()
ffffff003d6229a0 ahci:ahci_mop_commands+318 ()
ffffff003d622a20 ahci:ahci_timeout_pkts+1cb ()
ffffff003d622ab0 ahci:ahci_watchdog_handler+16c ()
ffffff003d622b00 genunix:callout_list_expire+98 ()
fffffff003d622b30 genunix:callout_expire+3b ()
ffffff003d622b60 genunix:callout_execute+20 ()
fffffff003d622c20 genunix:taskq_thread+2d0 ()
ffffff003d622c30 unix:thread_start+8 ()
syncing file systems... done
dumping to /dev/zvol/dsk/syspool/dump, offset 65536, content: kernel + curproc
 0:54 100% done
100% done: 1026116 pages dumped, dump succeeded
rebooting...
```



Community Edition Limits

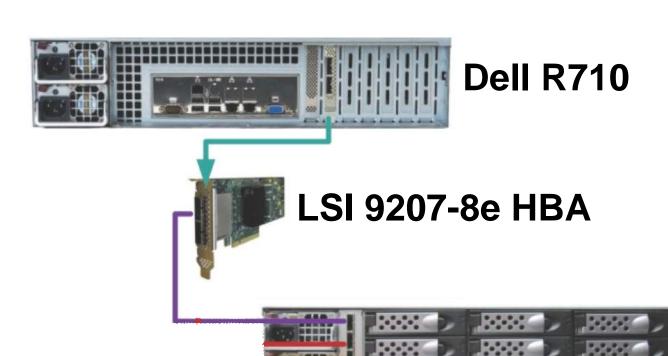
- Non-Prod Use ONLY
- 18TB Limit
- No Support



Community Edition HCL?

- R710s Work
- All Qlogic 4G & 8G Fibre Channel HBAs Work
- LSI 9207-8e HBAs ONLY
 - Must be in IT mode
- Some SAS Expanders Work
- Any hard drive on the LSI 9207-8e HCL should work*
 - Use ONLY 7200 RPM SAS drives
 - SATA SSDs are usually OK
 - Samsung 850 PRO & EVO
 - Intel 320 160GB





16 Bay JBOD



Mouse over image to zoom











\$ Have one to sell? Sell now

NEW Dell TYVGC LSI SAS 9207-8e 8-Channel 6Gb/s SAS PCIe 3.0 Host Bus Adapter

Item condition: New

Ended: Jan 10, 2015, 4:25PM

Quantity:

More than 10 available / 3 sold

Price: US \$179.95

Join eBay Bucks and earn % back on this item. See conditions

Shipping: FREE Standard Shipping | See details

Item location: Houston, Texas, United States

Ships to: Worldwide See exclusions

Delivery: Estimated within 6 business days @

Payments: PayPal VISA

Credit Cards processed by PayPal

See details

Returns: 14 days money back or item exchange, buyer pays return shipping | See details

Guarantee: COSY MONEY BACK GUARANTEE | See details

Get the item you ordered or get your money back. Covers your purchase price and original shipping.

Seller information rakicomputers (47953 *) 99.4% Positive feedback

+ Follow this seller

Visit store: Rakicomputers

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Description

Shipping and payments

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🖂 f 🗾 🛭

Seller inform

mrrackables (48

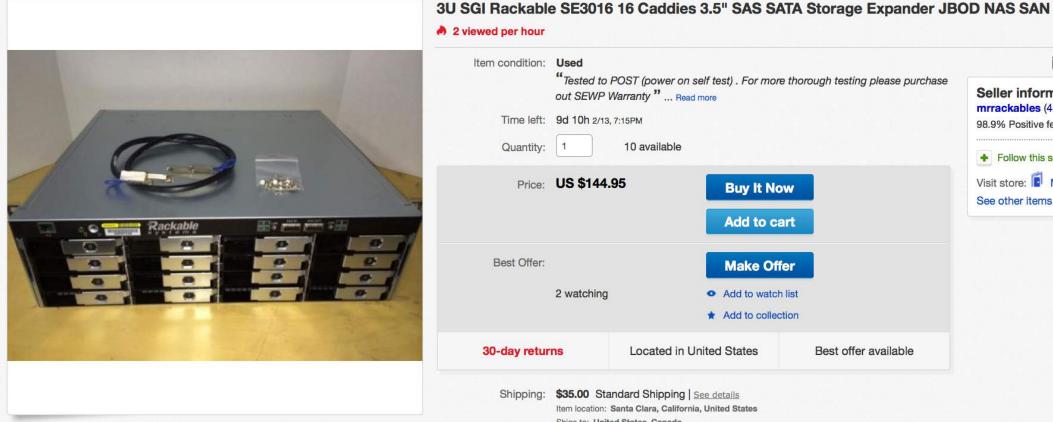
98.9% Positive fe

+ Follow this se Visit store:

See other items



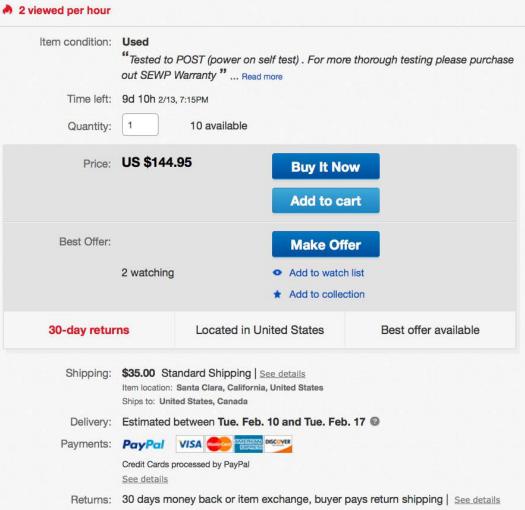
Back to search results | Listed in category: Computers/Tablets & Networking > Enterprise Networking, Servers > Servers, Clients & Terminals > Servers



Mouse over image to zoom

\$ Have one to sell?

Sell now



Guarantee: ebay MONEY BACK GUARANTEE | See details Get the item you ordered or get your money back. Covers your purchase price and original shipping.



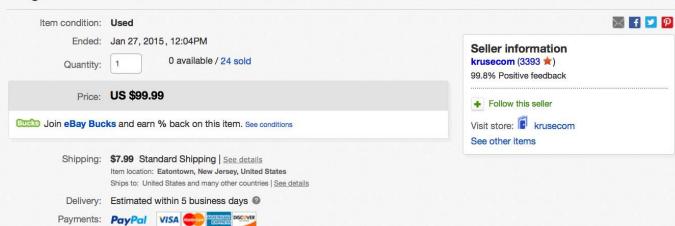
Seagate 2TB Constallation ES 3.5" SAS 64MB 6Gb/s Hard Drive ST2000NM0001

Returns: 30 days money back or item exchange, buyer pays return shipping | See details

Credit Cards processed by PayPal

Guarantee: ebay MONEY BACK GUARANTEE | See details Get the item you ordered or get your money back. Covers your purchase price and original shipping.

See details

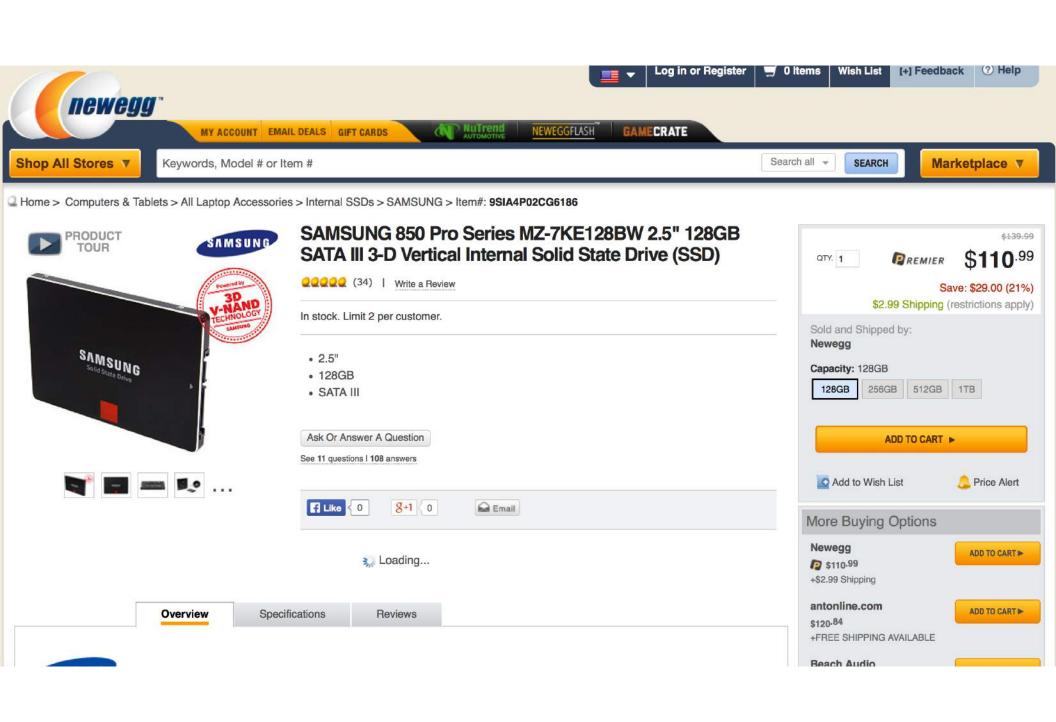


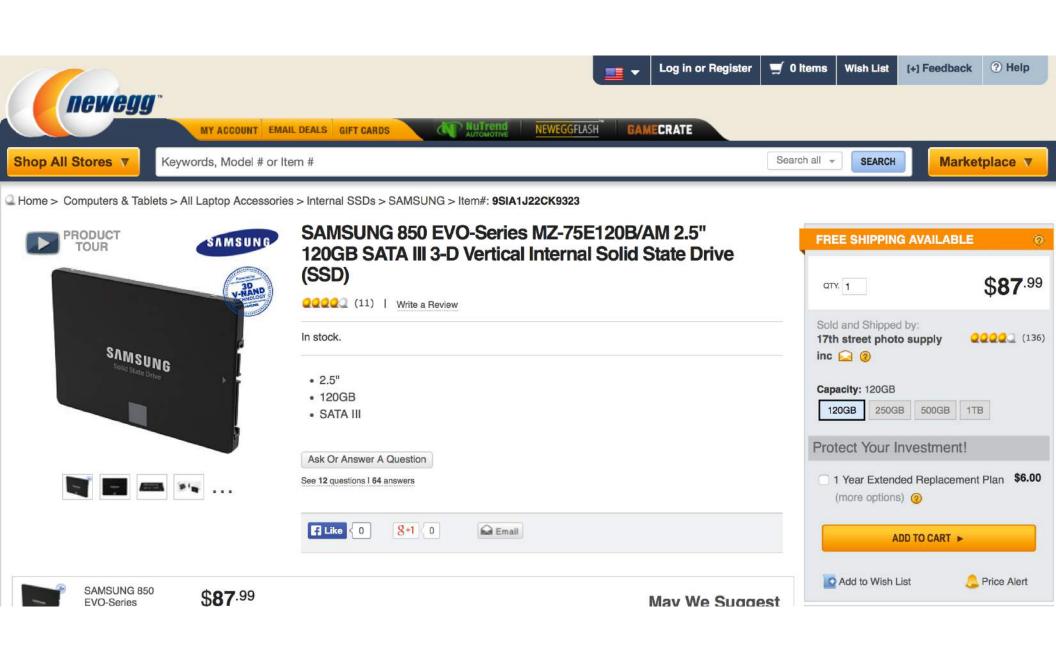
\$ Have one to sell? Sell now

Description

Shipping and payments

Print | Report item







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Hello, Thoma Your Acco

Computers

Brands **Best Sellers** Laptops & Tablets

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Hard Drives & Storage

Computer Accessories

Tablet Accessories

PC Components

PC Gaming

Go

Deals All Elec

Electronics > Computers & Accessories > Cables & Accessories > Hard Drive Enclosures



You purchased this item on December 18, 2014.

View this order





Click to open expanded view

Newer Technology AdaptaDrive 2.5" to 3.5" Drive Converter Bracket.

by NewerTech

201 customer reviews | 5 answered questions

Price: \$14.50 **Prime**

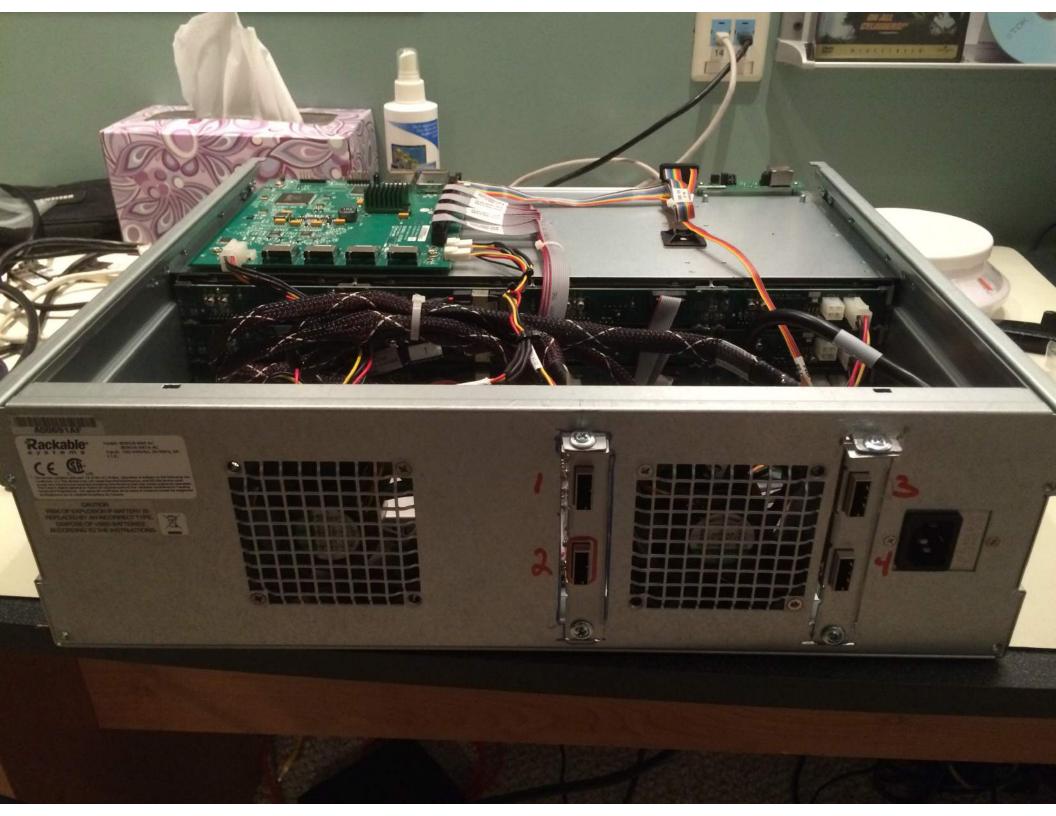
In Stock.

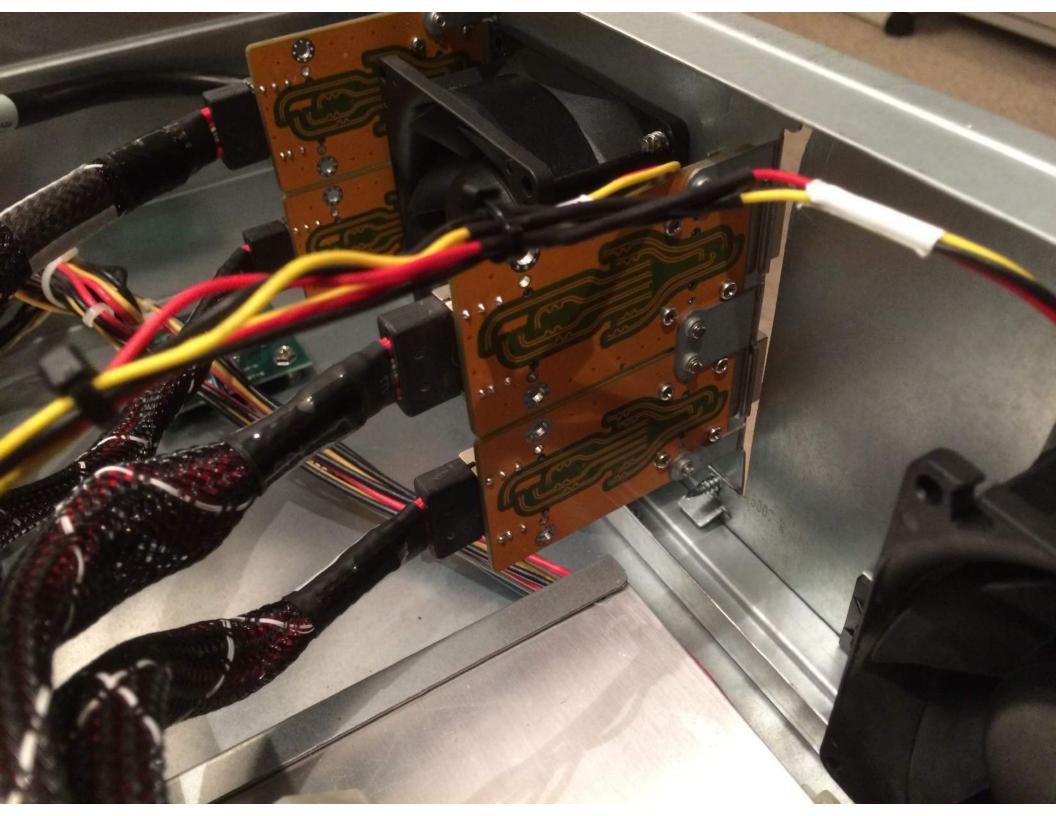
Sold by Newer Galaxy Distribution Company, LLC and Fulfilled by Amazon. Gift-wrap available.

Want it Thursday, Feb. 5? Order within 1 hr 41 mins and choose Two-Day Shipping at checkout. Details

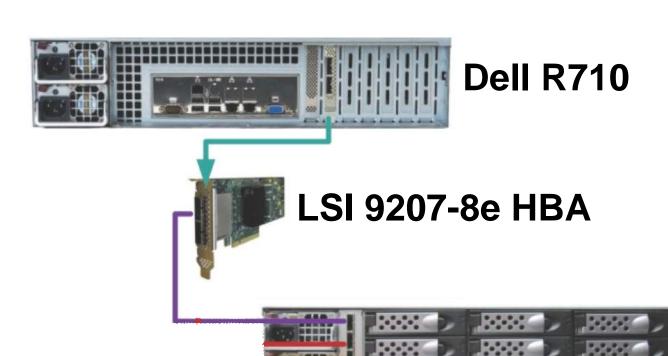
- Compatible with any 2.5-Inch SATA hard drive or Solid State drive
- Fits all 3.5-Inch SATA drive bays
- Includes compatibility with backplane trays such as those found in Apple Mac Pro models
- Fully SATA 3.0 Revision (6Gb/s) compatible and Backward compatible with SATA 2.0 Revision (3Gb/s) and 1.0 Revision (1.5Gb/s) drives
- · Open design allows for full air flow for proper drive cooling, Solid aluminum frame design

3 new from \$14.50



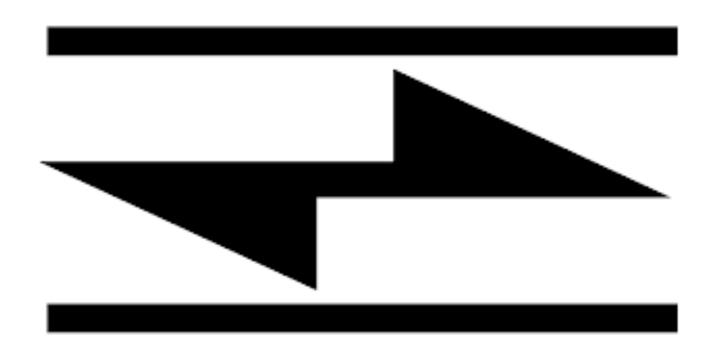






16 Bay JBOD

4.25Gb/s Fibre Channel



M f 💟 👂 | Add to watch list



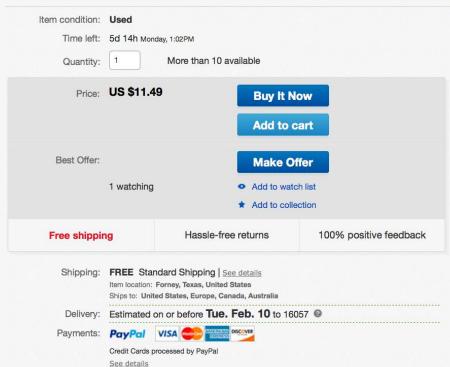
Back to search results | Listed in category: Computers/Tablets & Networking > Computer Components & Parts > Interface, Add-On Cards > Internal Network Cards



Mouse over image to zoom

\$ Have one to sell? Sell now

DELL QLogic Dual Port Fiber Channel PCI-E QLE2462-DELL PX2510401 DH226





New 2-yr activation reg'd.

Seller information

donedealitsolutionslic (92 *)

Feedback on our suggestions

People who viewed this item also viewed @



DELL QLogic Dual Port Fiber Channel PCI-E..

\$14.95

Buy It Now



Dell DH226 0DH226 QLogic QLE2462 Du...

\$11.95

Buy It Now



Dell QLogic DH226 QLE2462...

Returns: Hassle-free returns | Learn more @

Guarantee: COOY MONEY BACK GUARANTEE | See details Get the item you ordered or get your money back. Covers your purchase price and original shipping.

\$55.00

Buy It Now Free shipping



14 days money back or item exchange, you pay return shipping

Dell Qlogic QLE2462 Dual Port 4GB PCI-E ...

\$24.99

Buy It Now



DELL QLOGIC KC184 DH226 QLE2462 4...

\$49.00

Buy It Now Free shipping

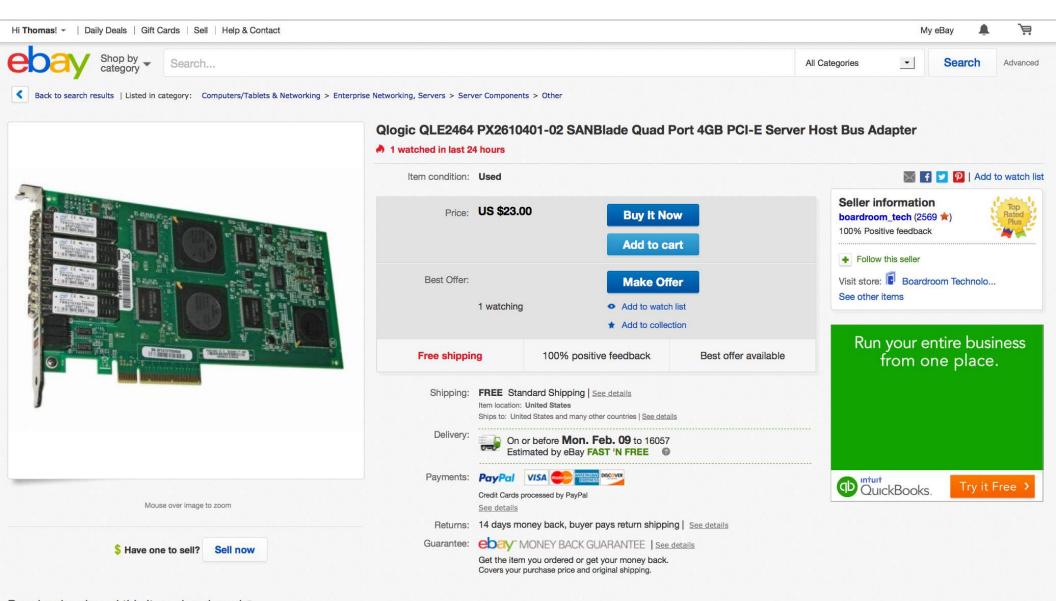


Dell QLogic QLE PCIe 4GB Dual-

\$19.99

Buy It Now

Description **Shipping and payments** Print | Report item



People who viewed this item also viewed @

Feedback on our suggestions

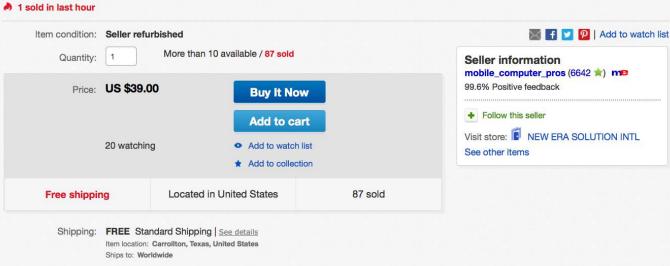
Sack to search results | Listed in category: Computers/Tablets & Networking > Enterprise Networking, Servers > Server Components > Disk Controllers, RAID Cards



Mouse over image to zoom



\$ Have one to sell? Sell now



Intel Pro/1000 Dual PORT GIGABIT ETHERNET PCIe NIC Card EXPI9402PT

Delivery: Estimated between Thu. Feb. 5 and Thu. Feb. 12 Use One-day Shipping to get it by Feb. 5

Guarantee: ebay MONEY BACK GUARANTEE | See details Get the item you ordered or get your money back. Covers your purchase price and original shipping.

Returns: 14 days money back or item exchange, buyer pays return shipping | See details

Credit Cards processed by PayPal

Payments: PayPal VISA

See details

ë

Advanced

Fibre Channel Costs

- 2x Dual Port HBA @ \$11.50 \$23.00
- 1x Quad Port HBA @ \$23.00
- 4x LC to LC Fiber Cable @ \$9.98

Grand Total: \$85.92

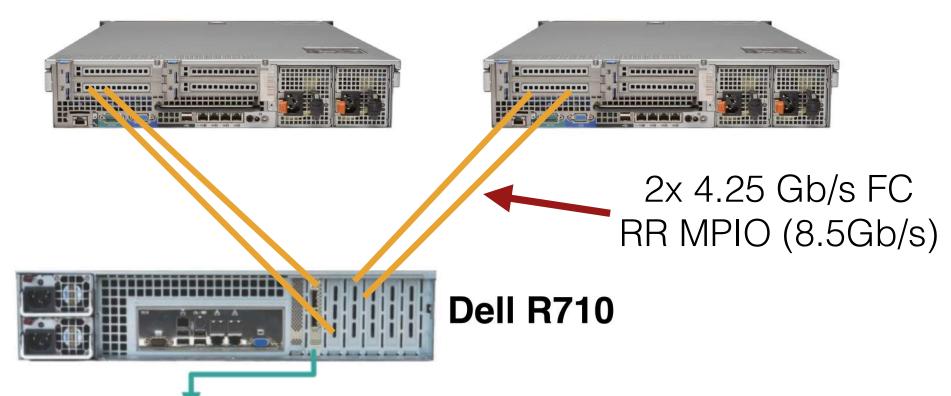


Enable Fibre Channel

SSH into the box and run these commands:

update_drv -d -i 'pciex1077,2432' qlc update_drv -a -i 'pciex1077,2432' qlt

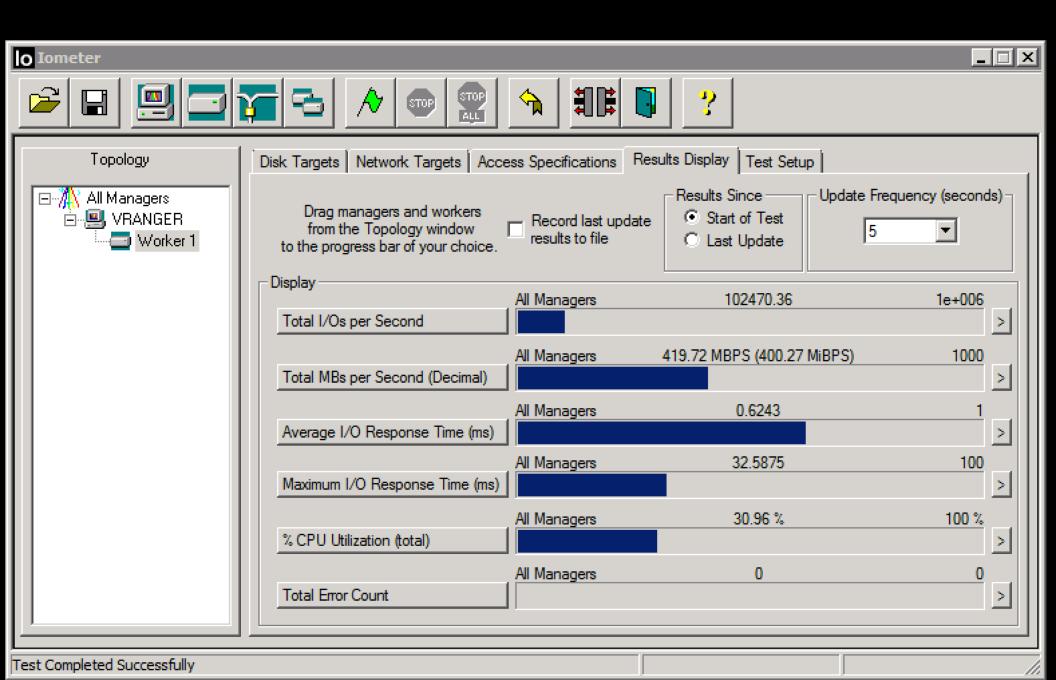
ESXi 1 ESXi 2

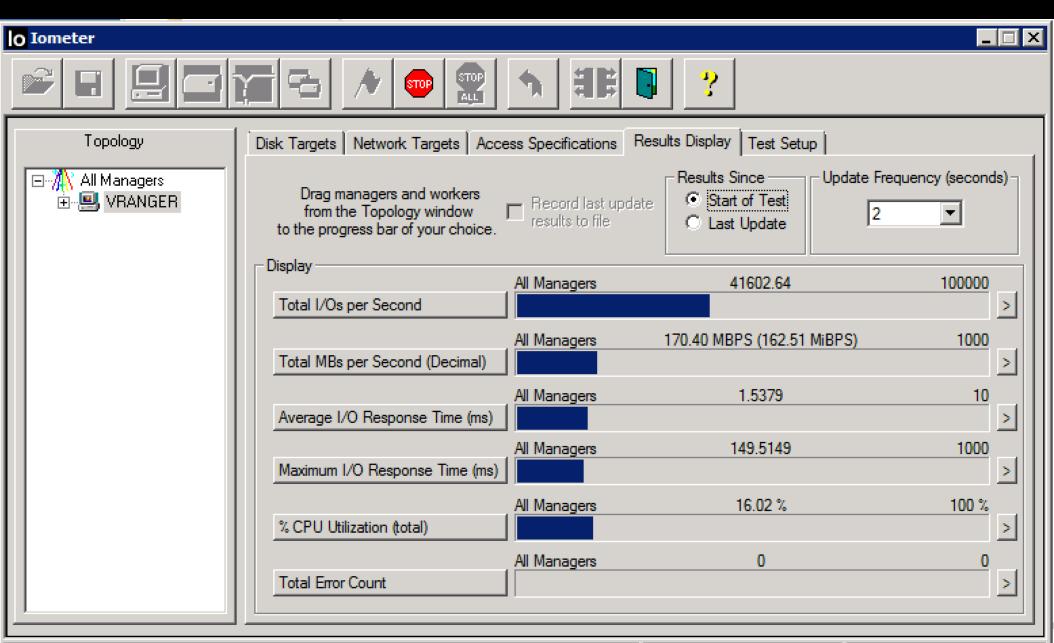


LSI 9207-8e HBA



16 Bay JBOD





TB - VMware File Server Test

Run remaining: 30 sec

Run 1 of 1

I/O, KB/Sec



Disk I/O, KB/Sec



tly gauges update every 5 seconds. You can change this interval here

Value

Thu Jan 08 22:20:53 2015 EST

US/Eastern

Thu Jan 08 22:01:13 2015 EST

0.81, 0.88, 0.67

40-0-45

40-0-36

40-0-43

4.0.3

49139MB

34746MB

NexentaStor CE Cost

Hardware Pricing:

(eBay)

- \$575 R710 w/72GB RAM
- \$130 LSI 9207-8e HBA
- \$175 JBOD
- \$520 7200 RPM Disks
- \$300 ZIL & L2ARC SSDs
- \$86 Fibre Channel Solution (all)

NexentaStor CE Cost

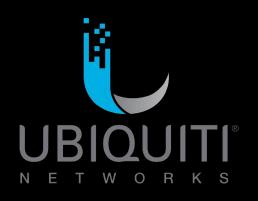
Hardware Pricing:

(eBay)

- \$575 R710 w/72GB RAM
- \$130 LSI 9207-8e HBA
- \$175 JBOD
- \$520 7200 RPM Disks
- \$300 ZIL & L2ARC SSDs
- \$86 Fibre Channel Solution (all)

Total: \$1614

What abut vSAN?







NETGEAR®

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Rack to coarch result

Back to search results | Listed in category: Computers/Tablets & Networking > Enterprise Networking, Servers > Switches & Hubs > Network Switches



Mouse over image to zoom



\$ Have one to sell?

Sell now

NETGEAR PROSAFE 24 PORT GSM7328S L3 GIGABIT ETHERNET NETWORK SWI

Item condition: For parts or not working

Sale ends in: 01d 21h 56m

Was: C\$149.89 3

You save: C \$74.94 (50% off)

Price: C \$74.95

Approximately US \$59.63

Buy It Now

Make Offer

Best Offer:

2 watching

Add to watch list

* Add to collection

50% savings

Experienced seller

Shipping: C \$33.00 (approx. US \$26.26) Standard Int'l Shipping | See details

See details about international shipping here.
Item location: Calgary, Alberta, Canada

Ships to: Canada, United States See exclusions

Delivery: Estimated between Thu. Feb. 19 and Thu. Feb. 26

Seller ships within 3 days after receiving cleared payment . 2

Payments: PayPal VISA CONTROL OF THE PAYMENTS:

Credit Cards processed by PayPal

See details

Returns: Seller does not offer returns. You are covered by the eBay Money Back

Guarantee if you received an item that is not as described in the listing.

Guarantee: COAY MONEY BACK GUARANTEE | See details

Get the item you ordered or get your money back. Covers your purchase price and original shipping.

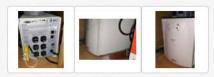
Power



Back to search results | Listed in category: Computers/Tablets & Networking > Power Protection, Distribution > Uninterruptible Power Supplies



Mouse over image to zoom



\$ Have one to sell?



APC Back-Ups PRO 1100 Battery Back-Up Power Supply BP1100 BP1000

Item condition: Used

Time left: 1 day Friday, 11:00PM

Starting bid: US \$5.00

*

Place bid

[0 bids]

Enter US \$5.00 or more

Add to watch list

* Add to collection

100% positive feedback

Shipping: \$40.00 Economy Shipping | See details

Item location: Atlanta, Georgia, United States

Ships to: United States and many other countries | See details

Delivery: Estimated between Sat. Feb. 14 and Mon. Feb. 23 @

Payments: PayPal VISA CONTRACTOR OF THE PAYMENT OF

Credit Cards processed by PayPal

See details

Returns: Seller does not offer returns. You are covered by the eBay Money Back

Guarantee if you received an item that is not as described in the listing.

Guarantee: COAY MONEY BACK GUARANTEE | See details

Get the item you ordered or get your money back. Covers your purchase price and original shipping.



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\$ Have one to sell?

Sell now

APC Back-Ups PRO 1100 Battery Back-Up Power Supply BP1100 BP1000

Item condition: Used

Time left: 3d 11h Monday, 9:50AM

Starting bid: US \$27.99



Enter US \$27.99 or more

[0 bids]

Place bid

Add to watch list

* Add to collection

100% positive feedback

Shipping: \$22.07 Standard Shipping | See details

Item location: Manchester, Maryland, United States

Ships to: United States See exclusions

Delivery: Estimated between Fri. Feb. 13 and Fri. Feb. 20 @

Payments: PayPal VISA

Credit Cards processed by PayPal

See details

Seller does not offer returns. You are covered by the eBay Money Back

Guarantee if you received an item that is not as described in the listing.

COOK MONEY BACK GUARANTEE | See details Guarantee:

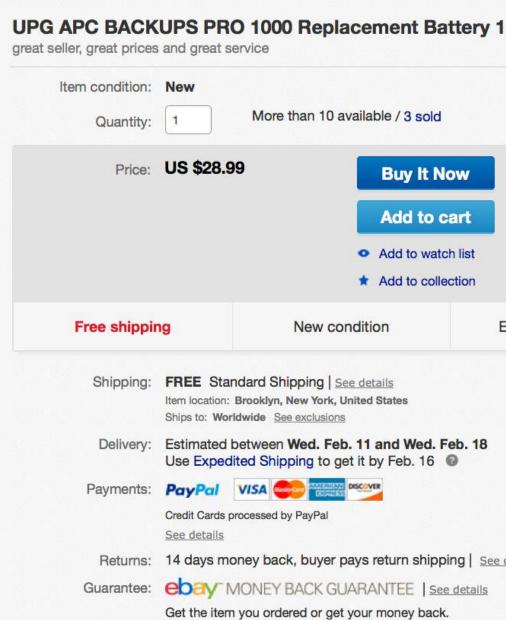
> Get the item you ordered or get your money back. Covers your purchase price and original shipping.

<

Back to search results | Listed in category: Consumer Electronics > Multipurpose Batteries & Power > Rechargeable Batteries

SAVE MORE WHEN YOU ADD RELATED ITEMS See all eligible items >





Covers your purchase price and original shipping.

\$ Have one to sell?

Sell now

Energy Costs

	Α	В	С	D	Е	F	G
1	Device	Hours/Day	Amps	Watts	KWa / Mo	\$ / Mo	
2	HVAC Running	0	5.4	594	0	\$0.00	
3	HVAC Idle	0	1	110	0	\$0.00	
4	Fan	24	0.5	55	40.1412	\$3.00	
5	ESXi1	24	1.45	159.5	116.40948	\$8.70	
6	ESXi2	24	1.45	159.5	116.40948	\$8.70	
7	Nexenta Server	24	2.2	242	176.62128	\$13.19	
8	Nexenta JBOD	24	1.75	192.5	140.4942	\$10.49	
9	vRanger	24	0.75	82.5	60.2118	\$4.50	
10	HP 3500yl	24	0.3	33	24.08472	\$1.80	
11	HP L2 SW	24	0.3	33	24.08472	\$1.80	
12	SonicWALL	24	0.2	22	16.05648	\$1.20	
13	Balance	24	0.2	22	16.05648	\$1.20	
14				0	0	\$0.00	
15				0	0	\$0.00	
16				0	0	\$0.00	
17	Totals		15.5	1705	730.56984	\$54.57	
18							

Cooling





Power Bill here

Dell R710







Click to open expanded view

Farm Innovators TC-21 Warm Weather Thermo Cube Thermostatically Controlled Outlet - On at 78-Degrees/Off at 70-Degrees

by Farm Innovators

★★★★☆ ▼ 951 customer reviews | 36 answered questions

List Price: \$18.99

Price: \$16.70 **Prime**You Save: \$2.29 (12%)

Only 10 left in stock (more on the way).

Ships from and sold by Amazon.com. Gift-wrap available.

Want it Saturday, Feb. 7? Order within 15 hrs 51 mins and choose Saturday Delivery at checkout. Details

Size: On at 78, Off at 70

On at 0, Off at 10 \$11.99 *Prime*

On at 20, Off at 30

\$15.59 **Prime**

On at 35, Off at 45 \$13.49 *Prime* On at 78, Off at 70 \$16.70 *prime*

On at 120, Off at 100 \$15.21 *Prime*

- Plugs into a standard 15 amp electrical outlet and turns power on automatically according to outside air temperature
- Saves money by using power only when temperatures require cooling
- Two receptacles for use with more than one electrical device
- Turns on at 78°F, off at 70°F
- Ideal for all types of home, farm and industrial fans: window, ceiling, exhaust, ventilators, attic, roof, air circulator and table fans

5 new from \$11.57 2 used from \$9.99

Have Questions About Buying Light Bulbs? Check out our Light Bulb Guide for help choosing the correct bulb for your lighting needs. Learn more

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Start the New Year with business essentials, including janitorial supplies, workplace safety products, office supplies, & more. Shop now

Business

What about the software?



1 Year NFR Licenses

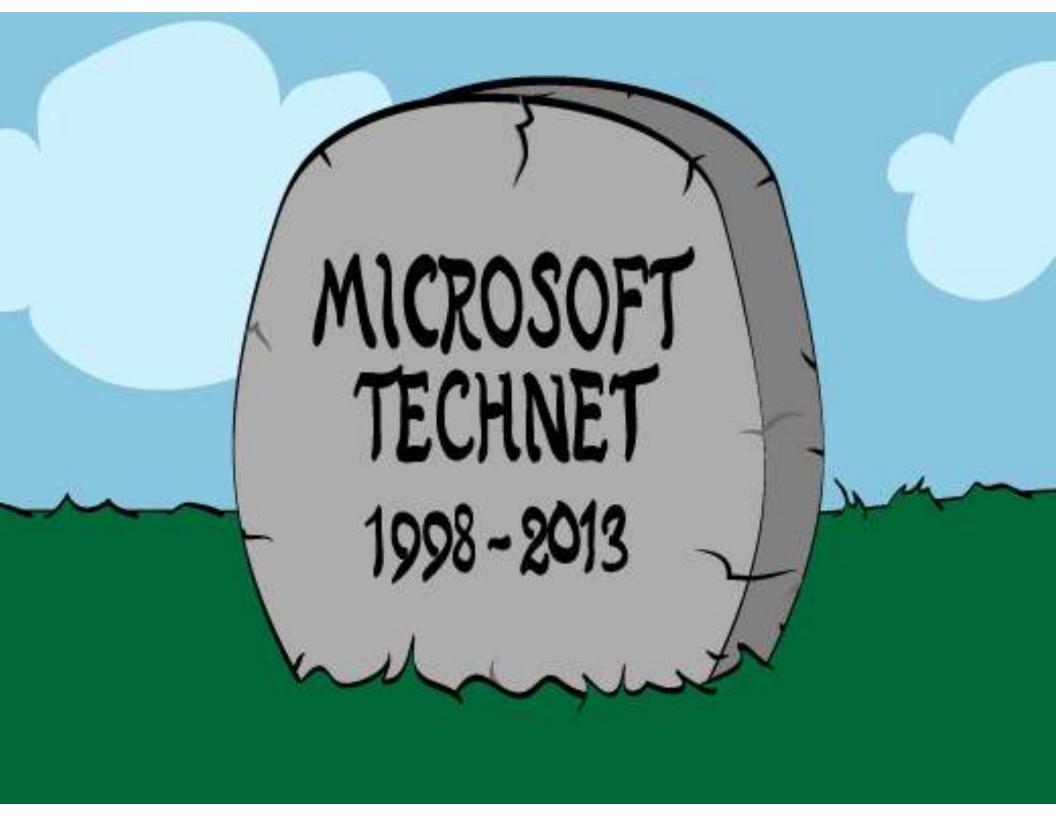
http://www.vmug.com/EVALExperience

- VMware vCenter Server[™] 5 Standalone for vSphere 5
- VMware vSphere® with Operations Management™ Enterprise Plus
- VMware vCloud Suite® Standard
- VMware vRealize™ Operations Insight™
- VMware vRealize Operations™ 6 Enterprise
- VMware vRealize Log Insight™
- VMware vRealize Operations for Horizon®
- VMware Horizon® Advanced Edition
- VMware Virtual SAN™

mware

Other Options?

- Microsoft







Available Software

- Windows 8.1
- Server 2012 R2 w/RDS CALs
- Office 2013
- Office 365 E3
- Visio 2013
- Project 2013
- SQL 2014 w/CALs
- Exchange 2013 w/CALs
- System Center 2012 R2
- Sharepoint Server 2013
- Lync Server 2013
- Lots More!

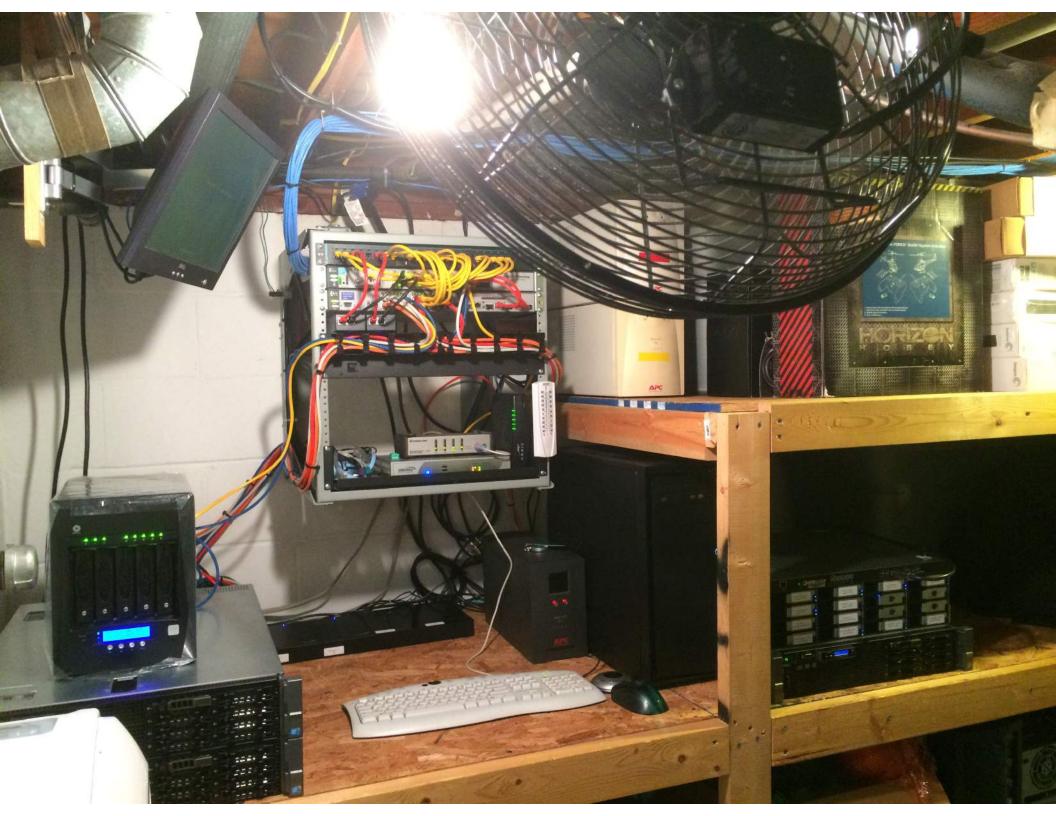


TechNet Evaluation Center

http://www.microsoft.com/en-us/evalcenter/

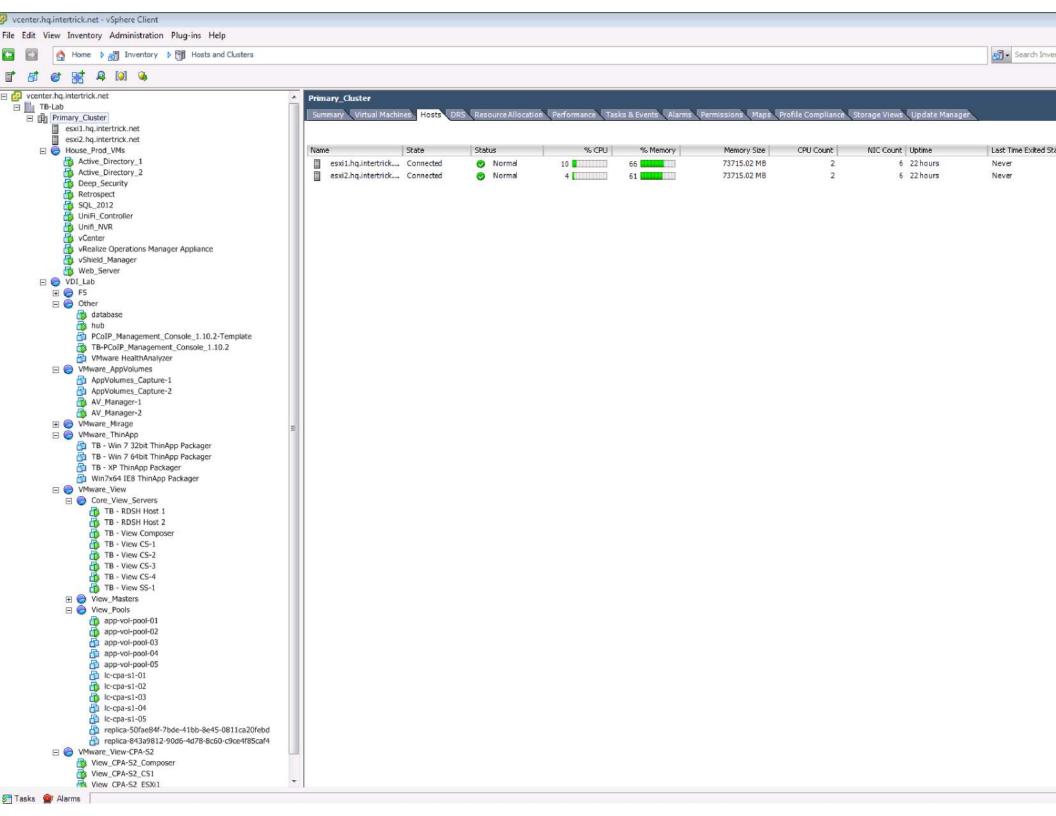
Example Trial Periods:

- •Windows 7 90 Days
- •Windows 8.1 90 Days
- •Windows 2012 R2 180 days
- •SQL 2012 180 Days
- •Office 2013 60 Days











5.0, 2403361

Datastores

ce Configuration Tasks & Events Alarms Permissions Maps Storage Views Update Manager

View: Datastores Devices

dentification	△ Status	Device	Drive Type	Capacity	Free	Туре	Last Update	Alarm Actions	Storage I/O Control	Hardware Acceleration
AV-Apps-7	Normal	NEXENTA Fibre C	Non-SSD	499.75 GB	498.80 GB	VMFS5	2/6/2015 8:21:06 AM	Enabled	Disabled	Supported
AV-WR-Vols-8	Normal	NEXENTA Fibre C	Non-SSD	1,023.75 G	1,022.80 G	VMFS5	2/6/2015 8:21:06 AM	Enabled	Disabled	Supported
Clones-3	Normal	NEXENTA Fibre C	Non-SSD	499.75 GB	481.90 GB	VMFS5	2/6/2015 8:40:06 AM	Enabled	Disabled	Supported
Clones-4	Normal	NEXENTA Fibre C	Non-SSD	499.75 GB	491.34 GB	VMFS5	2/6/2015 8:39:55 AM	Enabled	Disabled	Supported
ESXi1-SSD	Normal	Local ATA Disk (t	SSD	59.50 GB	4.03 GB	VMFS5	2/5/2015 12:44:58 PM	Disabled	Disabled	Unknown
Images-5	Normal	NEXENTA Fibre C	Non-SSD	1,023.75 G	745.94 GB	VMFS5	2/6/2015 8:21:06 AM	Enabled	Disabled	Supported
Replicas-2	Normal	NEXENTA Fibre C	Non-SSD	499.75 GB	374.93 GB	VMFS5	2/6/2015 8:40:06 AM	Enabled	Disabled	Supported
Servers-0	Normal	NEXENTA Fibre C	Non-SSD	4.00 TB	2.50 TB	VMFS5	2/6/2015 8:21:06 AM	Enabled	Enabled	Supported
Servers-1	Normal	NEXENTA Fibre C	Non-SSD	4.00 TB	2.36 TB	VMFS5	2/6/2015 3:51:02 AM	Enabled	Enabled	Supported
View-CPA-S2-6	Normal	NEXENTA Fibre C	Non-SSD	499.75 GB	418.65 GB	VMFS5	2/6/2015 8:21:06 AM	Enabled	Disabled	Supported

Datastore Details

Resca

Refresh Delete Add Storage...

Cost?

- 2x ESXi Hosts @ \$600ea
 - R710s w/2x Quad Core 5620s & 72GB RAM
- Nexenta \$1700
 - ~6TB Storage @ 50-100K IOPS & 420MB/s
- Network \$350
- Power & Cooling \$300

Total: \$3550

Coming Soon

http://labs.intertrick.net

Q&A

Thank You!