

## Contents

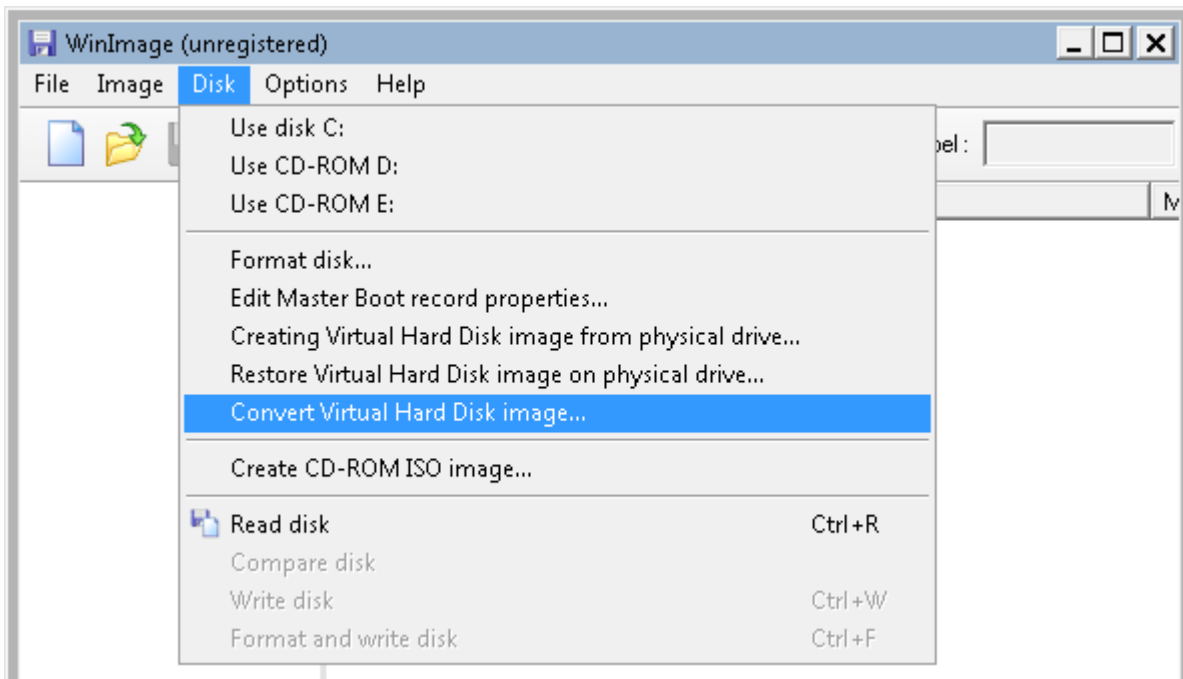
VMware: Convert VHD to VMDK with WinImage .....	1
VMware: Shrink (OS) volume size using VMware Converter .....	3
VMware: Easy upgrade to vSphere ESXi 5.1.....	5
VMware: HP sizing tool for VMware vSphere .....	8

## VMware: Convert VHD to VMDK with WinImage

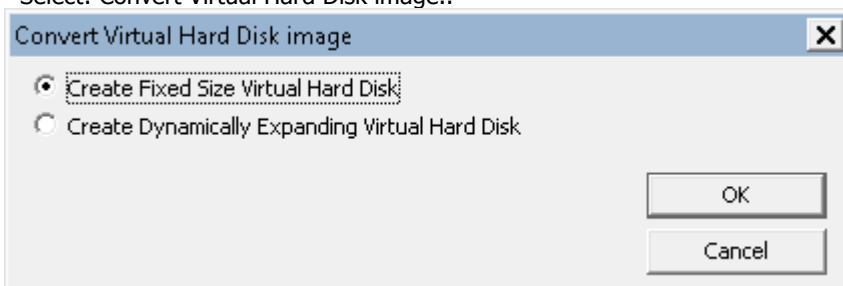
February 21st, 2012 [sanderdaems](#) [Leave a comment](#) [Go to comments](#)

Last week I've converted a .VHD (Microsoft Virtual PC) to .VMDK for a customer with the application WinImage, the process was very easy.. a little how to:

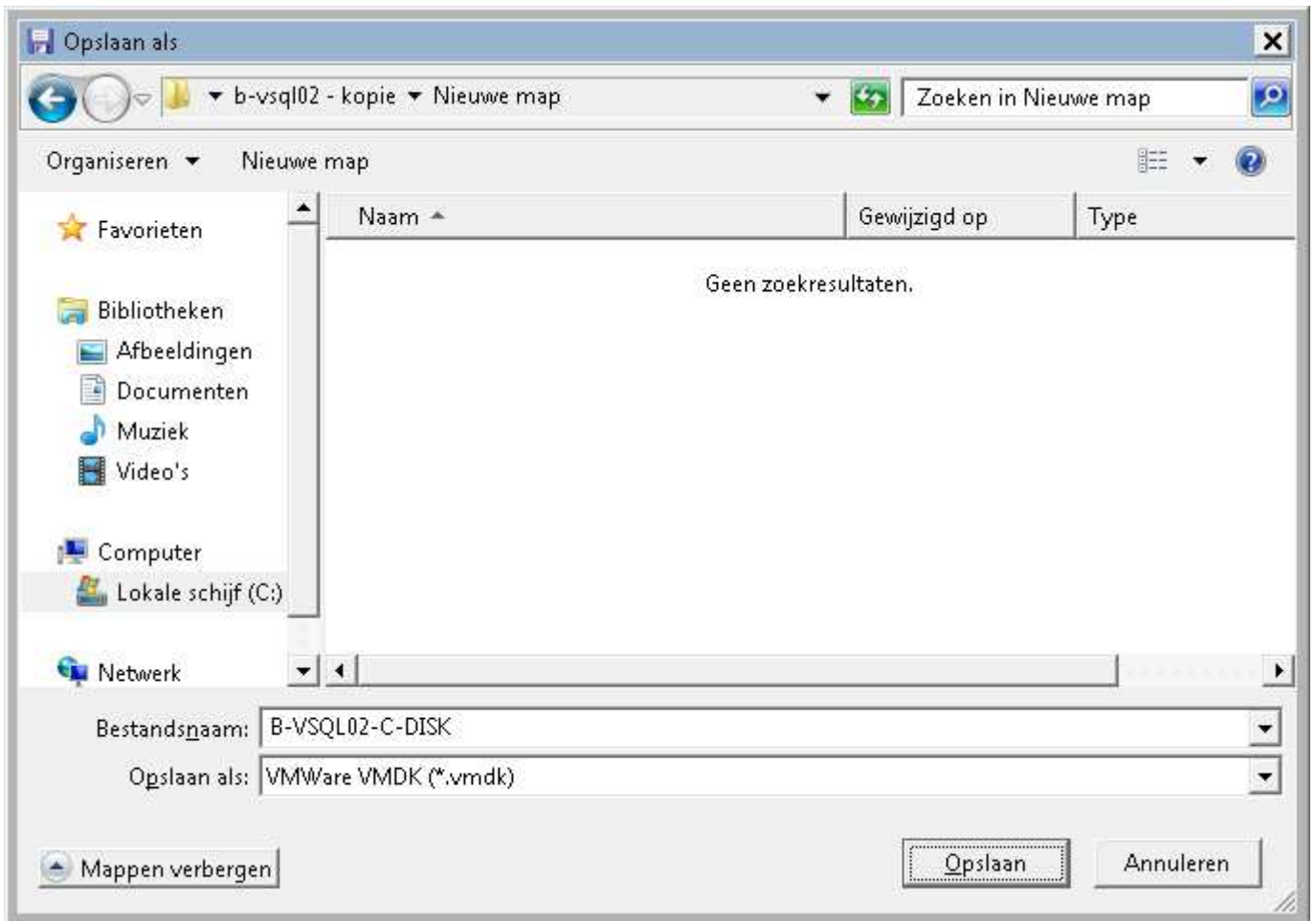
WinImage 8.5: [Download](#)



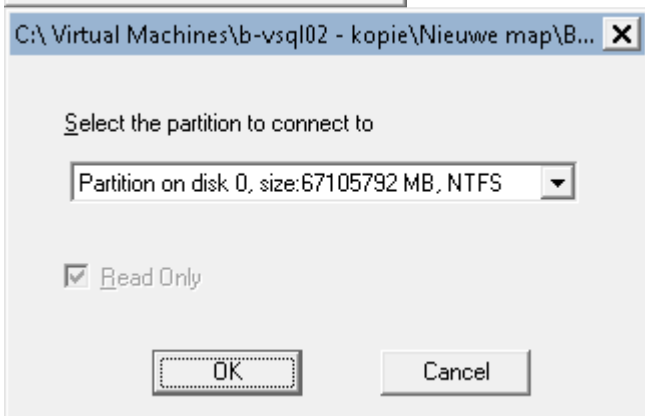
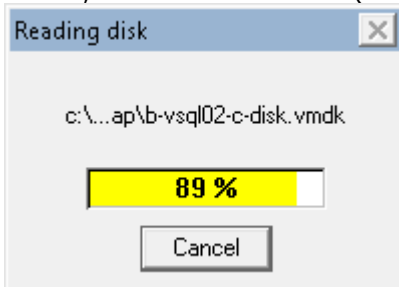
- Select: Convert Virtual Hard Disk image..

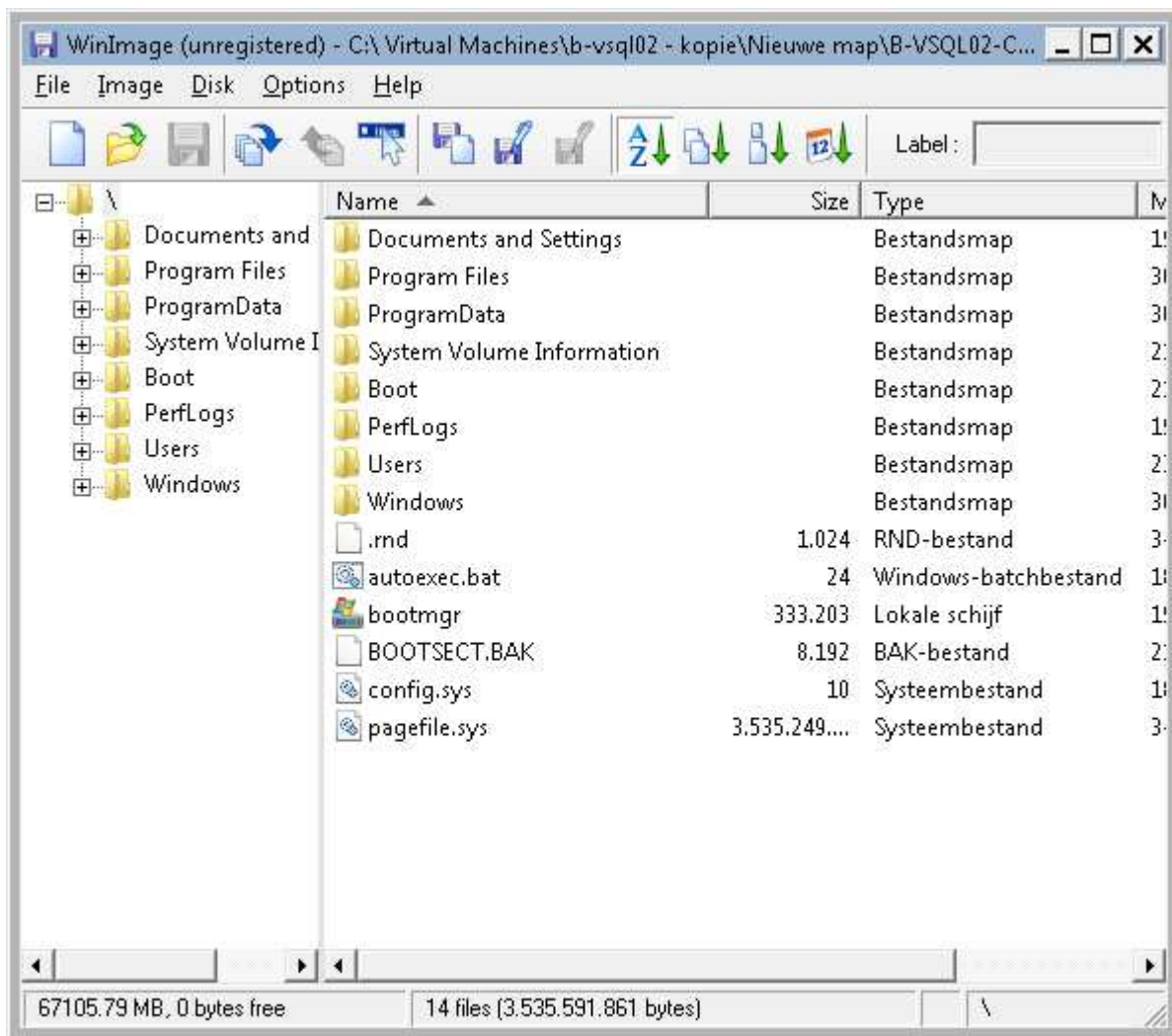


- Select: Create Fixed Size Virtual Hard Disk



- Select, Safe as: VMware VMDK (\*.vmdk), select target location and type the new (.vmdk) file name



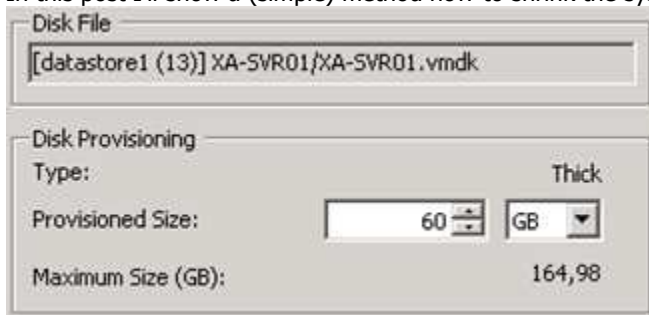


## VMware: Shrink (OS) volume size using VMware Converter

July 19th, 2012 [sanderdaems](#) [Leave a comment](#) [Go to comments](#)

Lots of VMware / Windows administrators can extend virtual disks on-the-fly in a few seconds, but what is the easiest way to shrink a / the (OS) volume?

In this post I'll show a (simple) method how-to shrink the system disk size from a virtual machine from 60 to 40 GB.



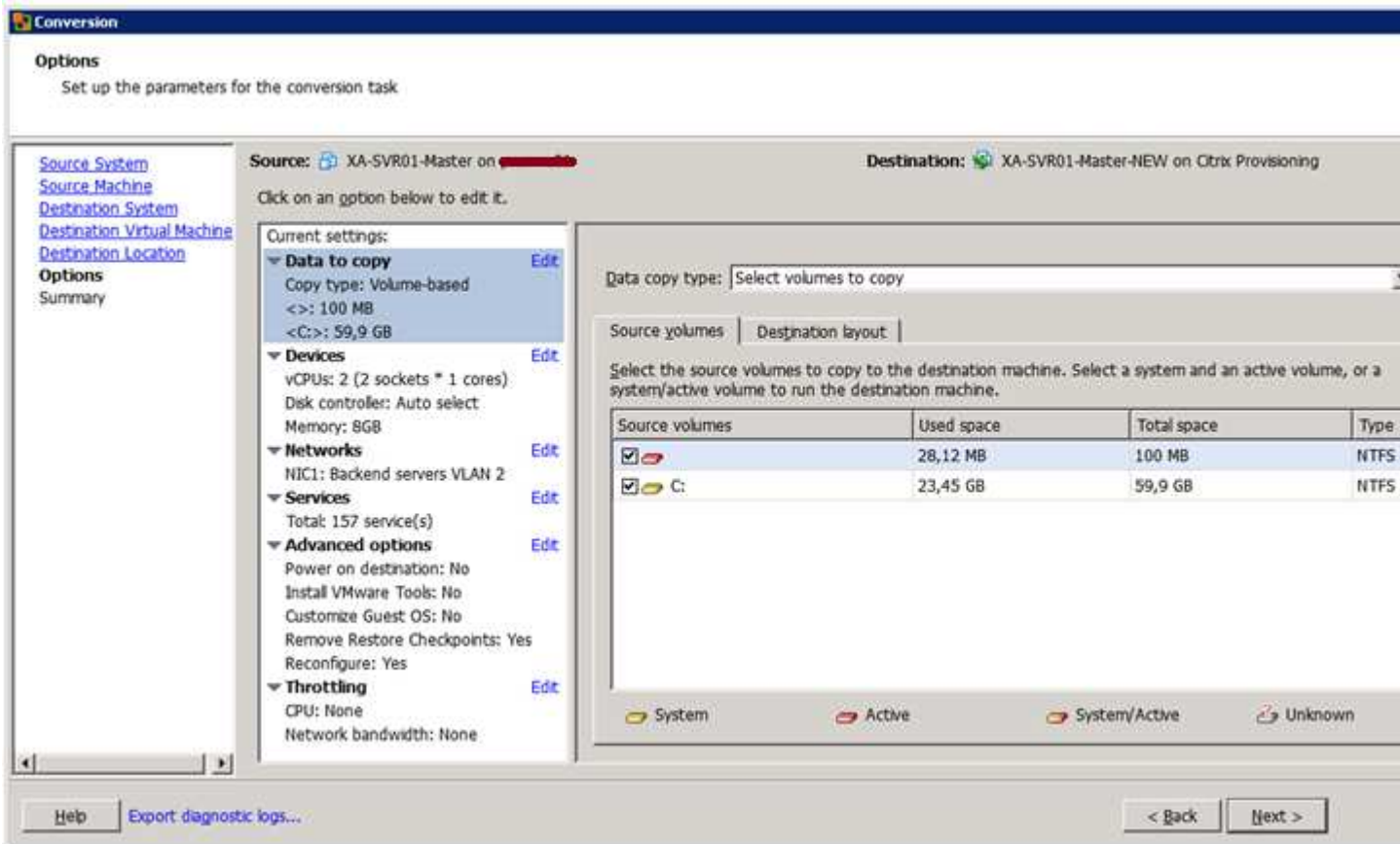
In all cases, confirm the following before shrink the size of the virtual disk:

- All snapshots have been removed;
- The virtual machine is powered off;

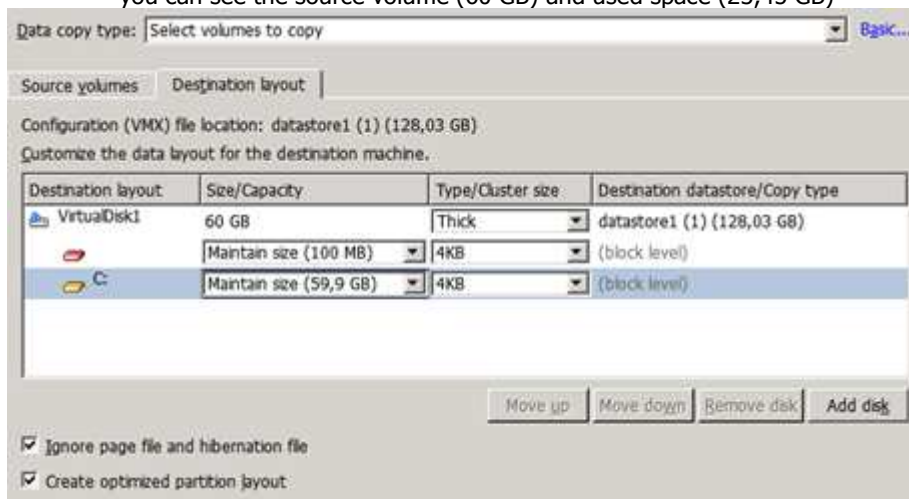
### How-to:

Install [VMware Converter](#) and connect you're vCenter server running that specific virtual machine

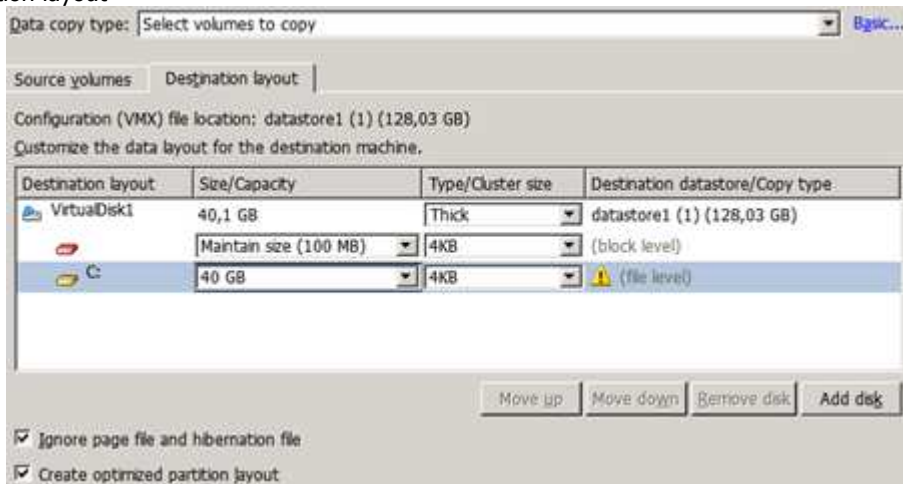
- Start the VMware Converter by clicking "Convert machine";
- Select source server (virtual machine on vSphere host);
- Select destination server (same vSphere host, new VM name);
- Select target datastore;- Options: select "Data to copy" and press Edit;



^ you can see the source volume (60 GB) and used space (23,45 GB)



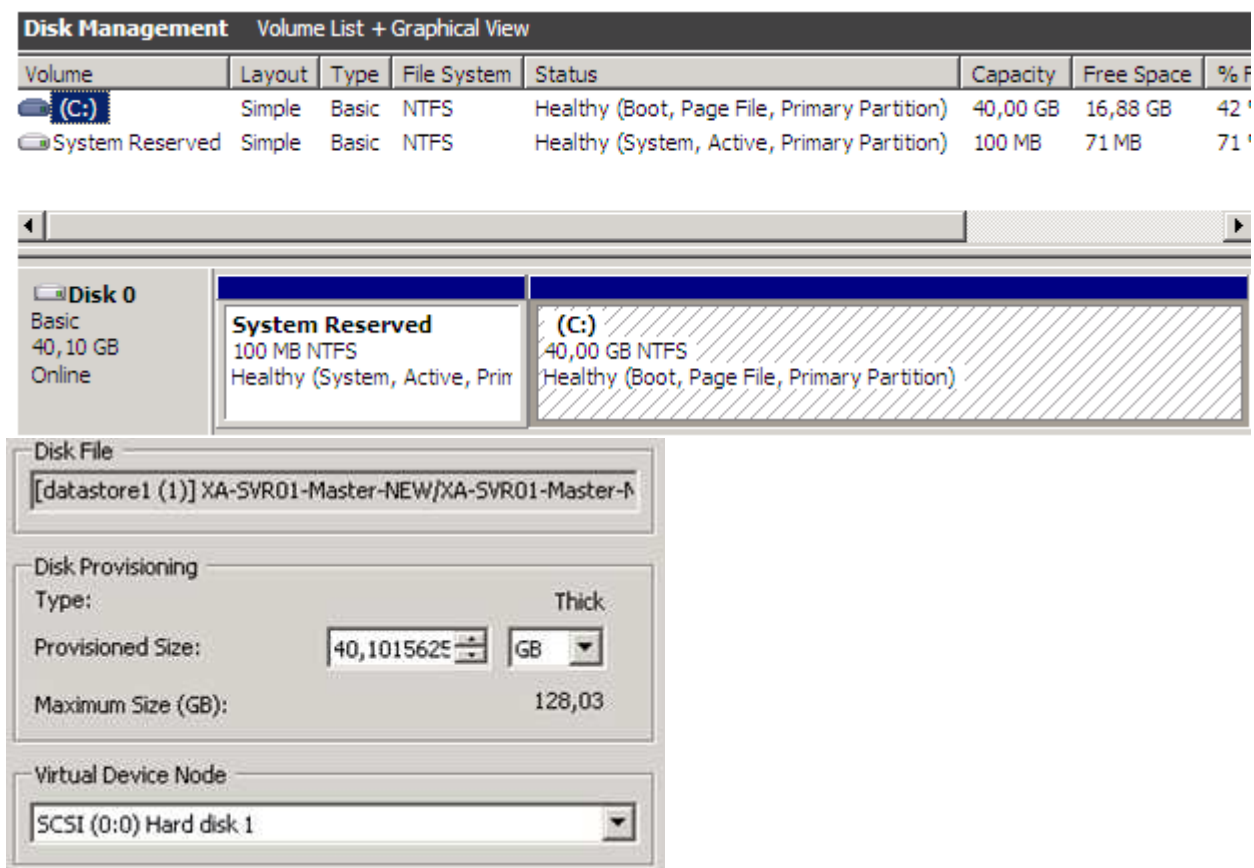
- Select tab "Destination layout"



- Click the "Size/Capacity" dropdown menu and select the new capacity in GB's.. in my case 40 GB
- Finish the wizard start the V2V process

**Result:**

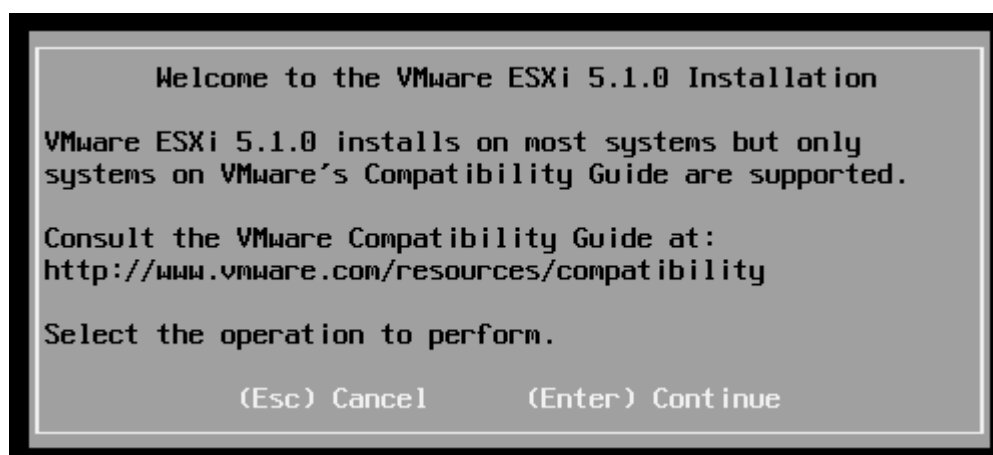
Once the V2V completed you can power-on the virtual machine.. check the result in Server Manager > Storage > Disk Management:



*Note:* If the specific virtual machine has a (MAC based) license server role please check the new generated MAC address at the vNIC!!

## VMware: Easy upgrade to vSphere ESXi 5.1

September 17th, 2012 [sanderdaems](#) [Leave a comment](#) [Go to comments](#)



- Press [Enter] to continue

## End User License Agreement (EULA)

### VMWARE END USER LICENSE AGREEMENT

PLEASE NOTE THAT THE TERMS OF THIS END USER LICENSE AGREEMENT SHALL GOVERN YOUR USE OF THE SOFTWARE, REGARDLESS OF ANY TERMS THAT MAY APPEAR DURING THE INSTALLATION OF THE SOFTWARE.

**IMPORTANT-READ CAREFULLY:** BY DOWNLOADING, INSTALLING, OR USING THE SOFTWARE, YOU (THE INDIVIDUAL OR LEGAL ENTITY) AGREE TO BE BOUND BY THE TERMS OF THIS END USER LICENSE AGREEMENT ("EULA"). IF YOU DO NOT AGREE TO THE TERMS OF THIS EULA, YOU MUST NOT DOWNLOAD, INSTALL, OR USE THE SOFTWARE, AND YOU MUST DELETE OR RETURN THE UNUSED SOFTWARE TO THE VENDOR FROM WHICH YOU ACQUIRED IT WITHIN THIRTY (30) DAYS AND REQUEST A REFUND OF THE LICENSE FEE, IF ANY, THAT

Use the arrow keys to scroll the EULA text

(ESC) Do not Accept

(F11) Accept and Continue

- F11 Accept and Continue

## Select a Disk to Install or Upgrade

\* Contains a VMFS partition

Storage Device	Capacity
-----	
Local:	
* VMware Block device (mpx.vmhba1:C0:T0:L0)	68.33 GiB
* VMware Block device (mpx.vmhba1:C0:T1:L0)	205.00 GiB
Remote:	
(none)	

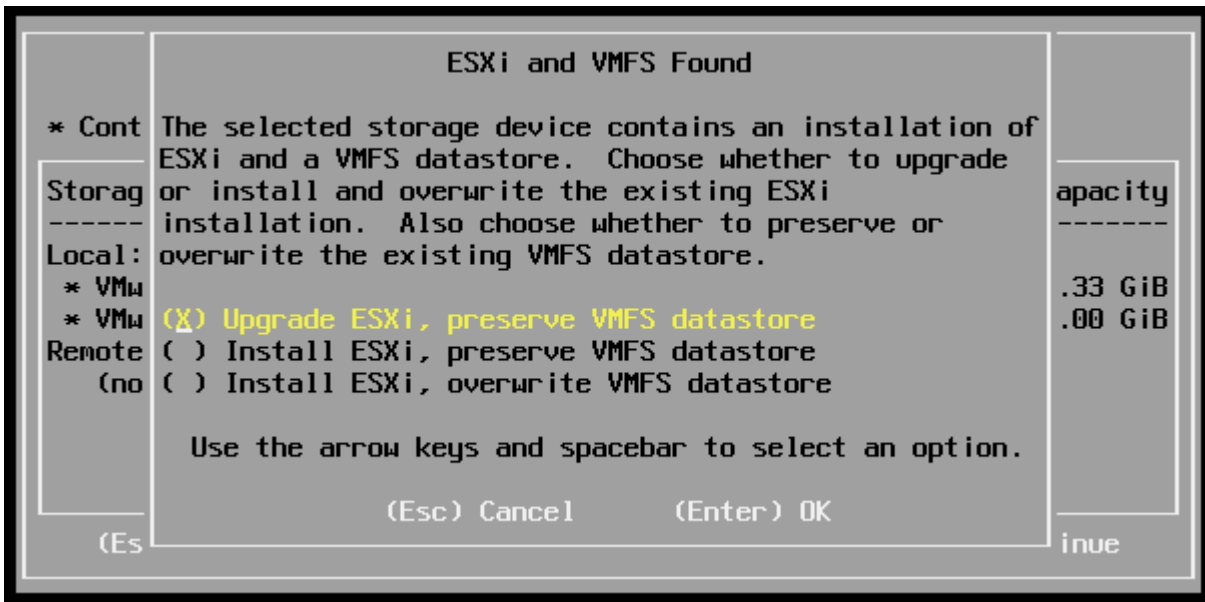
(Esc) Cancel

(F1) Details

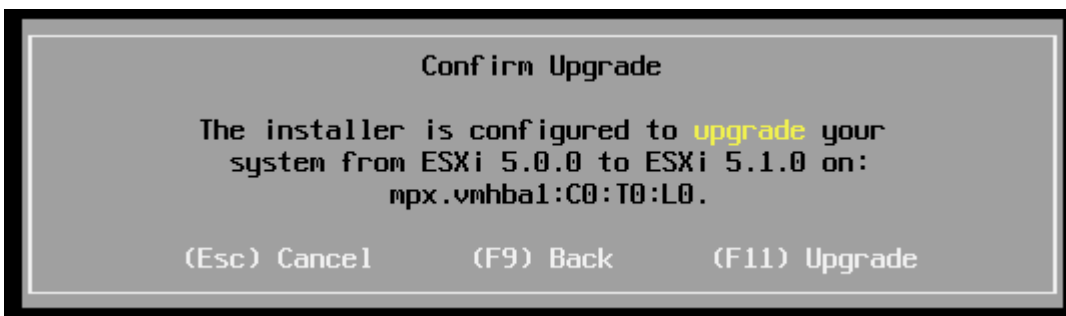
(F5) Refresh

(Enter) Continue

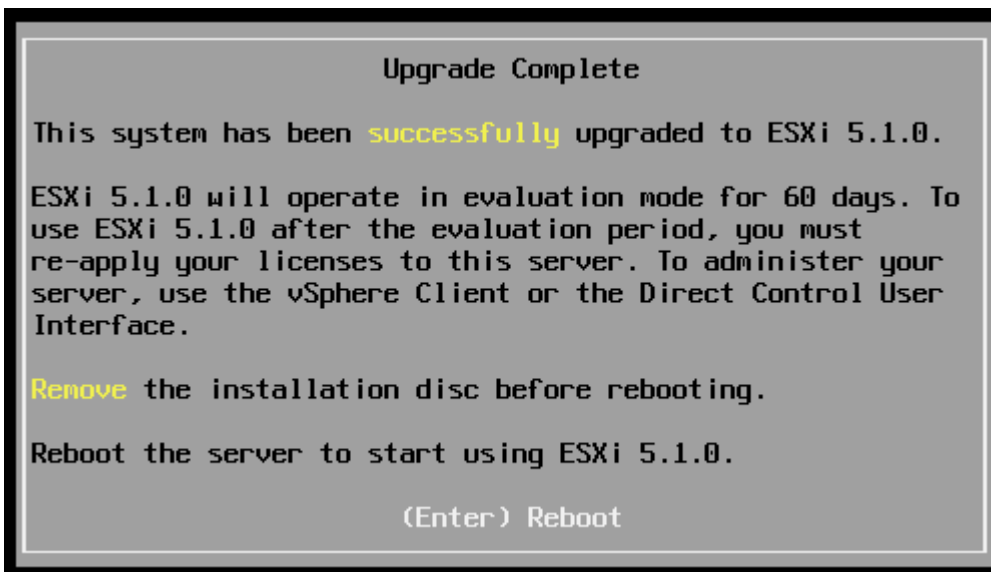
- Select the correct disk and press [Enter] to continue



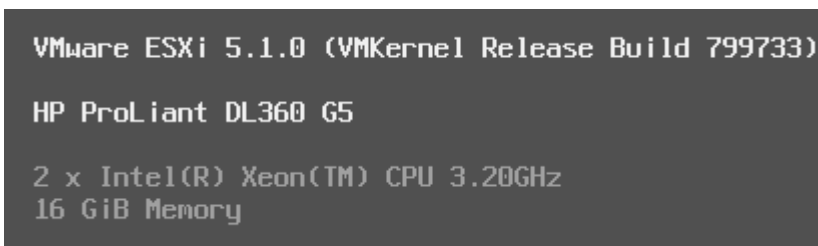
- Select the correct option ( Upgrade ESXi / Install ESXi, preserve VMFS / Install ESXi, overwrite VMFS) and press [Enter]



- Confirm the upgrade (in my case) and press F11 to Upgrade



- The upgrade process is finished, dismount the ISO and reboot the host



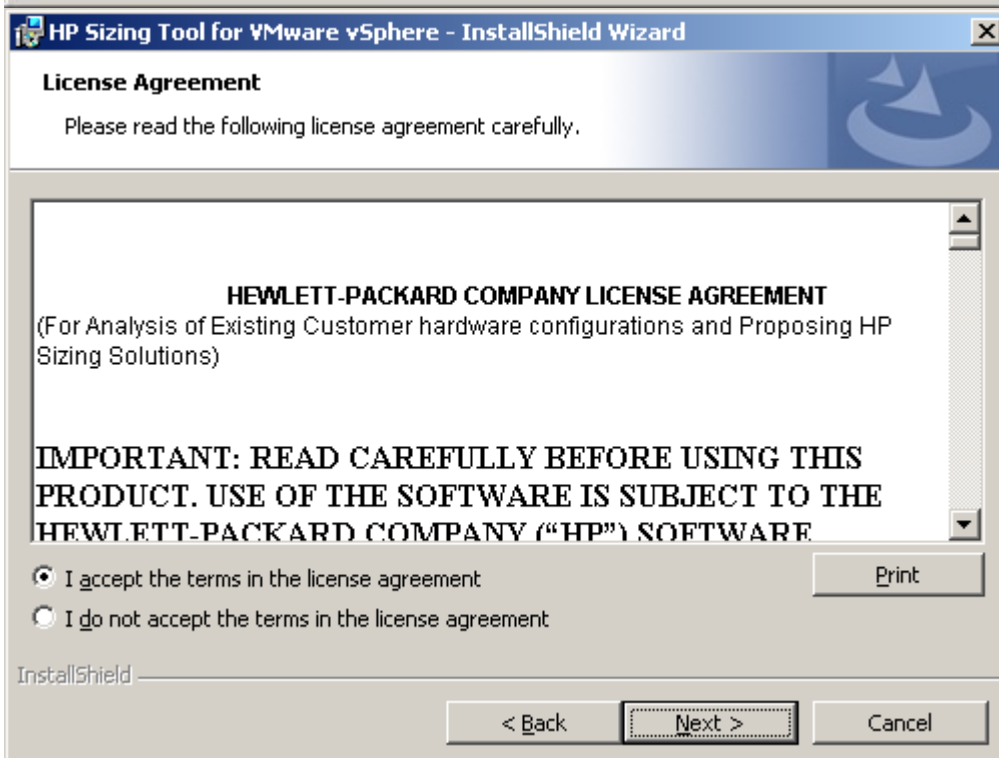
The host is back online again and the upgrade is finished, build number: 799733 😊

# VMware: HP sizing tool for VMware vSphere

March 16th, 2012 [sanderdaems](#) [Leave a comment](#) [Go to comments](#)

Last week I was writing a Technical Design for a customer to create a brand new vSphere 5 environment based on HP hardware (HP P4300 G2 storage and HP DL380G7 servers). I found [HP Sizing Tools for VMware vSphere](#) tool at the HP website to size and design storage and server components to run my new vSphere solution.

Here some installation and sizing facts:





**HP Sizing Tool for VMware vSphere - InstallShield Wizard** [X]

**Customer Information**

Please enter your information.

User Name:

Organization:


InstallShield

< Back   **Next >**   Cancel

**HP Sizing Tool for VMware vSphere - InstallShield Wizard** [X]

**Destination Folder**

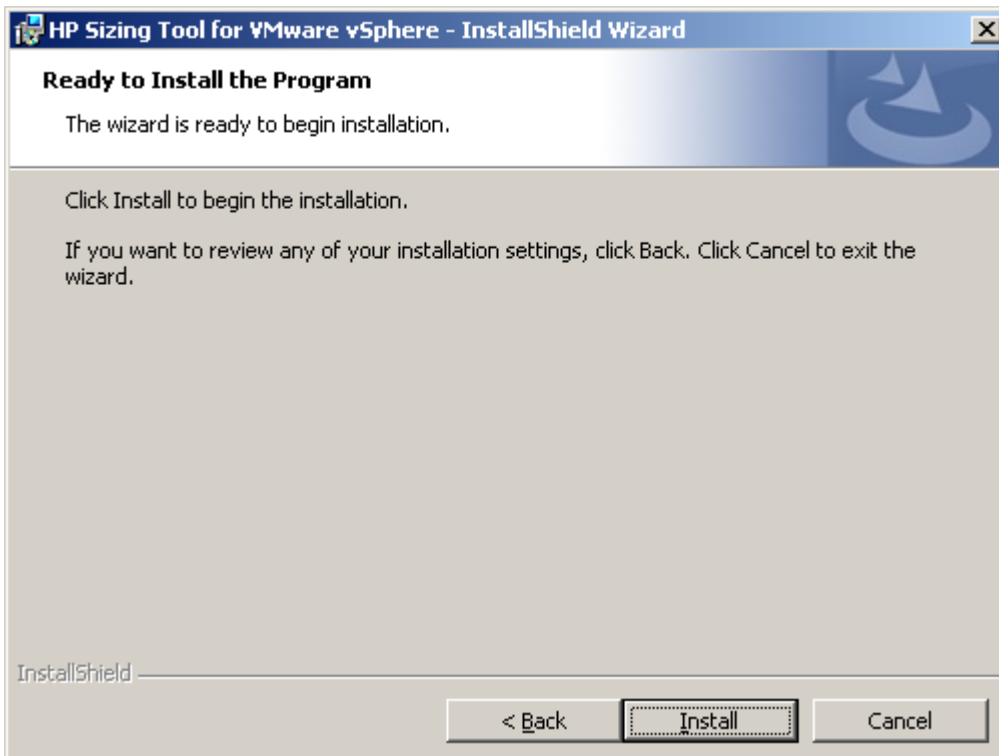
Click Next to install to this folder, or use the dropdown to select a different drive.

 Install HP Sizing Tool for VMware vSphere to:

Hewlett-Packard\ESS Sizers\

InstallShield

< Back   **Next >**   Cancel





# VMware ESX Sizing Tool

1 - Servers		2 - ESX Server			3 - Storage			4 - Targets		5 - Options		6 - Platform		
Use Sample Data					Open Excel File					Clear Cu				
Physical Server									Application					
Current Server					Processor				OS Version	Desired VM Disk Size	CPU Utilization (%)		RAM Usage (MB)	
Count	Name	Model	Form Factor (U)	Power Usage (Watts)	Family	# of procs	Speed (MHz)	Avg			Peak	Avg	Peak	
1	devserver01	DL360	1	85	Pentium III	1	1000	Windows 2003	11	13	27	120	378	
1	devserver02	DL380	3	150	Xeon	1	800	Windows 2000	8	12	22	100	465	
1	devserver03	DL360	1	85	Xeon DP	2	600	Windows 2000	12	9	28	212	341	
1	devserver04	DL360	1	85	Pentium II	1	300	Red Hat Linux	14	12	23	111	150	
1	devserver05	DL380	3	150	Pentium III	2	800	Windows NT...	13	13	33	313	456	
1	devserver06	DL360	1	85	Pentium Pro	1	700	Windows XP	3	11	24	102	584	
1	devserver07	DL360	1	85	Xeon DP	1	400	Windows 2003	2	7	22	102	278	
1	devserver08	DL380	3	150	Xeon DP	2	500	Novell NetW...	8	15	23	102	120	
1	devserver09	DL360	1	85	Pentium III	1	400	Red Hat Linux	6	15	28	167	352	
1	devserver10	DL360	1	85	Pentium III	2	800	SuSE Linux	7	15	32	220	355	
1	testserver01	DL380	3	150	Pentium Pro	1	500	Windows 2000	10	14	34	210	352	
1	testserver02	DL360	1	85	Pentium Pro	1	500	Windows NT...	4	12	32	301	325	
1	testserver03	DL360	1	85	Pentium III	2	800	Windows XP	3	23	29	160	167	
1	testserver04	DL380	3	150	Pentium Pro	1	500	Windows XP	1	11	23	199	279	

- Import you're server spec list with current RAM/CPU/Disk size/NIC's etc..



# VMware ESX Sizing Tool

1 - Servers

2 - ESX Server

3 - Storage

4 - Targets

5 - Options

6 - Platform

## Redundant NICs

A server with redundant NICs can maintain network connectivity even if one of its NIC's fails. Please note that some servers may not have enough physical NIC ports for redundancy and vMotion network redundancy and therefore will not be available for the solution.

[View more information on ProLiant Networking](#)

Would you like to configure redundant NICs for virtual machine networks?

Configure redundant NICs.

## vMotion

vMotion allows virtual machines to be migrated between ESX Server hosts on-the-fly. This feature requires the use of SAN. A dedicated 1GB NIC is also recommended (although not required) for vMotion traffic.

[View more information on vMotion.](#)

How would you like to configure vMotion in your solution?

- Configure separate vMotion network.
- Configure separate vMotion network (with redundancy).
- Use existing virtual machine network.
- Do not configure vMotion.

- Configure your network with redundant NIC's, and a separate (redundant) vMotion network



# VMware ESX Sizing Tool

1 - Servers

2 - ESX Server

3 - Storage

4 - Targets

5 - Options

6 - Platform

## Storage Options

The ESX service console takes care of system management functions as well as a number of other tasks. It can be stored either on the server's internal (local) storage or on a separate storage array (Boot from SAN).

VMFS is the Virtual Machine File System and is where the VM disk files reside. SAN storage is often used for VMFS, but it may also reside on local SCSI storage.

Which options would you like to configure?

- Configure HP StorageWorks for VMFS only
- Configure HP StorageWorks for VMFS and Boot from SAN
- Configure Local storage only

## Storage Works

When you face today's tough storage challenges, HP StorageWorks can help you scale IT architecture with data growth, conquer backup window limit issues, comply with data regulation requirements, recover data in less time and enable you to respond quickly through your adaptive infrastructure.

[View information on HP StorageWorks.](#)

[View information on storage array systems.](#)

What is your desired array type?

**P4000SAN** ▼

What is your desired array model?

- Configure a HP StorageWorks for VMFS only and select a array type



## Target Utilizations

In this section you can specify the desired maximum utilizations for your new servers. This provides capacity overhead to your solution to handle fluctuations in resource utilization or for additional VMs. The sizing tool will choose the best host for each virtual machine in order to optimize server resources while not exceeding the maximum values assigned here.

What are your desired target utilizations for your new servers?

Processor:	<input type="text" value="75 %"/>
Memory:	<input type="text" value="75 %"/>
Storage Capacity:	<input type="text" value="80 %"/>
Storage Operations:	<input type="text" value="80 %"/>
Network:	<input type="text" value="75 %"/>

- Configure target utilizations for the new servers



# VMware ESX Sizing Tool

1 - Servers	2 - ESX Server	3 - Storage	4 - Targets	5 - Options	6 - Platform
<b>Aggressiveness</b>					>>
<b>VM Limit</b>					>>
<b>VMWare Services</b>					<<
Vsphere Software	<b>Enterprise</b>	Vsphere Installation	<b>Yes</b>		
Software Support Level	<b>3-yr 24x7</b>	Vsphere Education			
Include vCenter	<b>Yes</b>				
					<b>None</b> VMware vSphere - Install, Configure, Manage [v4] VMware vSphere - What's New [v4] (2 days) VMware vSphere: Fast Track (5 days) VMware vSphere: Troubleshooting (4 days)
<b>Insight Software and Services</b>					>>

- Select VM Limits, VMware versions, Software support etc..



# VMware ESX Sizing Tool

1 - Servers

2 - ESX Server

3 - Storage

4 - Targets

5 - Options

6 - Platform

Select the server platform(s) to which you would like to consolidate. You may compare up to **THREE** platforms at a time.

HP's BladeSystem requires additional configuration. If you select a BladeSystem server, be sure to configure the additional options below. (Options are only viewable when a BladeSystem server is selected)

[View more information on ProLiant BL servers](#)

[View more information on ProLiant DL servers](#)

[View more information on ProLiant ML servers](#)

Ready to size

Which server platform(s) would you like to configure?

**ProLiant BLc  
(HP c-Class BladeSystem)**

- ProLiant BL685c G7
- ProLiant BL465c G7
- ProLiant BL460c G7
- ProLiant BL490c G7
- ProLiant BL495c G6
- ProLiant BL680c G5

**ProLiant DL  
(rack-optimized)**

- ProLiant DL980 G7
- ProLiant DL585 G7
- ProLiant DL580 G7
- ProLiant DL360 G7
- ProLiant DL385 G7
- ProLiant DL380 G7
- ProLiant DL370 G6
- ProLiant DL785 G6

**ProLiant ML  
(expansion-optimized)**

- ProLiant ML350 G6
- ProLiant ML370 G6



- Select target server platform which you want to use for the new environment





# VMware ESX Sizing Tool

---

The sizing tool is configuring solutions based on your input criteria

**Please wait ...**



---

**Result:**

**VMware ESX Sizing Tool**

File Options Help

- Sizer Home
  - Contact Us
  - Organize Solutions
  - Build Solution
    - Session
      - Interview
        - Solution Alternatives (3/5/2012 - Unit**
          - VMware - ESX Server
            - DL Profile1 (\$284,624)
              - 1 Physical Machines
                - Server Family
                - Processor
                - Memory
                - NICs
                - Local Storage
                - External Storage
                - Server Services
                - BOM
                - Actions



# VMware ESX Sizing Tool

## Solution Alternatives

### VMware - ESX Server

**Profile :** DL Profile1 **Pr**

#### Recommended Configuration

Physical Machines	1 x ProLiant DL380 G7 1P
	Intel 6 - Core 3.33GHz / 12MB Cache
	16,384 MB RAM
	Disk (DAS) - 2 Disks Spare ( 0 )
	Installation (I) - 2 Disks (72GB 15K SAS 6G 2.5 DP HDD)
	Disk (SAN) - 16 Disks ( F200 )
	VMFS 1 - (200GB SSD Disk) RAID50 2:1
	VMFS 2 - (100GB SSD Disk) RAID50 2:1

3/5/2012 Internet Price [ United States ]

- After finishing the wizard you are able to view the solution alternative. If you want to change the configuration you can specify some specific hardware in the menu on the left side result page.



# VMware ESX Sizing Tool

## NICs

### Physical Machines - NICs

The following NICs have been configured for your solution.

NIC	PCI Slot	Port	Port Type	Connection Description
Embedded NC382i Dual-Port Multi-function Gigabit NICs	Integrated	1	10/100/1000-T Gigabit Ethernet	Administration\VMRC
		2	10/100/1000-T Gigabit Ethernet	VM Net 1
Embedded NC382i Dual-Port Multi-function Gigabit NICs	Integrated	1	10/100/1000-T Gigabit Ethernet	VM Net 2
		2	10/100/1000-T Gigabit Ethernet	VMotion
HP NC364T PCIe 4Pt Gigabit Server Adptr	1	1	10/100/1000-T Gigabit Ethernet	VM Net 1 Backup
		2	10/100/1000-T Gigabit Ethernet	VM Net 2 Backup
		3	10/100/1000-T Gigabit Ethernet	VMotion Backup
		4	10/100/1000-T Gigabit Ethernet	Unassigned



# VMware ESX Sizing Tool

## Server Family

### Physical Machines - Server Family

The following Server Family is currently recommended. You can change this server model using the drop down control.

ProLiant DL380 G7  Tell me more about this [server](#) or [servers](#)

### Model Feature

The following model features option is currently configured for your Server Family.

SFF SAS

### Cooling Fans

The following cooling fan option is currently configured for your solution.

Redundant Hot-Pluggable Cooling Fans [Add \$0]

### Server Management

HP Insight Control delivers essential infrastructure management that can help save time and money by making it easy to deploy, migrate, monitor, control and optimize your IT infrastructure through a single, simple management console.

Delivered as part of Insight Control, but also available separately, iLO Advanced enhances the standard HP Integrated Lights-Out (iLO) capabilities of your server with sophisticated remote server administration.

Insight Control license [Add \$0]

All Insight Software licenses include 1 year of 24x7 Technical Support and Update Service. Upgrades to 3, 4 and 5 years offered separately.