I/O Compatibility Guide
For ESX Server 2.x

Last Updated: April 2, 2008

What's New
Changes since the last edition of this guide include:

- Added a statement regarding VMware support for the I/O devices listed in this document. See “Introduction” on page 1.

Introduction
VMware ESX Server delivers high performance I/O for PCI-based SCSI, RAID, Fibre Channel, and Ethernet controllers. To achieve high performance, these devices are accessed directly through device drivers in the ESX Server machine and not through a host operating system as with VMware Workstation and VMware Server products.

Support for I/O devices listed in this document is specific to device compatibility with the VMware ESX Server versions listed in the corresponding tables. This does not imply a statement of support for adding a device to any certified system. System vendors determine device compatibility with a given system. Please refer to the compatibility list provided by the system vendor before adding a certified device to a certified system.

NOTE  IDE RAID and SATA RAID are not supported for the VMFS file system.

If you are having a technical issue with 3rd party HW/SW and it is not found on this list, please refer to our 3rd Party HW/SW support policy at http://www.vmware.com/support/policies/ThirdParty.html.

This chapter includes:

- “ESX Server 2.5.5” on page 2
- “ESX Server 2.5.4” on page 14
- “ESX Server 2.5.3” on page 27
- “ESX Server 2.5.2” on page 39
- “ESX Server 2.5.1” on page 50
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- “ESX Server 2.1.2” on page 71
- “ESX Server 2.1.1” on page 71
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- “ESX Server 2.0” on page 99
ESX Server 2.5.5

Currently Supported Device Families
VMware currently has ESX Server device drivers available that support specific devices within the following families of I/O controllers. Please examine the detailed list of device models below to make sure your specific device is supported.

SCSI Controllers (Attached to Non-Removable SCSI Devices Only)

NOTE CD-ROM devices are removable devices, whereas tape drives are considered to be non-removable devices.

- Adaptec Ultra160 and Ultra 320 SCSI controllers.
- LSI Logic Symbios and NCR chip set-based SCSI controllers
- LSI Logic Fusion-MPT controllers

RAID Controllers

- Adaptec RAID
- Dell PercRAID controllers
- HP SmartArray controllers
- Intel RAID controller
- IBM ServeRAID controllers
- LSI MegaRAID controllers
- Mylex AcceleRAID and ExtremeRAID controllers

Fibre Channel Adapters (SCSI Protocol Support Only)

- Emulex Host Bus Adapters
- QLogic Host Bus Adapters

Ethernet NICs

- Intel PRO/100 Ethernet NICs
- Intel PRO/1000 Gigabit Ethernet NICs
- Broadcom NetXtreme 570x series Gigabit NICs
- Broadcom NetXtreme II Gigabit NICs
- 3Com Fast Ethernet NICs

VMware may add support for drivers and devices between releases of the product; check the VMware Web site for current information at http://www.vmware.com/support/pubs/.

The detailed list below shows actual vendor chip sets and adapters that VMware believes are compatible with the currently supported drivers. Although we have been careful in compiling the list, we have not tested all of these devices and cannot warrant that they all work. There may also be devices that are not listed but that do work with these device drivers.

Please contact VMware with any questions about current and planned device support.

Linux Driver Compatibility

While ESX Server itself is not derived from Linux, it includes a Linux compatibility module to allow Linux storage and networking drivers to be adapted and recompiled for ESX Server. This enables VMware to more easily support a wide
range of high performance devices and eases the driver porting effort on the storage and networking device vendors. VMware typically modifies these drivers for one or more of the following reasons:

- To make the driver compatible with the ESX Server
- To tune the driver for performance
- To add I/O resource governing or QoS support to the driver
- To fix generic bugs in the driver

It is not possible to directly load existing, precompiled, Linux device driver binaries into ESX Server.

**VMware Certification**

VMware certifies that specific systems and components are compatible with ESX Server. Through its Preferred Hardware Partner Program, it works with leading server vendors to ensure that appropriate configurations of their current and future server products are certified with ESX Server products. The following table summarizes the driver versions shipped with the current release of ESX Server. Details of the device models supported by each driver are listed in the following table.

### Table 1. Driver Version Supported in ESX Server 2.5.5

<table>
<thead>
<tr>
<th>Class</th>
<th>Vendor</th>
<th>Driver</th>
<th>Driver Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCSI</td>
<td>Adaptec</td>
<td>aic7xxx</td>
<td>6.2.35</td>
</tr>
<tr>
<td></td>
<td>Adaptec</td>
<td>aic79xx</td>
<td>1.3.7</td>
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<tr>
<td></td>
<td>Adaptec</td>
<td>adp94xx2</td>
<td>1.0.7 rel 11</td>
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<tr>
<td></td>
<td>LSI Logic</td>
<td>ncr53c8xx</td>
<td>3.4.3b</td>
</tr>
<tr>
<td></td>
<td>LSI Logic</td>
<td>sym53c8xx</td>
<td>1.7.3c</td>
</tr>
<tr>
<td></td>
<td>LSI Logic</td>
<td>mptscsi_2xx</td>
<td>2.06.48.01</td>
</tr>
<tr>
<td>RAID</td>
<td>HP</td>
<td>cpqarray</td>
<td>2.4.21</td>
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<td></td>
<td>HP</td>
<td>cciss</td>
<td>2.4.64</td>
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<tr>
<td></td>
<td>Adaptec/Dell/IBM</td>
<td>aacraid_esx</td>
<td>1.1-5 [2415]</td>
</tr>
<tr>
<td></td>
<td>Dell</td>
<td>megaraid_sas</td>
<td>0.0.0.02.00</td>
</tr>
<tr>
<td></td>
<td>IBM/Adaptec</td>
<td>ips</td>
<td>7.10.17</td>
</tr>
<tr>
<td></td>
<td>Adaptec/Dell/IBM</td>
<td>aacraid-115</td>
<td>1.1-5</td>
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<tr>
<td></td>
<td>Intel</td>
<td>gdth</td>
<td>2.04</td>
</tr>
<tr>
<td></td>
<td>LSI</td>
<td>MegaRAID</td>
<td>2.10.7</td>
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<tr>
<td></td>
<td>Mylex</td>
<td>DAC960</td>
<td>2.4.11</td>
</tr>
<tr>
<td>Fibre Channel</td>
<td>Emulex</td>
<td>lpfcdd_732</td>
<td>7.3.2_vmw4</td>
</tr>
<tr>
<td></td>
<td>Qlogic</td>
<td>qla2200_707/qla2300_707</td>
<td>7.07.04.1_vmw</td>
</tr>
<tr>
<td>Network</td>
<td>Broadcom</td>
<td>bcm5700</td>
<td>7.3.5</td>
</tr>
<tr>
<td></td>
<td>Intel</td>
<td>e100</td>
<td>2.3.40</td>
</tr>
<tr>
<td></td>
<td>Intel</td>
<td>e1000</td>
<td>7.3.15</td>
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<td></td>
<td>Broadcom</td>
<td>tg3</td>
<td>3.43b</td>
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<tr>
<td></td>
<td>Broadcom</td>
<td>bnx2</td>
<td>1.41.51b</td>
</tr>
</tbody>
</table>

**Adaptec Ultra160 SCSI Adapters**

The ESX Server Adaptec driver is based on the Linux aic7xxx version 6.2.35 driver. The following PCI Adaptec SCSI adapters and motherboard chip set devices should work as ESX Server adapters.
SCSI Adapters
- AHA_1480A
- AHA_2902/04/10/15/20/30C
- AHA_2930 (C/CU U/U2)
- AHA_2940 AU_0/1/CN
- AHA_2940 (U/UB/Pro/U CN/U Dual/U2/U2B/U2B/U2 OEM)
- AHA_2944 (U)
- AHA_3940 (U/AU)
- AHA_3944 (U/AU)
- AHA_3950 (U2B_0/U2B_1/U2D_0/U2D_1)
- AHA_3960 (D/D CPQ)
- AHA_3960X (U)
- AHA_4944 (U)
- AHA_29160 (CPQ/N/C/B)
- AHA_19160B

RAID Adapters
- 2200/S
- 2120/S

Motherboard Chip Sets
- AIC7850
- AIC7855
- AIC7859
- AIC7860
- AIC7870
- AIC7880
- AIC7892
- AIC7895
- AIC7895C
- AIC7890/91
- AIC7892
- AIC7895
- AIC7896/97
- AIC7899
- AIC7902
- AIC9410
Adaptec Ultra320 SCSI Adapters

The ESX Server Adaptec driver is based on the Linux aic79xx version 1.3.7 driver. The following PCI Adaptec SCSI adapters and motherboard chip set devices should work as ESX Server adapters.

SCSI Adapters
- AHA29320 (A)
- AHA29320 (LP)
- AHA39320 (A/D/DB)

Motherboard Chip Sets
- AIC7901 (A)
- AIC7902 (B)

LSI Logic Symbios and NCR Based SCSI Adapters

Most SCSI adapters based on the LSI Logic Symbios (formerly NCR) 53e8xx family of chip sets are supported as ESX Server devices. ESX Server uses two different drivers to support the device family: one based on the Linux ncr53c8xx version 3.4.3b driver and the other on the sym53c8xx version 1.7.3c driver. LSI Logic’s Symbios product division was formerly NCR Microelectronics Products Division. Older products may have either NCR or Symbios (SYM) part number prefixes; otherwise the part numbers are interchangeable. The following chip sets and adapters are supported as ESX Server devices.

Supported Symbios Chip Sets
- SYM53C810
- SYM53C810A
- SYM53C812
- SYM53C815
- SYM53C820
- SYM53C825
- SYM53C830
- SYM53C835
- SYM53C850
- SYM53C860
- SYM53C875
- SYM53C876
- SYM53C895
- SYM53C895A
- SYM53C896
- SYM53C897
- SYM53C1510D
Table 2. SYM53C1010 Supported Symbios-Based SCSI Adapters

<table>
<thead>
<tr>
<th>Model/Type</th>
<th>Chip Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYM20810 32 bit PCI-to-Fast SCSI</td>
<td>SYM53C810A</td>
</tr>
<tr>
<td>SYM20811 32 bit PCI-to-Fast SCSI</td>
<td>SYM53C810A</td>
</tr>
<tr>
<td>SYM20860 32 bit PCI-to-Ultra SCSI</td>
<td>SYM53C860</td>
</tr>
<tr>
<td>SYM21002 32 bit PCI-to-Ultra2 SCSI</td>
<td>SYM53C896</td>
</tr>
<tr>
<td>SYM22801 PCI-to-Dual Ultra SCSI</td>
<td>SYM53C876</td>
</tr>
<tr>
<td>SYM22802 PCI-to-Ultra SCSI</td>
<td>SYM53C876</td>
</tr>
<tr>
<td>SYM22902 Ultra2 MiniHAB</td>
<td>SYM53C895A/SYM53C895</td>
</tr>
<tr>
<td>SYM22910 PCI-to-Dual Ultra2 SCSI</td>
<td>SYM53C896</td>
</tr>
<tr>
<td>815XS</td>
<td>SYM53C815</td>
</tr>
<tr>
<td>81005</td>
<td>SYM53C810</td>
</tr>
<tr>
<td>SYM8150</td>
<td>SYM53C815</td>
</tr>
<tr>
<td>SYM8251</td>
<td>SYM53C825</td>
</tr>
<tr>
<td>SYM8600SP</td>
<td>SYM53C860</td>
</tr>
<tr>
<td>SYM8750SP</td>
<td>SYM53C875</td>
</tr>
<tr>
<td>SYM8751D</td>
<td>SYM53C875</td>
</tr>
<tr>
<td>SYM8751SPE</td>
<td>SYM53C875</td>
</tr>
<tr>
<td>SYM8951U</td>
<td>SYM53C895</td>
</tr>
<tr>
<td>SYM8952U</td>
<td>SYM53C895A/SYM53C895</td>
</tr>
<tr>
<td>SYM8953U</td>
<td>SYM53C895A</td>
</tr>
<tr>
<td>SYM53C1010</td>
<td>Ultra160</td>
</tr>
<tr>
<td>SYM53C1010_66</td>
<td>Ultra160</td>
</tr>
</tbody>
</table>

Third-party SCSI adapters from Compaq/DEC, Gigabyte, Promise Technology, and Tyan should also work with the ESX Server NCR driver.

**LSI Logic SCSI and SAS Adapters**

The ESX Server driver is based on the LSI Logic mptlinux mptscsi_2xx driver version 2.6.34.13 and supports the following SCSI controllers. These controllers are also supported in a RAID-1 configuration.

- 53C1020
- 53C1030
- LSISAS1064E
- LSISAS1068
- HP SG44Ge Host Bus Adapter

**LSI Logic MegaRAID Adapters**

The ESX Server driver is based on the LSI MegaRAID 2.10.7 driver and supports the following SCSI controllers.

- 320-1
- 320-2
- 320-2E ROMB
- 320-2X
Dell PowerEdge RAID Controllers (PERC)

VMware ESX Server supports two classes of PERC branded controllers. Some are based on Adaptec RAID chip sets, and some on LSI Logic (formerly American Megatrends, Inc.) MegaRAID chip sets.

The ESX Server driver for Adaptec-based PercRAID controllers is based on the Linux aacraid version 0.9.9ac6-T 2.1.5 driver.

- PERC 2/QC
- PERC 3/Si (PowerEdge 2450 onboard RAID)
- PERC 3/Di (PowerEdge 2550, 2650, and 4400 onboard RAID)

The ESX Server driver for LSI Logic/AMI-based PercRAID controllers is based on the Linux megaraid version 2.10.7 driver. The following devices use that driver:

- PERC 2/DC
- PERC 3/DCL
- MegaRAID 418, 428, 438, 466, 762, 467, 471, 490, 493
- Dell PERC 4e/Di internal RAID controllers, also listed as PERC RAID 4ei. (Firmware upgrade 522A is not supported. For further details, refer to KB 5966817 at http://kb.vmware.com/kb/5966817)
- PERC 3/DC
- PERC 3/QC
- PERC 4/DC (Firmware upgrade 352B is not supported. For further details, refer to KB 5966817 at http://kb.vmware.com/kb/5966817)
- PERC 4e/Si
- PERC 4e/DC
- PERC 4/im

The ESX Server driver for LSI Logic/AMI-based PercRAID SAS controllers is based on the Linux megaraid_sas driver. The following devices use the megaraid_sas driver:

- PERC 5/i

HP SmartArray RAID Controllers

The ESX Server driver is based on the HP cpqarray v 2.4.21 and cciss v 2.4.50 drivers.

Cpqarray-based Controllers

- IDA, IDA-2, IAES
- SMART
- SMART-2/E
- SMART-2 (SMART-2/P, SMART-2SL, Smart Array 3200, Smart Array 3100ES, Smart Array 221)
- SMART-4 (Integrated Array, LC2, Smart Array 4200, Smart Array 4250ES, Smart Array 431)
- HP SA P600 SAS controller

CCISSL-based Controllers

- SMART-5 (Smart Array 5300 series, Smart Array 5i, Smart Array 5312)
- SMART-6 (Smart Array 641, 6400, 6402, 6404)
- SMART-6i
**IBM ServeRAID RAID Controllers**

The ESX Server drivers are based on the Linux ips version 7.10.17 driver and the aacraid_esx30 version 1.1-5 [2415] driver.

The ips driver supports the following RAID controllers:

- ServeRAID-3H
- ServeRAID-/4L, 4LX
- ServeRAID-4M, 4Mx
- ServeRAID-4H
- ServeRAID-/5i
- ServeRAID-5M
- ServeRAID-6M*
- ServeRAID-6i*
- ServeRAID-6i+*
- ServeRAID-7k

*Firmware version 7.10.17 and greater.

The aacraid_esx30 driver supports the following RAID controllers:

- ServeRAID-8i
- ServeRAID-8K

**Intel RAID Controllers**

The ESX Server driver is based on the Intel gdth 2.04 driver.

- SRCU42L*

* The SRCU42L card is supported only in the Intel SRSH4 and all OEM versions of that system.

**Mylex AcceleRAID/eXtremeRAID Controllers**

The ESX Server driver is based on the Linux DAC960 version 2.4.11 driver. Specific AcceleRAID and eXtremeRAID controllers are also based on DAC960-compatible controllers.

- DAC960 (E, M, PD, PL, PU, PE, FG, Pj, PTL0, PR, PRL, PTL1)
- DDAC960 (S, SU, SX, SF, SS, FL, LL, FF, HP)
- DAC1164P
- EXR2000P
- EXR3000P
- AcceleRAID 160, 170, 352
- eXtremeRAID 1100

**Emulex Fibre Channel Adapters**

Please see the *SAN Compatibility Guide for ESX Server 2.x* for more information on the specific drivers, configurations, models, and firmware supported.
QLogic Fibre Channel Adapters

Please see the SAN Compatibility Guide for ESX Server 2.x for more information on the specific drivers, configurations, models, and firmware supported.

Intel PRO/100 Ethernet NICs

The default ESX Server driver for PRO/100 NICs is based on the Intel-supplied e100 Intel(R) PRO/100 Fast Ethernet Adapter version 2.0.302.3.40 driver. This is a comprehensive listing of Intel and OEM models that have been based on these chip sets. You should check the specific chip set used in your card for compatibility.

### Table 3.

<table>
<thead>
<tr>
<th>Controller</th>
<th>Adapter Name</th>
<th>Board ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>82558</td>
<td>PRO/100+ PCI Adapter</td>
<td>668081-xxx, 689661-xxx</td>
</tr>
<tr>
<td>82558</td>
<td>PRO/100+ Management Adapter</td>
<td>691334-xxx, 701738-xxx, 721383-xxx</td>
</tr>
<tr>
<td>82558</td>
<td>PRO/100+ Dual Port Server Adapter</td>
<td>714303-xxx, 711269-xxx, A28276-xxx</td>
</tr>
<tr>
<td>82558</td>
<td>PRO/100+ PCI Server Adapter</td>
<td>710550-xxx</td>
</tr>
<tr>
<td>82550</td>
<td>PRO/100 S Server Adapter</td>
<td>752438-xxx (82550)</td>
</tr>
<tr>
<td>82550</td>
<td>PRO/100 S Desktop Adapter</td>
<td>751767-xxx (82550)</td>
</tr>
<tr>
<td>82559</td>
<td>PRO/100 S Desktop Adapter</td>
<td>748592-xxx, A12167-xxx, A12318-xxx, A12317-xxx, A12165-xxx, 748569-xxx (82559)</td>
</tr>
<tr>
<td>82559</td>
<td>PRO/100+ Server Adapter</td>
<td>729757-xxx</td>
</tr>
<tr>
<td>82559</td>
<td>PRO/100 S Management Adapter</td>
<td>748566-xxx, 748564-xxx</td>
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<tr>
<td>82550</td>
<td>PRO/100 S Dual Port Server Adapter</td>
<td>A56831-xxx</td>
</tr>
<tr>
<td>82551</td>
<td>PRO/100 M Desktop Adapter</td>
<td>A80897-xxx</td>
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<tr>
<td>82551</td>
<td>PRO/100 S Advanced Management Adapter</td>
<td>747842-xxx, 745171-xxx</td>
</tr>
<tr>
<td>CNR</td>
<td>PRO/100 VE Desktop Adapter</td>
<td>A10386-xxx, A10725-xxx, A23801-xxx, A19716-xxx</td>
</tr>
<tr>
<td>CNR</td>
<td>PRO/100 VM Desktop Adapter</td>
<td>A14323-xxx, A19725-xxx, A23801-xxx, A22220-xxx, A23796-xxx</td>
</tr>
</tbody>
</table>

The specific HP OEM model numbers associated with this driver are:

- NC360T
- NC3120
- NC3121
- NC3123
- NC3131
- NC3132
- NC3133
- NC3134N
Intel PRO/1000 Gigabit Ethernet NICs

The ESX Server driver for Intel PRO/1000 based Gigabit Ethernet cards is based on the Linux v 5.2.39 e1000 driver. Several HP and IBM Gigabit Ethernet cards are based on this controller, but you need to check the OEM model number to ascertain this.

Table 4.

<table>
<thead>
<tr>
<th>Controller</th>
<th>Adapter Name</th>
<th>Board IDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>82540</td>
<td>PRO/1000 MT Desktop Adapter</td>
<td>A78408-xxx</td>
</tr>
<tr>
<td>82542</td>
<td>PRO/1000 Gigabit Server Adapter</td>
<td>700262-xxx, 717037-xxx</td>
</tr>
<tr>
<td>82543</td>
<td>PRO/1000 F Server Adapter</td>
<td>738640-xxx, A38888-xxx</td>
</tr>
<tr>
<td>82543</td>
<td>PRO/1000 T Server Adapter</td>
<td>A19845-xxx, A33948-xxx</td>
</tr>
<tr>
<td>82544</td>
<td>PRO/1000 XT Server Adapter</td>
<td>A51580-xxx</td>
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<tr>
<td>82544</td>
<td>PRO/1000 XF Server Adapter</td>
<td>A50484-xxx</td>
</tr>
<tr>
<td>82544</td>
<td>PRO/1000 T Desktop Adapter</td>
<td>A62947-xxx</td>
</tr>
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<td>82545</td>
<td>PRO/1000 MT Server Adapter</td>
<td>A92165-xxx</td>
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<td>PRO/1000 MF Server Adapter</td>
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<td>82545</td>
<td>PRO/1000 MF Server Adapter (LX)</td>
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<td>82545GM</td>
<td>PRO/1000 F Server Adapter</td>
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</tr>
<tr>
<td>82546</td>
<td>PRO/1000 MT Dual Port Server Adapter</td>
<td>A92111-xxx</td>
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<tr>
<td>82546</td>
<td>PRO/1000 MF Dual Port Server Adapter</td>
<td>A91620-xxx</td>
</tr>
<tr>
<td>82546EB</td>
<td>PRO/1000 MT Quad Port Server Adapter</td>
<td></td>
</tr>
<tr>
<td>82546EB</td>
<td>Dual Port Gigabit Ethernet Controller</td>
<td></td>
</tr>
<tr>
<td>82546GB</td>
<td>PRO/1000 P Dual Port Server Adapter</td>
<td></td>
</tr>
<tr>
<td>82571EB</td>
<td>Intel PRO/1000 PT Dual Port Server Adapter</td>
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</tr>
<tr>
<td></td>
<td>Intel PRO/1000 PT Quad Port Ethernet Controller</td>
<td></td>
</tr>
<tr>
<td>82572EI</td>
<td>Intel PRO/1000 PT Server Adapter (single port)</td>
<td></td>
</tr>
<tr>
<td>82546GB</td>
<td>Intel PRO/1000 GT Quad Port Server Adapter</td>
<td></td>
</tr>
</tbody>
</table>

The specific HP OEM model numbers associated with this driver are:

- NC110T
- NC310F
- NC340T
- NC6134
- NC6136
VMware supports the following IBM OEM versions of the Intel adapters:

- 06P3601 - IBM 10/100 Ethernet Server Adapter
- 09N9901 - 10/100 Fast Etherlink PCI TX Server
- 22P4901 - IBM 10/100 Dual Port Server Adapter
- 22P680 - PRO/1000 XT (PCI-X) Server Adapter
- 31P9601 - PRO/1000 MT Server Ethernet Adapter
- 73P2701 - IBM PRO/1000 MT Dual Port Server Ethernet Adapter
- 73P5101 - PRO/1000 GT Dual Port Server Adapter
- IBM PRO/1000 GT Quad Port Server Adapter by Intel
- IBM PRO/1000 MT Server Ethernet Adapter by Intel
- IBM PRO/1000 MT Dual Port Server Adapter by Intel
- IBM PRO/1000 GT Server Adapter by Intel
- IBM PRO/1000 GT Dual Port Server Adapter by Intel
- IBM PRO/1000 PT Dual Port Server Adapter by Intel
- IBM PRO/1000 XT Server Adapter by Intel

The specific Sun OEM model numbers associated with this driver are:

- X7280A-2
- X7281A-2
- X7285A
- X7286A
- X7291A
- X9271A
- X9272A
- X9273A
- X9273A-Z

**Broadcom Gigabit Ethernet NICs**

The ESX Server driver for Broadcom Gigabit Ethernet cards is based on the Broadcom 5700 driver for Linux v 7.3.5 version driver.

- Broadcom Vigil B5700 1000Base-T
- Broadcom BCM5700 1000Base-T
- Broadcom BCM5700 1000Base-SX
- Broadcom BCM5700
- Broadcom BCM5701 1000Base-T
- Broadcom BCM5701 1000Base-SX
■ Broadcom BCM5701 1000Base-T
■ Broadcom BCM5701
■ Broadcom BCM5702 1000Base-T
■ Broadcom BCM5703 1000Base-T
■ Broadcom BCM5703 1000Base-SX
■ Broadcom Arbuckle B5703 1000Base-SX
■ Broadcom BCM5704 CIoB-E 1000Base-T
■ Broadcom BCM5704 1000Base-T
■ Broadcom BCM5704 1000Base-SX, T
■ Broadcom BCM5705 1000Base-T
■ Broadcom BCM5705M 1000Base-T
■ Broadcom BCM5721 Gigabit Ethernet
■ Broadcom NetXtreme Gigabit Ethernet for HPhp
■ Broadcom BCM5788 1000Base-T
■ 3Com 3C996 10/100/1000 Server NIC
■ 3Com 3C996 Gigabit Fiber-SX Server NIC
■ 3Com 3C996B Gigabit Server NIC
■ 3Com 3C997 Gigabit Server NIC
■ 3Com 3C997 Gigabit Fiber-SX Server NIC
■ 3Com 3C1000 Gigabit NIC
■ 3Com 3C940 Gigabit LOM (21X21)
■ 3Com 3C942 Gigabit LOM (31X31)
■ HP NC150T
■ HP NC150T PCI four-port Gigabit Combo Switch Adapter
■ HP NC320T PCI-X Gigabit Server Adapter
■ HP NC325m Quad-Port Gigabit Server Adapter
■ HP NC364m Dual-Port Multifunction Gigabit Server Adapter
■ HP NC364T
■ HP NC364T PCI Express Quad Port Gigabit Server
■ HP NC370F
■ HP NC370F PCI-X Multifunction 1000SX Gigabit Server Adapter
■ HP NC370T PCI-X Multifunction Gigabit Server Adapter
■ HP NC373F
■ HP NC373F PCI Express Multifunction Gigabit Server Adapter
■ HP NC373m Dual-Port Multifunction Gigabit Server Adapter
■ HP NC373T PCI Express Multifunction Gigabit Server Adapter
■ HP NC373T PCI-X Multifunction Gigabit Server Adapter
HP NC374m PCI Express Multifunction Gigabit Server Adapter
HP NC380T Gigabit Server Adapter
HP NC6770 Gigabit Server Adapter
HP NC7760 Gigabit Server Adapter
HP NC7761 Gigabit Server Adapter
HP NC7770 Gigabit Server Adapter
HP NC7771 Gigabit Server Adapter
HP NC7772 Gigabit Server Adapter
HP NC7780 Gigabit Server Adapter
HP NC7781 Gigabit Server Adapter
HP NC7782 Gigabit Server Adapter
HP NC7783 Gigabit Server Adapter
IBM NetXtreme II 1000 Express Ethernet Adapter
IBM NetXtreme 1000 T Express Ethernet Adapter
IBM NetXtreme 1000 T + Ethernet Adapter
IBM NetXtreme 1000 T + Dual Port Ethernet Adapter
IBM NetXtreme 1000 SX + Fiber Ethernet Adapter
IBM NetXtreme 1000 Express G Ethernet Adapter
73P9030 - Gigabit Ethernet Expansion
90P3777 - Gigabit Ethernet Expansion
26K4842 - Gigabit Ethernet Expansion

ESX Server software uses the open source tg3 driver for the following Gigabit Ethernet cards:
- Broadcom BCM5715

ESX Server software uses the open source bnx2 driver for the following Gigabit Ethernet cards:
- Broadcom BCM5706
- Broadcom BCM5708
- Broadcom BCM5708C

**3Com EtherLink PCI III/XL Series Ethernet NICs**

ESX Server supports many 3Com Ethernet NICs. The ESX Server driver includes two drivers: one based on the Linux 3c90x version 1.0.2 driver and the other based on the Linux 3C990-x version 1.0.0b. The following 3Com NICs are supported as ESX Server devices.

**EtherLink 10/100 PCI NICs**
- 3C905C Family and 3C920 ASICs – EtherLink 10/100 PCI including the -TX and -TX-M
- 3C905B Family and 3C918 ASICs – EtherLink 10/100 PCI including the -TX, -TX-M, and -TX-NM
- 3C905B-COMBO – EtherLink 10/100 PCI COMBO
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3C905B-T4 – EtherLink 10/100 PCI T4

EtherLink Server 10/100 PCI NICs

- 3C980C-TX – EtherLink Server 10/100 PCI
- 3C980B-TX – EtherLink Server 10/100 PCI
- 3C980-TX – EtherLink Server 10/100 PCI

EtherLink 100 PCI NIC

- 3C905B-FX – EtherLink 100 PCI Fiber

EtherLink 10 PCI NICs

- 3C900B-TPO – EtherLink 10 PCI TPO
- 3C900B-TPC – EtherLink 10 PCI TPC
- 3C900B-COMBO – EtherLink 10 PCI COMBO
- 3C900B-FL – EtherLink 10 PCI Fiber

In addition, all cards based on the 3c990-x card should be compatible with ESX Server.

IBM BladeCenter NICs

- 73P9030 - IBM BladeCenter GB Ethernet Expansion
- 90P3777 - Intel GB Ethernet Expansion
- 26K4842 - IBM BladeCenter SFF GBEthernet Expansion

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Currently Supported Device Families

VMware currently has ESX Server device drivers available that support specific devices within the following families of I/O controllers. Please examine the detailed list of device models below to make sure your specific device is supported.

SCSI Controllers (Attached to Non-Removable SCSI Devices Only)

NOTE: CD-ROM devices are removable devices, whereas tape drives are considered to be non-removable devices.

- Adaptec Ultra160 and Ultra 320 SCSI controllers.
- LSI Logic Symbios and NCR chip set-based SCSI controllers
- LSI Logic Fusion-MPT controllers

RAID Controllers

- Adaptec RAID
- Dell PercRAID controllers
- HP SmartArray controllers
- Intel RAID controller
- IBM ServeRAID controllers
- LSI MegaRAID controllers
- Mylex AcceleRAID and ExtremeRAID controllers
Fibre Channel Adapters (SCSI Protocol Support Only)
- Emulex Host Bus Adapters
- QLogic Host Bus Adapters

Ethernet NICs
- Intel PRO/100 Ethernet NICs
- Intel PRO/1000 Gigabit Ethernet NICs
- Broadcom NetXtreme 570x series Gigabit NICs
- Broadcom NetXtreme II Gigabit NICs
- 3Com Fast Ethernet NICs

VMware may add support for drivers and devices between releases of the product; check the VMware Web site for current information at http://www.vmware.com/support/pubs/.

The detailed list below shows actual vendor chip sets and adapters that VMware believes are compatible with the currently supported drivers. Although we have been careful in compiling the list, we have not tested all of these devices and cannot warrant that they all work. There may also be devices that are not listed but that do work with these device drivers.

Please contact VMware with any questions about current and planned device support.

**Linux Driver Compatibility**

While ESX Server itself is not derived from Linux, it includes a Linux compatibility module to allow Linux storage and networking drivers to be adapted and recompiled for ESX Server. This enables VMware to more easily support a wide range of high performance devices and eases the driver porting effort on the storage and networking device vendors. VMware typically modifies these drivers for one or more of the following reasons:

- To make the driver compatible with the ESX Server
- To tune the driver for performance
- To add I/O resource governing or QoS support to the driver
- To fix generic bugs in the driver

It is not possible to directly load existing, precompiled, Linux device driver binaries into ESX Server.

**VMware Certification**

VMware certifies that specific systems and components are compatible with ESX Server. Through its Preferred Hardware Partner Program, it works with leading server vendors to ensure that appropriate configurations of their current and future server products are certified with ESX Server products. The following table summarizes the driver versions shipped with the current release of ESX Server. Details of the device models supported by each driver are listed in the following table.
### Table 5. Driver Version Supported in ESX Server 2.5.4

<table>
<thead>
<tr>
<th>Class</th>
<th>Vendor</th>
<th>Driver</th>
<th>Driver Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCSI</td>
<td>Adaptec</td>
<td>aic7xxx</td>
<td>6.2.35</td>
</tr>
<tr>
<td></td>
<td>Adaptec</td>
<td>aic79xx</td>
<td>1.3.7</td>
</tr>
<tr>
<td></td>
<td>Adaptec</td>
<td>adp94xx2</td>
<td>1.0.7 rel 11</td>
</tr>
<tr>
<td></td>
<td>LSI Logic</td>
<td>ncr53c8xx</td>
<td>3.4.3b</td>
</tr>
<tr>
<td></td>
<td>LSI Logic</td>
<td>sym53c8xx</td>
<td>1.7.3c</td>
</tr>
<tr>
<td></td>
<td>LSI Logic</td>
<td>mptscsi_2xx</td>
<td>2.6.34.13</td>
</tr>
<tr>
<td>RAID</td>
<td>HP</td>
<td>cpqarray</td>
<td>2.4.21</td>
</tr>
<tr>
<td></td>
<td>HP</td>
<td>cciss</td>
<td>2.4.54</td>
</tr>
<tr>
<td></td>
<td>Adaptec/Dell/IBM</td>
<td>aacraid_esx</td>
<td>1.1-5 [2415]</td>
</tr>
<tr>
<td></td>
<td>Dell</td>
<td>megaraid_sas</td>
<td>0.00.02.00</td>
</tr>
<tr>
<td></td>
<td>IBM/Adaptec</td>
<td>ips</td>
<td>7.10.17</td>
</tr>
<tr>
<td></td>
<td>Adaptec/Dell/IBM</td>
<td>aacraid-115</td>
<td>1.1-5</td>
</tr>
<tr>
<td></td>
<td>Intel</td>
<td>gdtth</td>
<td>2.04</td>
</tr>
<tr>
<td></td>
<td>LSI</td>
<td>MegaRAID</td>
<td>2.10.7</td>
</tr>
<tr>
<td></td>
<td>Mylex</td>
<td>DAC960</td>
<td>2.4.11</td>
</tr>
<tr>
<td>Fibre Channel</td>
<td>Emulex</td>
<td>lpfccdd_2xx</td>
<td>2.01g</td>
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<tr>
<td></td>
<td>Qlogic</td>
<td>qla2200_7xx</td>
<td>7.04.00</td>
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<td></td>
<td></td>
<td>qla2300_7xx</td>
<td></td>
</tr>
<tr>
<td>Network</td>
<td>Broadcom</td>
<td>bcm5700</td>
<td>7.3.5</td>
</tr>
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<td></td>
<td>Intel</td>
<td>e100</td>
<td>2.3.40</td>
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<td></td>
<td>Intel</td>
<td>e1000</td>
<td>7.0.33</td>
</tr>
<tr>
<td></td>
<td>Broadcom</td>
<td>tg3</td>
<td>3.43b</td>
</tr>
<tr>
<td></td>
<td>Broadcom</td>
<td>bnx2</td>
<td>1.4.39b</td>
</tr>
</tbody>
</table>

## Adaptec Ultra160 SCSI Adapters

The ESX Server Adaptec driver is based on the Linux aic7xxx version 6.2.35 driver. The following PCI Adaptec SCSI adapters and motherboard chip set devices should work as ESX Server adapters.

### SCSI Adapters
- AHA_1480A
- AHA_2902/04/10/15/20/30C
- AHA_2930 (C/CU U/U2)
- AHA_2940 AU_0/1/CN
- AHA_2944 (U)
- AHA_3940 (U/AU)
- AHA_3944 (U/AU)
- AHA_3950 (U2B_0/U2B_1/U2D_0/U2D_1)
- AHA_3960 (D/D CPQ)
- AHA_398X (U)
RAID Adapters
- 2200/S
- 2120/S

Motherboard Chip Sets
- AIC7850
- AIC7855
- AIC7859
- AIC7860
- AIC7870
- AIC7880
- AIC7892
- AIC7895
- AIC7895C
- AIC7890/91
- AIC7892
- AIC7895
- AIC7896/97
- AIC7899
- AIC7902
- AIC9410

Adaptec Ultra320 SCSI Adapters
The ESX Server Adaptec driver is based on the Linux aic79xx version 1.3.7 driver. The following PCI Adaptec SCSI adapters and motherboard chip set devices should work as ESX Server adapters.

SCSI Adapters
- AHA29320 (A)
- AHA29320 (LP)
- AHA39320 (A/D/DB)

Motherboard Chip Sets
- AIC7901 (A)
- AIC7902 (B)

LSI Logic Symbios and NCR Based SCSI Adapters
Most SCSI adapters based on the LSI Logic Symbios (formerly NCR) 53c8xx family of chip sets are supported as ESX Server devices. ESX Server uses two different drivers to support the device family: one based on the Linux ncr53c8xx
version 3.4.3b driver and the other on the sym53c8xx version 1.7.3c driver. LSI Logic’s Symbios product division was formerly NCR Microelectronics Products Division. Older products may have either NCR or Symbios (SYM) part number prefixes; otherwise the part numbers are interchangeable. The following chip sets and adapters are supported as ESX Server devices.

### Supported Symbios Chip Sets

- SYM53C810
- SYM53C810A
- SYM53C815
- SYM53C820
- SYM53C825
- SYM53C860
- SYM53C875
- SYM53C876
- SYM53C895
- SYM53C895A
- SYM53C896
- SYM53C897
- SYM53C1510D
Third-party SCSI adapters from Compaq/DEC, Gigabyte, Promise Technology, and Tyan should also work with the ESX Server NCR driver.

**LSI Logic SCSI and SAS Adapters**

The ESX Server driver is based on the LSI Logic mptlinux mptscsi_2xx driver version 2.6.34.13 and supports the following SCSI controllers. These controllers are also supported in a RAID-1 configuration.

- 53C1020
- 53C1030
- LSISAS1064E
- LSISAS1068

**LSI Logic MegaRAID Adapters**

The ESX Server driver is based on the LSI MegaRAID 2.10.7 driver and supports the following SCSI controllers.

- 320-1
- 320-2
- 320-2E ROMB
- 320-2X

---

**Table 6. SYM53C1010 Supported Symbios-Based SCSI Adapters**

<table>
<thead>
<tr>
<th>Model/Type</th>
<th>Chip Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYM20810 32 bit PCI-to-Fast SCSI</td>
<td>SYM53C810A</td>
</tr>
<tr>
<td>SYM20811 32 bit PCI-to-Fast SCSI</td>
<td>SYM53C810A</td>
</tr>
<tr>
<td>SYM20860 32 bit PCI-to-Ultra SCSI</td>
<td>SYM53C860</td>
</tr>
<tr>
<td>SYM21002 32 bit PCI-to-Ultra2 SCSI</td>
<td>SYM53C896</td>
</tr>
<tr>
<td>SYM22801 PCI-to-Dual Ultra SCSI</td>
<td>SYM53C876</td>
</tr>
<tr>
<td>SYM22802 PCI-to-Ultra SCSI</td>
<td>SYM53C876</td>
</tr>
<tr>
<td>SYM22902 Ultra2 MiniHAB</td>
<td>SYM53C895A/SYM53C895</td>
</tr>
<tr>
<td>SYM22910 PCI-to-Dual Ultra2 SCSI</td>
<td>SYM53C896</td>
</tr>
<tr>
<td>815XS</td>
<td>SYM53C815</td>
</tr>
<tr>
<td>8100S</td>
<td>SYM53C810</td>
</tr>
<tr>
<td>SYM8150</td>
<td>SYM53C815</td>
</tr>
<tr>
<td>SYM8251</td>
<td>SYM53C825</td>
</tr>
<tr>
<td>SYM8600SP</td>
<td>SYM53C860</td>
</tr>
<tr>
<td>SYM8750SP</td>
<td>SYM53C875</td>
</tr>
<tr>
<td>SYM8751D</td>
<td>SYM53C875</td>
</tr>
<tr>
<td>SYM8751SPE</td>
<td>SYM53C875</td>
</tr>
<tr>
<td>SYM8951U</td>
<td>SYM53C895</td>
</tr>
<tr>
<td>SYM8952U</td>
<td>SYM53C895A/SYM53C895</td>
</tr>
<tr>
<td>SYM8953U</td>
<td>SYM53C895A</td>
</tr>
<tr>
<td>SYM53C1010</td>
<td>Ultra160</td>
</tr>
<tr>
<td>SYM53C1010_66</td>
<td>Ultra160</td>
</tr>
</tbody>
</table>
Dell PowerEdge RAID Controllers (PERC)
VMware ESX Server supports two classes of PERC branded controllers. Some are based on Adaptec RAID chip sets, and some on LSI Logic (formerly American Megatrends, Inc.) MegaRAID chip sets.

The ESX Server driver for Adaptec-based PercRAID controllers is based on the Linux aacraid version 0.9.9ac6-T 2.1.5 driver.

- PERC 2/QC
- PERC 3/Si (PowerEdge 2450 onboard RAID)
- PERC 3/Di (PowerEdge 2550, 2650, and 4400 onboard RAID)

The ESX Server driver for LSI Logic/AMI-based PercRAID controllers is based on the Linux megaraid version 2.10.7 driver. The following devices use that driver:

- PERC 2/DC
- PERC 3/DCL
- MegaRAID 418, 428, 438, 466, 762, 467, 471, 490, 493
- Dell PERC 4e/Di internal RAID controllers, also listed as PERC RAID 4ei. (Firmware upgrade 522A is not supported. For further details, refer to KB 5966817 at [http://kb.vmware.com/kb/5966817](http://kb.vmware.com/kb/5966817))
- PERC 3/DC
- PERC 3/QC
- PERC 4/DC (Firmware upgrade 352B is not supported. For further details, refer to KB 5966817 at [http://kb.vmware.com/kb/5966817](http://kb.vmware.com/kb/5966817))
- PERC 4e/Si
- PERC 4e/DC
- PERC 4/im

The ESX Server driver for LSI Logic/AMI-based PercRAID SAS controllers is based on the Linux megaraid_sas driver. The following devices use the megaraid_sas driver:

- PERC 5/i

HP SmartArray RAID Controllers
The ESX Server driver is based on the HP cpqarray v 2.4.21 and cciss v 2.4.50 drivers.

Cpqarray-based Controllers

- IDA, IDA-2, IAES
- SMART
- SMART-2/E
- SMART-2 (SMART-2/P, SMART-2SL, Smart Array 3200, Smart Array 3100ES, Smart Array 221)
- SMART-4 (Integrated Array, LC2, Smart Array 4200, Smart Array 4250ES, Smart Array 431)
- HP SA P600 SAS controller

CCISS-based Controllers

- SMART-5 (Smart Array 5300 series, Smart Array 5i, Smart Array 5312)
- SMART-6 (Smart Array 641, 6400, 6402, 6404)
- SMART-6i
IBM ServeRAID RAID Controllers
The ESX Server drivers are based on the Linux ips version 7.10.17 driver and the aacraid_esx30 version 1.1-5 [2415] driver.

The ips driver supports the following RAID controllers:
- ServeRAID-3H
- ServeRAID-/4L, 4LX
- ServeRAID-4M, 4Mx
- ServeRAID-4H
- ServeRAID-/5i
- ServeRAID-5M
- ServeRAID-6M*
- ServeRAID-6i*
- ServeRAID-6i+*
- ServeRAID-7k

*Firmware version 7.10.17 and greater.

The aacraid_esx30 driver supports the following RAID controllers:
- ServeRAID-8i
- ServeRAID-8K

Intel RAID Controllers
The ESX Server driver is based on the Intel gdth 2.04 driver.
- SRCU42L*

* The SRCU42L card is supported only in the Intel SRSH4 and all OEM versions of that system.

Mylex AcceleRAID/eXtremeRAID Controllers
The ESX Server driver is based on the Linux DAC960 version 2.4.11 driver. Specific AcceleRAID and eXtremeRAID controllers are also based on DAC960-compatible controllers.
- DAC960 (E, M, PD, PL, PU, PE, PG, Pj, PTL0, PR, PRL, PTL1)
- DDAC960 (S, SU, SX, SF, SS, FL, LL, FF, HP)
- DAC1164P
- EXR2000P
- EXR3000P
- AcceleRAID 160, 170, 352
- eXtremeRAID 1100

Emulex Fibre Channel Adapters
Please see the SAN Compatibility Guide for ESX Server 2.x for more information on the specific drivers, configurations, models, and firmware supported.
QLogic Fibre Channel Adapters

Please see the SAN Compatibility Guide for ESX Server 2.x for more information on the specific drivers, configurations, models, and firmware supported.

Intel PRO/100 Ethernet NICs

The default ESX Server driver for PRO/100 NICs is based on the Intel-supplied e100 Intel(R) PRO/100 Fast Ethernet Adapter version 2.0.302.3.40 driver. This is a comprehensive listing of Intel and OEM models that have been based on these chip sets. You should check the specific chip set used in your card for compatibility.

Table 7.

<table>
<thead>
<tr>
<th>Controller</th>
<th>Adapter Name</th>
<th>Board ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>82558</td>
<td>PRO/100+ PCI Adapter</td>
<td>668081-xxx, 689661-xxx</td>
</tr>
<tr>
<td>82558</td>
<td>PRO/100+ Management Adapter</td>
<td>691334-xxx, 701738-xxx, 721383-xxx</td>
</tr>
<tr>
<td>82558</td>
<td>PRO/100+ Dual Port Server Adapter</td>
<td>714303-xxx, 711269-xxx, A28276-xxx</td>
</tr>
<tr>
<td>82558</td>
<td>PRO/100+ PCI Server Adapter</td>
<td>710550-xxx</td>
</tr>
<tr>
<td>82550</td>
<td>PRO/100 S Server Adapter</td>
<td>752438-xxx (82550)</td>
</tr>
<tr>
<td>82550</td>
<td>PRO/100 S Desktop Adapter</td>
<td>751767-xxx (82550)</td>
</tr>
<tr>
<td>82559</td>
<td>PRO/100 S Desktop Adapter</td>
<td>748592-xxx, A12167-xxx, A12318-xxx, A12317-xxx, A12165-xxx, 748569-xxx (82559)</td>
</tr>
<tr>
<td>82559</td>
<td>PRO/100+ Server Adapter</td>
<td>729757-xxx</td>
</tr>
<tr>
<td>82559</td>
<td>PRO/100 S Management Adapter</td>
<td>748566-xxx, 748564-xxx</td>
</tr>
<tr>
<td>82550</td>
<td>PRO/100 S Dual Port Server Adapter</td>
<td>A56831-xxx</td>
</tr>
<tr>
<td>82551</td>
<td>PRO/100 M Desktop Adapter</td>
<td>A80897-xxx</td>
</tr>
<tr>
<td>82551</td>
<td>PRO/100 S Advanced Management Adapter</td>
<td>747842-xxx, 745171-xxx</td>
</tr>
<tr>
<td>CNR</td>
<td>PRO/100 VE Desktop Adapter</td>
<td>A10386-xxx, A10725-xxx, A23801-xxx, A19716-xxx</td>
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<tr>
<td>CNR</td>
<td>PRO/100 VM Desktop Adapter</td>
<td>A14323-xxx, A19725-xxx, A23801-xxx, A22220-xxx, A23796-xxx</td>
</tr>
</tbody>
</table>

The specific HP OEM model numbers associated with this driver are:

- NC360T
- NC3120
- NC3121
- NC3123
- NC3131
- NC3132
- NC3133
- NC3134N
Intel PRO/1000 Gigabit Ethernet NICs

The ESX Server driver for Intel PRO/1000 based Gigabit Ethernet cards is based on the Linux v 5.2.39 e1000 driver. Several HP and IBM Gigabit Ethernet cards are based on this controller, but you need to check the OEM model number to ascertain this.

Table 8.

<table>
<thead>
<tr>
<th>Controller</th>
<th>Adapter Name</th>
<th>Board IDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>82540</td>
<td>PRO/1000 MT Desktop Adapter</td>
<td>A78408-xxx</td>
</tr>
<tr>
<td>82542</td>
<td>PRO/1000 Gigabit Server Adapter</td>
<td>700262-xxx, 717037-xxx</td>
</tr>
<tr>
<td>82543</td>
<td>PRO/1000 F Server Adapter</td>
<td>738640-xxx, A38888-xxx</td>
</tr>
<tr>
<td>82543</td>
<td>PRO/1000 T Server Adapter</td>
<td>A19845-xxx, A33948-xxx</td>
</tr>
<tr>
<td>82544</td>
<td>PRO/1000 XT Server Adapter</td>
<td>A51580-xxx</td>
</tr>
<tr>
<td>82544</td>
<td>PRO/1000 XF Server Adapter</td>
<td>A50484-xxx</td>
</tr>
<tr>
<td>82544</td>
<td>PRO/1000 T Desktop Adapter</td>
<td>A62947-xxx</td>
</tr>
<tr>
<td>82545</td>
<td>PRO/1000 MT Server Adapter</td>
<td>A92165-xxx</td>
</tr>
<tr>
<td>82545</td>
<td>PRO/1000 MF Server Adapter</td>
<td>A91622-xxx</td>
</tr>
<tr>
<td>82545</td>
<td>PRO/1000 MF Server Adapter (LX)</td>
<td>A91624-xxx</td>
</tr>
<tr>
<td>82545GM</td>
<td>PRO/1000 F Server Adapter</td>
<td></td>
</tr>
<tr>
<td>82546</td>
<td>PRO/1000 MT Dual Port Server Adapter</td>
<td>A92111-xxx</td>
</tr>
<tr>
<td>82546</td>
<td>PRO/1000 MF Dual Port Server Adapter</td>
<td>A92111-xxx</td>
</tr>
<tr>
<td>82546EB</td>
<td>PRO/1000 MT Quad Port Server Adapter</td>
<td>A91620-xxx</td>
</tr>
<tr>
<td>82546EB</td>
<td>Dual Port Gigabit Ethernet Controller</td>
<td></td>
</tr>
<tr>
<td>82546GB</td>
<td>PRO/1000 P Dual Port Server Adapter</td>
<td></td>
</tr>
<tr>
<td>82571EB</td>
<td>Intel PRO/1000 PT Dual Port Server Adapter</td>
<td></td>
</tr>
<tr>
<td>82572EI</td>
<td>Intel PRO/1000 PT Server Adapter (single port)</td>
<td></td>
</tr>
<tr>
<td>82546GB</td>
<td>Intel PRO/1000 GT Quad Port Server Adapter</td>
<td></td>
</tr>
</tbody>
</table>

The specific HP OEM model numbers associated with this driver are:

- NC110T
- NC310F
- NC340T
- NC6134
- NC6136
- NC7131
VMware supports the following IBM OEM versions of the Intel adapters:

- 06P3601 - IBM 10/100 Ethernet Server Adapter
- 09N9901 - 10/100 Fast Etherlink PCI TX Server
- 22P4901 - IBM 10/100 Dual Port Server Adapter
- 22P680 - PRO/1000 XT (PCI-X) Server Adapter
- 31P9601 - PRO/1000 MT Server Ethernet Adapter
- 73P2701 - IBM PRO/1000 MT Dual Port Server Ethernet Adapter
- 73P5101 - PRO/1000 GT Dual Port Server Adapter
- IBM PRO/1000 GT Quad Port Server Adapter by Intel
- IBM PRO/1000 MT Server Ethernet Adapter by Intel
- IBM PRO/1000 MT Dual Port Server Adapter by Intel
- IBM PRO/1000 GT Server Adapter by Intel
- IBM PRO/1000 GT Dual Port Server Adapter by Intel
- IBM PRO/1000 PT Dual Port Server Adapter by Intel
- IBM PRO/1000 XT Server Adapter by Intel

The specific Sun OEM model numbers associated with this driver are:

- X7280A-2
- X7281A-2
- X7285A
- X7286A
- X7291A
- X9271A
- X9272A
- X9273A
- X9273A-Z

**Broadcom Gigabit Ethernet NICs**

The ESX Server driver for Broadcom Gigabit Ethernet cards is based on the Broadcom 5700 driver for Linux v 7.3.5 version driver.

- Broadcom Vigil B5700 1000Base-T
- Broadcom BCM5700 1000Base-T
- Broadcom BCM5700 1000Base-SX
- Broadcom BCM5700
- Broadcom BCM5701 1000Base-T
- Broadcom BCM5701 1000Base-SX
- Broadcom BCM5701 1000Base-T
- Broadcom BCM5701
- Broadcom BCM5702 1000Base-T
- Broadcom BCM5703 1000Base-T
- Broadcom BCM5703 1000Base-SX
- Broadcom Arbuckle B5703 1000Base-SX
- Broadcom BCM5704 CIOB-E 1000Base-T
- Broadcom BCM5704 1000Base-T
- Broadcom BCM5704 1000Base-SX, T
- Broadcom BCM5705 1000Base-T
- Broadcom BCM5705M 1000Base-T
- Broadcom BCM5721 Gigabit Ethernet
- Broadcom NetXtreme Gigabit Ethernet for HP
- Broadcom BCM5788 1000Base-T
- 3Com 3C996 10/100/1000 Server NIC
- 3Com 3C996 Gigabit Fiber-SX Server NIC
- 3Com 3C996B Gigabit Server NIC
- 3Com 3C997 Gigabit Server NIC
- 3Com 3C997 Gigabit Fiber-SX Server NIC
- 3Com 3C1000 Gigabit NIC
- 3Com 3C940 Gigabit LOM (21X21)
- 3Com 3C942 Gigabit LOM (31X31)
- HP NC150T
- HP NC150T PCI four-port Gigabit Combo Switch Adapter
- HP NC320T PCI-X Gigabit Server Adapter
- HP NC325m Quad-Port Gigabit Server Adapter
- HP NC364m Dual-Port Multifunction Gigabit Server Adapter
- HP NC364T
- HP NC364T PCI Express Quad Port Gigabit Server
- HP NC370F
- HP NC370F PCI-X Multifunction 1000SX Gigabit Server Adapter
- HP NC370T PCI-X Multifunction Gigabit Server Adapter
- HP NC373F
- HP NC373F PCI Express Multifunction Gigabit Server Adapter
- HP NC373m Dual-Port Multifunction Gigabit Server Adapter
- HP NC373T PCI Express Multifunction Gigabit Server Adapter
- HP NC373T PCI-X Multifunction Gigabit Server Adapter
- HP NC374m PCI Express Multifunction Gigabit Server Adapter
- HP NC380T Gigabit Server Adapter
- HP NC6770 Gigabit Server Adapter
- HP NC7760 Gigabit Server Adapter
- HP NC7761 Gigabit Server Adapter
- HP NC7770 Gigabit Server Adapter
- HP NC7771 Gigabit Server Adapter
- HP NC7772 Gigabit Server Adapter
- HP NC7780 Gigabit Server Adapter
- HP NC7781 Gigabit Server Adapter
- HP NC7782 Gigabit Server Adapter
- HP NC7783 Gigabit Server Adapter
- IBM NetXtreme II 1000 Express Ethernet Adapter
- IBM NetXtreme 1000 T Express Ethernet Adapter
- IBM NetXtreme 1000 T + Ethernet Adapter
- IBM NetXtreme 1000 T + Dual Port Ethernet Adapter
- IBM NetXtreme 1000 SX + Fiber Ethernet Adapter
- IBM NetXtreme 1000 Express G Ethernet Adapter
- 73P9030 - Gigabit Ethernet Expansion
- 90P3777 - Gigabit Ethernet Expansion
- 26K4842 - Gigabit Ethernet Expansion

ESX Server software uses the open source tg3 driver for the following Gigabit Ethernet cards:

- Broadcom BCM5715

ESX Server software uses the open source bnx2 driver for the following Gigabit Ethernet cards:

- Broadcom BCM5706
- Broadcom BCM5708

### 3Com EtherLink PCI III/XL Series Ethernet NICs

ESX Server supports many 3Com Ethernet NICs. The ESX Server driver includes two drivers: one based on the Linux 3c90x version 1.0.2 driver and the other based on the Linux 3C990-x version 1.0.0b. The following 3Com NICs are supported as ESX Server devices.

#### EtherLink 10/100 PCI NICs

- 3C905C Family and 3C920 ASICs – EtherLink 10/100 PCI including the -TX and -TX-M
- 3C905B Family and 3C918 ASICs – EtherLink 10/100 PCI including the -TX, -TX-M, and -TX-NM
- 3C905B-COMBO – EtherLink 10/100 PCI COMBO
- 3C905B-T4 – EtherLink 10/100 PCI T4
EtherLink Server 10/100 PCI NICs
- 3C980C-TX – EtherLink Server 10/100 PCI
- 3C980B-TX – EtherLink Server 10/100 PCI
- 3C980-TX – EtherLink Server 10/100 PCI

EtherLink 100 PCI NIC
- 3C905B-FX – EtherLink 100 PCI Fiber

EtherLink 10 PCI NICs
- 3C900B-TPO – EtherLink 10 PCI TPO
- 3C900B-TPC – EtherLink 10 PCI TPC
- 3C900B-COMBO – EtherLink 10 PCI COMBO
- 3C900B-FL – EtherLink 10 PCI Fiber

In addition, all cards based on the 3c990-x card should be compatible with ESX Server.

IBM Bladecenter NICs
- 73P9030 - IBM BladeCenter GB Ethernet Expansion
- 90P3777 - Intel GB Ethernet Expansion
- 26K4842 - IBM BladeCenter SFF GBEthernet Expansion

ESX Server 2.5.3

Currently Supported Device Families
VMware currently has ESX Server device drivers available that support specific devices within the following families of I/O controllers. Please examine the detailed list of device models below to make sure your specific device is supported.

SCSI Controllers (Attached to Non-Removable SCSI Devices Only)
Note: CD-ROM devices are removable devices, whereas tape drives are considered to be non-removable devices.
- Adaptec Ultra160 and Ultra 320 SCSI controllers
- LSI Logic Symbios and NCR chip set-based SCSI controllers
- LSI Logic Fusion-MPT SCSI controllers

RAID Controllers
- Adaptec RAID
- Dell PercRAID controllers
- HP SmartArray controllers
- Intel RAID controller
- IBM ServeRAID controllers
- LSI MegaRAID controllers
- Mylex AcceleRAID and ExtremeRAID controllers
Fibre Channel Adapters (SCSI Protocol Support Only)

- Emulex Host Bus Adapters
- QLogic Host Bus Adapters

Ethernet NICs

- Intel PRO/100 Ethernet NICs
- Intel PRO/1000 Gigabit Ethernet NICs
- Broadcom NetXtreme 570x series Gigabit NICs
- 3Com Fast Ethernet NICs

VMware may add support for drivers and devices between releases of the product; check the VMware Web site for current information at [http://www.vmware.com/support/pubs/](http://www.vmware.com/support/pubs/).

The detailed list below shows actual vendor chip sets and adapters that VMware believes are compatible with the currently supported drivers. Although we have been careful in compiling the list, we have not tested all of these devices and cannot warrant that they all work. There may also be devices that are not listed but that do work with these device drivers.

Please contact VMware with any questions about current and planned device support.

### Linux Driver Compatibility

While ESX Server itself is not derived from Linux, it includes a Linux compatibility module to allow Linux storage and networking drivers to be adapted and recompiled for ESX Server. This enables VMware to more easily support a wide range of high performance devices and eases the driver porting effort on the storage and networking device vendors. VMware typically modifies these drivers for one or more of the following reasons:

- To make the driver compatible with the ESX Server
- To tune the driver for performance
- To add I/O resource governing or QoS support to the driver
- To fix generic bugs in the driver

It is not possible to directly load existing, precompiled, Linux device driver binaries into ESX Server.

### VMware Certification

VMware certifies that specific systems and components are compatible with ESX Server. Through its Preferred Hardware Partner Program, it works with leading server vendors to ensure that appropriate configurations of their current and future server products are certified with ESX Server products. The following table summarizes the driver versions shipped with the current release of ESX Server. Details of the device models supported by each driver are listed in the following table.
Table 9. Driver Version Supported in ESX Server 2.5.3

<table>
<thead>
<tr>
<th>Class</th>
<th>Vendor</th>
<th>Driver</th>
<th>Driver Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCSI</td>
<td>Adaptec</td>
<td>aic7xxx</td>
<td>6.2.35</td>
</tr>
<tr>
<td></td>
<td>Adaptec</td>
<td>aic79xx</td>
<td>1.3.7</td>
</tr>
<tr>
<td></td>
<td>Adaptec</td>
<td>adp94xx</td>
<td>0.0.5-7</td>
</tr>
<tr>
<td></td>
<td>LSI Logic</td>
<td>ncr53c8xx</td>
<td>3.4.3b</td>
</tr>
<tr>
<td></td>
<td>LSI Logic</td>
<td>sym53c8xx</td>
<td>1.7.3c</td>
</tr>
<tr>
<td></td>
<td>LSI Logic</td>
<td>mptscsi</td>
<td>2.05.16</td>
</tr>
<tr>
<td>RAID</td>
<td>HP</td>
<td>cpaarray</td>
<td>2.4.21</td>
</tr>
<tr>
<td></td>
<td>HP</td>
<td>cciss</td>
<td>2.4.54</td>
</tr>
<tr>
<td></td>
<td>Dell</td>
<td>aacraid</td>
<td>0.9.9ac6-T</td>
</tr>
<tr>
<td></td>
<td>Dell</td>
<td>megaraid</td>
<td>2.10.7</td>
</tr>
<tr>
<td></td>
<td>IBM/Adaptec</td>
<td>ips</td>
<td>7.10.17</td>
</tr>
<tr>
<td></td>
<td>IBM/Adaptec</td>
<td>aacraid-115</td>
<td>1.1-5</td>
</tr>
<tr>
<td></td>
<td>Intel</td>
<td>gdth</td>
<td>2.04</td>
</tr>
<tr>
<td></td>
<td>LSI</td>
<td>MegaRAID</td>
<td>2.10.7</td>
</tr>
<tr>
<td></td>
<td>Mylex</td>
<td>DAC960</td>
<td>2.4.11</td>
</tr>
<tr>
<td>Fibre Channel</td>
<td>Emulex</td>
<td>lpfddd_2xx</td>
<td>2.01g</td>
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<td></td>
<td>Qlogic</td>
<td>qla2200_7xx /</td>
<td>7.04.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>qla2300_7xx</td>
<td></td>
</tr>
<tr>
<td>Network</td>
<td>Broadcom</td>
<td>bcm5700</td>
<td>7.3.5</td>
</tr>
<tr>
<td></td>
<td>Intel</td>
<td>e100</td>
<td>2.3.40</td>
</tr>
<tr>
<td></td>
<td>Intel</td>
<td>e1000</td>
<td>6.0.60</td>
</tr>
</tbody>
</table>

Adaptec Ultra160 SCSI Adapters

The ESX Server Adaptec driver is based on the Linux aic7xxx version 6.2.35 driver. The following PCI Adaptec SCSI adapters and motherboard chip set devices should work as ESX Server adapters.

SCSI Adapters

- AHA_1480A
- AHA_2902/04/10/15/20/30C
- AHA_2930 (C/CU U/U2)
- AHA_2940 AU_(0/1/CN)
- AHA_2944 (U)
- AHA_3940 (U/AU)
- AHA_3944 (U/AU)
- AHA_3950 (U2B_0/U2B_1/U2D_0/U2D_1)
- AHA_3960 (D/D CPQ)
- AHA_398X (U)
- AHA_4944 (U)
RAID Adapters
- 2200/S
- 2120/S

Motherboard Chip Sets
- AIC7850
- AIC7855
- AIC7859
- AIC7860
- AIC7870
- AIC7880
- AIC7892
- AIC7895
- AIC7895C
- AIC7890/91
- AIC7892
- AIC7895
- AIC7896/97
- AIC7899
- AIC7902
- AIC9410

Adaptec Ultra320 SCSI Adapters
The ESX Server Adaptec driver is based on the Linux aic79xx version 1.3.7 driver. The following PCI Adaptec SCSI adapters and motherboard chip set devices should work as ESX Server adapters.

SCSI Adapters
- AHA29320 (A)
- AHA29320 (LP)
- AHA39320 (A/D/DB)

Motherboard Chip Sets
- AIC7901 (A)
- AIC7901 (B)

LSI Logic Symbios and NCR Based SCSI Adapters
Most SCSI adapters based on the LSI Logic Symbios (formerly NCR) 53c8xx family of chip sets are supported as ESX Server devices. ESX Server uses two different drivers to support the device family: one based on the Linux ncr53c8xx version 3.4.3b driver and the other on the sym53c8xx version 1.7.3c driver. LSI Logic’s Symbios product division was formerly NCR Microelectronics Products Division. Older products may have either NCR or Symbios (SYM) part
number prefixes; otherwise the part numbers are interchangeable. The following chip sets and adapters are supported as ESX Server devices.

**Supported Symbios Chip Sets**

- SYM53C810
- SYM53C810A
- SYM53C815
- SYM53C820
- SYM53C825
- SYM53C860
- SYM53C875
- SYM53C876
- SYM53C895
- SYM53C895A
- SYM53C896
- SYM53C897
- SYM53C1510D
32 Third-party SCSI adapters from Compaq/DEC, Gigabyte, Promise Technology, and Tyan should also work with the ESX Server NCR driver.

**LSI Logic MPT-Fusion SCSI Adapters**

The ESX Server driver is based on the LSI Logic mptlinux mptscsi v 2.05.16 driver and supports the following SCSI controllers. These controllers are also supported in a RAID-1 configuration.

- 53C1020
- 53C1030

**LSI Logic MegaRAID Adapters**

The ESX Server driver is based on the LSI MegaRAID 2.10.7 driver and supports the following SCSI controllers.

- 320-1
- 320-2
- 320-2E ROMB
- 320-2X

**Dell PercRAID Controllers**

VMware ESX Server supports two classes of Perc branded controllers. Some are based on Adaptec RAID chip sets, and some on LSI Logic (formerly American Megatrends, Inc.) MegaRAID chip sets.

The ESX Server driver for Adaptec-based PercRAID controllers is based on the Linux aacraid version 0.9.9ac6-T 2.1.5 driver.
PERC 2/QC
PERC 3/Si (PowerEdge 2450 onboard RAID)
PERC 3/Di (PowerEdge 2550, 2650, and 4400 onboard RAID)
The ESX Server driver for LSI Logic/AMI-based PercRAID controllers is based on the Linux megaraid version 2.10.7 driver.

PERC 2/DC
PERC 3/DCL
PERC 4/eDi
MegaRAID 418, 428, 438, 466, 762, 467, 471, 490, 493
Dell PERC 4e/Di internal RAID controllers, also listed as PERC RAID 4ei. (Firmware upgrade 522A is not supported. For further details, refer to KB 5966817 at http://kb.vmware.com/kb/5966817)

PERC 3/DC
PERC 3/QC
PERC 4/DC (Firmware upgrade 352B is not supported. For further details, refer to KB 5966817 at http://kb.vmware.com/kb/5966817)

PERC 4e/Si
PERC 4/IM

HP SmartArray RAID Controllers
The ESX Server driver is based on the HP cpqarray v 2.4.21 and cciss v 2.4.50 drivers.

Cpqarray-based Controllers
- IDA, IDA-2, IAES
- SMART
- SMART-2/E
- SMART-2 (SMART-2/P, SMART-2SL, Smart Array 3200, Smart Array 3100ES, Smart Array 221)
- SMART-4 (Integrated Array, LC2, Smart Array 4200, Smart Array 4250ES, Smart Array 431)
- HP SA P600 SAS controller

CCISS-based Controllers
- SMART-5 (Smart Array 5300 series, Smart Array 5i, Smart Array 5312)
- SMART-6 (Smart Array 641, 6400, 6402, 6404)
- SMART-6i

IBM ServeRAID RAID Controllers
The ESX Server drivers are based on the Linux ips version 7.10.17 driver and the aacraid-115 version 1.1-5 driver.
The ips driver supports the following RAID controllers:
- ServeRAID-3H
- ServeRAID-/4L, 4LX
- ServeRAID-4M, 4Mx
- ServeRAID-4H
ServeRAID-5i
ServeRAID-5M
ServeRAID-6M*
ServeRAID-6i*
ServeRAID-6i+*
ServeRAID-7k

*Firmware version 7.10.17 and greater.

The aacraid-115 driver supports the following RAID controllers:
ServeRAID-8i

Intel RAID Controllers
The ESX Server driver is based on the Intel gdth 2.04 driver.
SRCU42L*

* The SRCU42L card is supported only in the Intel SRSH4 and all OEM versions of that system.

Mylex AcceleRAID/eXtremeRAID Controllers
The ESX Server driver is based on the Linux DAC960 version 2.4.11 driver. Specific AcceleRAID and eXtremeRAID controllers are also based on DAC960-compatible controllers.
DAC960 (E, M, PD, PL, PU, PE, PG, Pj, PT0, PR, PRL, PT1)
DDAC960 (S, SU, SX, SF, SS, FL, LL, FF, HP)
DAC1164P
EXR2000P
EXR3000P
AcceleRAID 160, 170, 352
eXtremeRAID 1100

Emulex Fibre Channel Adapters
Please see the SAN Compatibility Guide for ESX Server 2.x for more information on the specific drivers, configurations, models, and firmware supported.

QLogic Fibre Channel Adapters
Please see the SAN Compatibility Guide for ESX Server 2.x for more information on the specific drivers, configurations, models, and firmware supported.

Intel PRO/100 Ethernet NICs
The default ESX Server driver for PRO/100 NICs is based on the Intel-supplied e100 Intel(R) PRO/100 Fast Ethernet Adapter version 2.0.302.3.40 driver. This is a comprehensive listing of Intel and OEM models that have been based on these chip sets. You should check the specific chip set used in your card for compatibility.

Table 11.

<table>
<thead>
<tr>
<th>Controller</th>
<th>Adapter Name</th>
<th>Board ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>82558</td>
<td>PRO/100+ PCI Adapter</td>
<td>668031-xxx, 689661-xxx</td>
</tr>
</tbody>
</table>
The specific HP OEM model numbers associated with this driver are:

- NC3120
- NC3121
- NC3123
- NC3131
- NC3132
- NC3133
- NC3134N
- NC3135
- NC3160
- NC3161
- NC3162
- NC3163
- NC3122
Intel PRO/1000 Gigabit Ethernet NICs

The ESX Server driver for Intel PRO/1000 based Gigabit Ethernet cards is based on the Linux v 5.2.39 e1000 driver. Several HP and IBM Gigabit Ethernet cards are based on this controller, but you need to check the OEM model number to ascertain this.

Table 12.

<table>
<thead>
<tr>
<th>Controller</th>
<th>Adapter Name</th>
<th>Board IDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>82540</td>
<td>PRO/1000 MT Desktop Adapter</td>
<td>A78408-xxx</td>
</tr>
<tr>
<td>82542</td>
<td>PRO/1000 Gigabit Server Adapter</td>
<td>700262-aaa, 717037-aaa</td>
</tr>
<tr>
<td>82543</td>
<td>PRO/1000 F Server Adapter</td>
<td>738640-xxx, A38888-xxx</td>
</tr>
<tr>
<td>82544</td>
<td>PRO/1000 T Server Adapter</td>
<td>A19845-xxx, A33948-xxx</td>
</tr>
<tr>
<td>82544</td>
<td>PRO/1000 XT Server Adapter</td>
<td>A51580-xxx</td>
</tr>
<tr>
<td>82544</td>
<td>PRO/1000 XF Server Adapter</td>
<td>A50484-xxx</td>
</tr>
<tr>
<td>82544</td>
<td>PRO/1000 T Desktop Adapter</td>
<td>A62947-xxx</td>
</tr>
<tr>
<td>82545</td>
<td>PRO/1000 MT Server Adapter</td>
<td>A92165-xxx</td>
</tr>
<tr>
<td>82545</td>
<td>PRO/1000 MF Server Adapter</td>
<td>A91622-xxx</td>
</tr>
<tr>
<td>82545</td>
<td>PRO/1000 MF Server Adapter (LX)</td>
<td>A91624-xxx</td>
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<tr>
<td>82545GM</td>
<td>PRO/1000 F Server Adapter</td>
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</tr>
<tr>
<td>82546</td>
<td>PRO/1000 MT Dual Port Server Adapter</td>
<td>A92111-xxx</td>
</tr>
<tr>
<td>82546</td>
<td>PRO/1000 MF Dual Port Server Adapter</td>
<td>A91620-xxx</td>
</tr>
<tr>
<td>82546EB</td>
<td>PRO/1000 MT Quad Port Server Adapter</td>
<td></td>
</tr>
<tr>
<td>82546EB</td>
<td>Dual Port Gigabit Ethernet Controller</td>
<td></td>
</tr>
<tr>
<td>82546GB</td>
<td>PRO/1000 P Dual Port Server Adapter</td>
<td></td>
</tr>
</tbody>
</table>

The specific HP OEM model numbers associated with this driver are:

- NC310F
- NC6134
- NC6136
- NC7131
- NC7170
- NC6170

VMware supports the following IBM OEM versions of the Intel adapters:

- 06P3601 - IBM 10/100 Ethernet Server Adapter
- 09N9901 - 10/100 Fast Etherlink PCI TX Server
- 22P4901 - IBM 10/100 Dual Port Server Adapter
- 22P680 - PRO/1000 XT (PCI-X) Server Adapter
- 31P9601 - PRO/1000 MT Server Ethernet Adapter
- 73P2701 - IBM PRO/1000 MT Dual Port Server Ethernet Adapter
- 73P5101 - PRO/1000 GT Dual Port Server Adapter
- IBM PRO/1000 MT Server Ethernet Adapter by Intel
- IBM PRO/1000 MT Dual Port Server Adapter by Intel
- IBM PRO/1000 GT Server Adapter by Intel
- IBM PRO/1000 GT Dual Port Server Adapter by Intel
- IBM PRO/1000 PT Dual Port Server Adapter by Intel
- IBM PRO/1000 XT Server Adapter by Intel

The specific Sun OEM model numbers associated with this driver are:

- X7285A
- X7286A
- X7291A
- X9271A
- X9272A
- X9273A

**Broadcom Gigabit Ethernet NICs**

The ESX Server driver for Broadcom Gigabit Ethernet cards is based on the Broadcom 5700 driver for Linux v 7.3.5 version driver.

- Broadcom Vigil B5700 1000Base-T
- Broadcom BCM5700 1000Base-T
- Broadcom BCM5700 1000Base-SX
- Broadcom BCM5700
- Broadcom BCM5701 1000Base-T
- Broadcom BCM5701 1000Base-SX
- Broadcom BCM5701 1000Base-T
- Broadcom BCM5701
- Broadcom BCM5702 1000Base-T
- Broadcom BCM5703 1000Base-T
- Broadcom BCM5703 1000Base-SX
- Broadcom Arbuckle B5703 1000Base-SX
- Broadcom BCM5704 CIOB-E 1000Base-T
- Broadcom BCM5704 1000Base-T
- Broadcom BCM5704 1000Base-SX, T
- Broadcom BCM5705 1000Base-T
- Broadcom BCM5705M 1000Base-T
- Broadcom BCM5721 Gigabit Ethernet
- Broadcom NetXtreme Gigabit Ethernet for HP/Compaq
- Broadcom BCM5788 1000Base-T
- 3Com 3C996 10/100/1000 Server NIC
- 3Com 3C996 Gigabit Fiber-SX Server NIC
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- 3Com 3C996B Gigabit Server NIC
- 3Com 3C997 Gigabit Server NIC
- 3Com 3C997 Gigabit Fiber-SX Server NIC
- 3Com 3C1000 Gigabit NIC
- 3Com 3C940 Gigabit LOM (21X21)
- 3Com 3C942 Gigabit LOM (31X31)
- HP NC6770 Gigabit Server Adapter
- HP NC7760 Gigabit Server Adapter
- HP NC7761 Gigabit Server Adapter
- HP NC7770 Gigabit Server Adapter
- HP NC7771 Gigabit Server Adapter
- HP NC7772 Gigabit Server Adapter
- HP NC7780 Gigabit Server Adapter
- HP NC7781 Gigabit Server Adapter
- HP NC7782 Gigabit Server Adapter
- HP NC7783 Gigabit Server Adapter
- IBM NetXtreme 1000 T Express Ethernet Adapter
- IBM NetXtreme 1000 T + Ethernet Adapter
- IBM NetXtreme 1000 T + Dual Port Ethernet Adapter
- IBM NetXtreme 1000 SX + Fiber Ethernet Adapter
- IBM NetXtreme 1000 Express G Ethernet Adapter
- 73P9030 - Gigabit Ethernet Expansion
- 90P3777 - Gigabit Ethernet Expansion
- 26K4842 - Gigabit Ethernet Expansion

**3Com EtherLink PCI III/XL Series Ethernet NICs**

ESX Server supports many 3Com Ethernet NICs. The ESX Server driver includes two drivers: one based on the Linux 3c90x version 1.0.2 driver and the other based on the Linux 3C990-x version 1.0.0b. The following 3Com NICs are supported as ESX Server devices.

**EtherLink 10/100 PCI NICs**

- 3C905C Family and 3C920 ASICs – EtherLink 10/100 PCI including the -TX and -TX-M
- 3C905B Family and 3C918 ASICs – EtherLink 10/100 PCI including the -TX, -TX,-M, and -TX-NM
- 3C905B-COMBO – EtherLink 10/100 PCI COMBO
- 3C905B-T4 – EtherLink 10/100 PCI T4

**EtherLink Server 10/100 PCI NICs**

- 3C980C-TX – EtherLink Server 10/100 PCI
- 3C980B-TX – EtherLink Server 10/100 PCI
3C980-TX – EtherLink Server 10/100 PCI

**EtherLink 100 PCI NIC**
- 3C905B-FX – EtherLink 100 PCI Fiber

**EtherLink 10 PCI NICs**
- 3C900B-TPO – EtherLink 10 PCI TPO
- 3C900B-TPC – EtherLink 10 PCI TPC
- 3C900B-COMBO – EtherLink 10 PCI COMBO
- 3C900B-FL – EtherLink 10 PCI Fiber

In addition, all cards based on the 3c990-x card should be compatible with ESX Server.

**IBM BladeCenter NICS**
- 73P9030 - IBM BladeCenter GB Ethernet Expansion
- 90P3777 - Intel GB Ethernet Expansion
- 26K4842 - IBM BladeCenter SFF GB Ethernet Expansion

**ESX Server 2.5.2**

**Currently Supported Device Families**
VMware currently has ESX Server device drivers available that support specific devices within the following families of I/O controllers. Please examine the detailed list of device models below to make sure your specific device is supported.

**SCSI Controllers (Attached to Non-Removable SCSI Devices Only)**
*Note:* CD-ROM devices are removable devices, whereas tape drives are considered to be non-removable devices.
- Adaptec Ultra160 and Ultra 320 SCSI controllers
- LSI Logic Symbios and NCR chip set-based SCSI controllers
- LSI Logic Fusion-MPT SCSI controllers

**RAID Controllers**
- Adaptec RAID
- Dell PercRAID controllers
- HP SmartArray controllers
- Intel RAID controller
- IBM ServeRAID controllers
- LSI MegaRAID controllers
- Mylex AcceleRAID and ExtremeRAID controllers

**Fibre Channel Adapters (SCSI Protocol Support Only)**
- Emulex Host Bus Adapters
- QLogic Host Bus Adapters
Ethernet NICs

- Intel PRO/100 Ethernet NICs
- Intel PRO/1000 Gigabit Ethernet NICs
- Broadcom NetXtreme 570x series Gigabit NICs
- 3Com Fast Ethernet NICs

VMware may add support for drivers and devices between releases of the product; check the VMware Web site for current information at http://www.vmware.com/support/pubs/.

The detailed list below shows actual vendor chip sets and adapters that VMware believes are compatible with the currently supported drivers. Although we have been careful in compiling the list, we have not tested all of these devices and cannot warrant that they all work. There may also be devices that are not listed but that do work with these device drivers.

Please contact VMware with any questions about current and planned device support.

**Linux Driver Compatibility**

While ESX Server itself is not derived from Linux, it includes a Linux compatibility module to allow Linux storage and networking drivers to be adapted and recompiled for ESX Server. This enables VMware to more easily support a wide range of high performance devices and eases the driver porting effort on the storage and networking device vendors. VMware typically modifies these drivers for one or more of the following reasons:

- To make the driver compatible with the ESX Server
- To tune the driver for performance
- To add I/O resource governing or QoS support to the driver
- To fix generic bugs in the driver

It is not possible to directly load existing, precompiled, Linux device driver binaries into ESX Server.

**VMware Certification**

VMware certifies that specific systems and components are compatible with ESX Server. Through its Preferred Hardware Partner Program, it works with leading server vendors to ensure that appropriate configurations of their current and future server products are certified with ESX Server products. The following table summarizes the driver versions shipped with the current release of ESX Server. Details of the device models supported by each driver are listed in the following table.

**Table 13. Driver Version Supported in ESX Server 2.5.2**

<table>
<thead>
<tr>
<th>Class</th>
<th>Vendor</th>
<th>Driver</th>
<th>Driver Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCSI</td>
<td>Adaptec</td>
<td>aic7xxx</td>
<td>6.2.35</td>
</tr>
<tr>
<td></td>
<td>Adaptec</td>
<td>aic79xx</td>
<td>1.3.7</td>
</tr>
<tr>
<td></td>
<td>Adaptec</td>
<td>adp94xx</td>
<td>0.0.5-7</td>
</tr>
<tr>
<td></td>
<td>LSI Logic</td>
<td>ncr53c8xx</td>
<td>3.4.3b</td>
</tr>
<tr>
<td></td>
<td>LSI Logic</td>
<td>sym53c8xx</td>
<td>1.7.3c</td>
</tr>
<tr>
<td></td>
<td>LSI Logic</td>
<td>mptscsi</td>
<td>2.05.16</td>
</tr>
</tbody>
</table>
Table 13. Driver Version Supported in ESX Server 2.5.2

<table>
<thead>
<tr>
<th>Class</th>
<th>Vendor</th>
<th>Driver</th>
<th>Driver Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAID</td>
<td>HP</td>
<td>cpqarray</td>
<td>2.4.21</td>
</tr>
<tr>
<td></td>
<td>HP</td>
<td>cciss</td>
<td>2.4.54</td>
</tr>
<tr>
<td></td>
<td>Dell</td>
<td>aacraid</td>
<td>0.9.9ac6-T</td>
</tr>
<tr>
<td></td>
<td>Dell</td>
<td>megaraid</td>
<td>2.10.7</td>
</tr>
<tr>
<td></td>
<td>IBM/Adaptec</td>
<td>ips</td>
<td>7.10.17</td>
</tr>
<tr>
<td></td>
<td>IBM/Adaptec</td>
<td>aacraid-115</td>
<td>1.1-5</td>
</tr>
<tr>
<td></td>
<td>Intel</td>
<td>gdth</td>
<td>2.04</td>
</tr>
<tr>
<td></td>
<td>LSI</td>
<td>MegaRAID</td>
<td>2.10.7</td>
</tr>
<tr>
<td></td>
<td>Mylex</td>
<td>DAC960</td>
<td>2.4.11</td>
</tr>
<tr>
<td>Fibre Channel</td>
<td>Emulex</td>
<td>lpfcdd_2xx</td>
<td>2.01g</td>
</tr>
<tr>
<td></td>
<td>Qlogic</td>
<td>qla2200_7xx / qla2300_7xx</td>
<td>7.04.00</td>
</tr>
<tr>
<td>Network</td>
<td>Broadcom</td>
<td>bcm5700</td>
<td>7.3.5</td>
</tr>
<tr>
<td></td>
<td>Intel</td>
<td>e100</td>
<td>2.3.40</td>
</tr>
<tr>
<td></td>
<td>Intel</td>
<td>e1000t</td>
<td>6.0.15</td>
</tr>
</tbody>
</table>

1. ESX Server 2.5.2 Upgrade Patch 4 supports e1000 version 6.0.60.

Adaptec Ultra160 SCSI Adapters

The ESX Server Adaptec driver is based on the Linux aic7xxx version 6.2.35 driver. The following PCI Adaptec SCSI adapters and motherboard chip set devices should work as ESX Server adapters.

SCSI Adapters

- AHA_1480A
- AHA_2902/04/10/15/20/30C
- AHA_2930 (C/CU U/U2)
- AHA_2940 AU_(0/1/CN)
- AHA_2944 (U)
- AHA_3940 (U/AU)
- AHA_3944 (U/AU)
- AHA_3950 (U2B_0/U2B_1/U2D_0/U2D_1)
- AHA_3960 (D/D CPQ)
- AHA_398X (U)
- AHA_4944 (U)
- AHA_29160 (CPQ/N/C/B)
- AHA_19160B

RAID Adapters

- 2200/S
- 2120/S
Motherboard Chip Sets
- AIC7850
- AIC7855
- AIC7859
- AIC7860
- AIC7870
- AIC7880
- AIC7892
- AIC7895
- AIC7895C
- AIC7890/91
- AIC7892
- AIC7895
- AIC7896/97
- AIC7899
- AIC7902
- AIC9410

Adaptec Ultra320 SCSI Adapters
The ESX Server Adaptec driver is based on the Linux aic79xx version 1.3.7 driver. The following PCI Adaptec SCSI adapters and motherboard chip set devices should work as ESX Server adapters.

SCSI Adapters
- AHA29320 (A)
- AHA29320 (LP)
- AHA39320 (A/D/DB)

Motherboard Chip Sets
- AIC7901 (A)
- AIC7902 (B)

LSI Logic Symbios and NCR Based SCSI Adapters
Most SCSI adapters based on the LSI Logic Symbios (formerly NCR) 53c8xx family of chip sets are supported as ESX Server devices. ESX Server uses two different drivers to support the device family: one based on the Linux ncr53c8xx version 3.4.3b driver and the other on the sym53c8xx version 1.7.3c driver. LSI Logic's Symbios product division was formerly NCR Microelectronics Products Division. Older products may have either NCR or Symbios (SYM) part number prefixes; otherwise the part numbers are interchangeable. The following chip sets and adapters are supported as ESX Server devices.

Supported Symbios Chip Sets
- SYM53C810
- SYM53C810A
Third-party SCSI adapters from Compaq/DEC, Gigabyte, Promise Technology, and Tyan should also work with the ESX Server NCR driver.

### LSI Logic MPT-Fusion SCSI Adapters

The ESX Server driver is based on the LSI Logic mptlinux mptscsi v 2.05.16 driver and supports the following SCSI controllers. These controllers are also supported in a RAID-1 configuration.

- 53C1020
53C1030

**LSI Logic MegaRAID Adapters**

The ESX Server driver is based on the LSI MegaRAID 2.10.7 driver and supports the following SCSI controllers.

- 320-1
- 320-2
- 320-2E ROMB
- 320-2X

**Dell PercRAID Controllers**

VMware ESX Server supports two classes of Perc branded controllers. Some are based on Adaptec RAID chip sets, and some on LSI Logic (formerly American Megatrends, Inc.) MegaRAID chip sets.

The ESX Server driver for Adaptec-based PercRAID controllers is based on the Linux aacraid version 0.9.9ac6-T 2.1.5 driver.

- PERC 2/QC
- PERC 3/Si (PowerEdge 2450 onboard RAID)
- PERC 3/Di (PowerEdge 2550, 2650, and 4400 onboard RAID)

The ESX Server driver for LSI Logic/AMI-based PercRAID controllers is based on the Linux megaraid version 2.10.7 driver.

- PERC 2/DC
- PERC 3/DCL
- PERC 4/eDi
- MegaRAID 418, 428, 438, 466, 762, 467, 471, 490, 493
- Dell PERC 4e/Di internal RAID controllers, also listed as PERC RAID 4ei. (Firmware upgrade 522A is not supported. For further details, refer to KB 5966817 at [http://kb.vmware.com/kb/5966817](http://kb.vmware.com/kb/5966817))
- PERC 3/DC
- PERC 3/QC
- PERC 4/DC (Firmware upgrade 352B is not supported. For further details, refer to KB 5966817 at [http://kb.vmware.com/kb/5966817](http://kb.vmware.com/kb/5966817))
- PERC 4/e/Si
- PERC 4/IM

**HP SmartArray RAID Controllers**

The ESX Server driver is based on the HP cpqarray v 2.4.21 and cciss v 2.4.50 drivers.

**Cpqarray-based Controllers**

- IDA, IDA-2, IAES
- SMART
- SMART-2/E
- SMART-2 (SMART-2/P, SMART-2SL, Smart Array 3200, Smart Array 3100ES, Smart Array 221)
- SMART-4 (Integrated Array, LC2, Smart Array 4200, Smart Array 4250ES, Smart Array 431)
- HP SA P600 SAS controller

CCISS-based Controllers
- SMART-5 (Smart Array 5300 series, Smart Array 5i, Smart Array 5312)
- SMART-6 (Smart Array 641, 6400, 6402, 6404)
- SMART-6i

IBM ServeRAID RAID Controllers
The ESX Server drivers are based on the Linux ips version 7.10.17 driver and the aacraid-115 version 1.1-5 driver. The ips driver supports the following RAID controllers:
- ServeRAID-3H
- ServeRAID-/4L, 4LX
- ServeRAID-4M, 4Mx
- ServeRAID-4H
- ServeRAID-/5i
- ServeRAID-5M
- ServeRAID-6M*
- ServeRAID-6i*
- ServeRAID-6i+*
- ServeRAID-7k

*Firmware version 7.10.17 and greater.
The aacraid-115 driver supports the following RAID controllers:
- ServeRAID-8i

Intel RAID Controllers
The ESX Server driver is based on the Intel gdth 2.04 driver.
- SRCU42L*

* The SRCU42L card is supported only in the Intel SRSH4 and all OEM versions of that system.

Mylex AcceleRAID/eXtremeRAID Controllers
The ESX Server driver is based on the Linux DAC960 version 2.4.11 driver. Specific AcceleRAID and eXtremeRAID controllers are also based on DAC960-compatible controllers.
- DAC960 (E, M, PD, PL, PU, PE, PG, Pj, PTL0, PR, PRL, PTL1)
- DDAC960 (S, SU, SX, SF, SS, FL, LL, FF, HP)
- DAC1164P
- EXR2000P
- EXR3000P
- AcceleRAID 160, 170, 352
- eXtremeRAID 1100
**Emulex Fibre Channel Adapters**
Please see the *SAN Compatibility Guide for ESX Server 2.x* for more information on the specific drivers, configurations, models, and firmware supported.

**QLogic Fibre Channel Adapters**
Please see the *SAN Compatibility Guide for ESX Server 2.x* for more information on the specific drivers, configurations, models, and firmware supported.

**Intel PRO/100 Ethernet NICs**
The default ESX Server driver for PRO/100 NICs is based on the Intel-supplied e100 Intel(R) PRO/100 Fast Ethernet Adapter version 2.0.302.3.40 driver. This is a comprehensive listing of Intel and OEM models that have been based on these chip sets. You should check the specific chip set used in your card for compatibility.

**Table 15.**

<table>
<thead>
<tr>
<th>Controller</th>
<th>Adapter Name</th>
<th>Board ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>82558</td>
<td>PRO/100+ PCI Adapter</td>
<td>668081-xxx, 689661-xxx</td>
</tr>
<tr>
<td>82558</td>
<td>PRO/100+ Management Adapter</td>
<td>691334-xxx, 701738-xxx, 721383-xxx</td>
</tr>
<tr>
<td>82558</td>
<td>PRO/100+ Dual Port Server Adapter</td>
<td>714303-xxx, 711269-xxx, A28276-xxx</td>
</tr>
<tr>
<td>82558</td>
<td>PRO/100+ PCI Server Adapter</td>
<td>710550-xxx</td>
</tr>
<tr>
<td>82550</td>
<td>PRO/100 S Server Adapter</td>
<td>752438-xxx (82550)</td>
</tr>
<tr>
<td>82550</td>
<td>PRO/100 S Desktop Adapter</td>
<td>751767-xxx (82550)</td>
</tr>
<tr>
<td>82559</td>
<td>PRO/100 S Desktop Adapter</td>
<td>748592-xxx, A12167-xxx, A12318-xxx, A12317-xxx, A12165-xxx, 748569-xxx (82559)</td>
</tr>
<tr>
<td>82559</td>
<td>PRO/100+ Server Adapter</td>
<td>729757-xxx</td>
</tr>
<tr>
<td>82559</td>
<td>PRO/100 S Management Adapter</td>
<td>748566-xxx, 748564-xxx</td>
</tr>
<tr>
<td>82550</td>
<td>PRO/100 S Dual Port Server Adapter</td>
<td>A56831-xxx</td>
</tr>
<tr>
<td>82551</td>
<td>PRO/100 M Desktop Adapter</td>
<td>A80897-xxx</td>
</tr>
<tr>
<td>82551</td>
<td>PRO/100 S Advanced Management Adapter</td>
<td>747842-xxx, 745171-xxx</td>
</tr>
<tr>
<td>CNR</td>
<td>PRO/100 VE Desktop Adapter</td>
<td>A10386-xxx, A10725-xxx, A23801-xxx, A19716-xxx</td>
</tr>
<tr>
<td>CNR</td>
<td>PRO/100 VM Desktop Adapter</td>
<td>A14323-xxx, A19725-xxx, A23801-xxx, A22220-xxx, A23796-xxx</td>
</tr>
</tbody>
</table>

The specific HP OEM model numbers associated with this driver are:

- NC3120
- NC3121
- NC3123
- NC3131
- NC3132
Intel PRO/1000 Gigabit Ethernet NICs

The ESX Server driver for Intel PRO/1000 based Gigabit Ethernet cards is based on the Linux v 5.2.39 e1000 driver. Several HP and IBM Gigabit Ethernet cards are based on this controller, but you need to check the OEM model number to ascertain this.

Table 16.

<table>
<thead>
<tr>
<th>Controller</th>
<th>Adapter Name</th>
<th>Board IDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>82542</td>
<td>PRO/1000 Gigabit Server Adapter</td>
<td>700262-xxx, 717037-xxx</td>
</tr>
<tr>
<td>82543</td>
<td>PRO/1000 F Server Adapter</td>
<td>738640-xxx, A38888-xxx</td>
</tr>
<tr>
<td>82543</td>
<td>PRO/1000 T Server Adapter</td>
<td>A19845-xxx, A33948-xxx</td>
</tr>
<tr>
<td>82544</td>
<td>PRO/1000 XT Server Adapter</td>
<td>A51580-xxx</td>
</tr>
<tr>
<td>82544</td>
<td>PRO/1000 XF Server Adapter</td>
<td>A50484-xxx</td>
</tr>
<tr>
<td>82544</td>
<td>PRO/1000 T Desktop Adapter</td>
<td>A62947-xxx</td>
</tr>
<tr>
<td>82540</td>
<td>PRO/1000 MT Desktop Adapter</td>
<td>A78408-xxx</td>
</tr>
<tr>
<td>82545</td>
<td>PRO/1000 MT Server Adapter</td>
<td>A92165-xxx</td>
</tr>
<tr>
<td>82546</td>
<td>PRO/1000 MT Dual Port Server Adapter</td>
<td>A92111-xxx</td>
</tr>
<tr>
<td>82545</td>
<td>PRO/1000 MF Server Adapter</td>
<td>A91622-xxx</td>
</tr>
<tr>
<td>82545</td>
<td>PRO/1000 MF Server Adapter (LX)</td>
<td>A91624-xxx</td>
</tr>
<tr>
<td>82546</td>
<td>PRO/1000 MF Dual Port Server Adapter</td>
<td>A91620-xxx</td>
</tr>
<tr>
<td>82546EB</td>
<td>PRO/1000 MT Quad Port Server Adapter</td>
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</tr>
<tr>
<td>82546EB</td>
<td>Dual Port Gigabit Ethernet Controller</td>
<td></td>
</tr>
<tr>
<td>82546GB</td>
<td>PRO/1000 P Dual Port Server Adapter(^1)</td>
<td></td>
</tr>
</tbody>
</table>

1. Enabled with **ESX Server 2.5.2 Upgrade Patch 4** only.

The specific HP OEM model numbers associated with this driver are:

- NC6134
- NC6136
- NC7131
- NC7170
- NC6170

VMware supports the following IBM OEM versions of the Intel adapters:

- 06P3601 - IBM 10/100 Ethernet Server Adapter
09N9901 - 10/100 Fast Etherlink PCI TX Server
22P4901 - IBM 10/100 Dual Port Server Adapter
22P680 - PRO/1000 XT (PCI-X) Server Adapter
31P9601 - PRO/1000 MT Server Ethernet Adapter
73P2701 - IBM PRO/1000 MT Dual Port Server Ethernet Adapter
73P5101 - PRO/1000 GT Dual Port Server Adapter

The specific Sun OEM model numbers associated with this driver are:

X7285A
X7286A
X7291A
X9271A
X9272A
X9273A

Broadcom Gigabit Ethernet NICs

The ESX Server driver for Broadcom Gigabit Ethernet cards is based on the Broadcom 5700 driver for Linux v 7.3.5 version driver.

Broadcom Vigil B5700 1000Base-T
Broadcom BCM5700 1000Base-T
Broadcom BCM5700 1000Base-SX
Broadcom BCM5700
Broadcom BCM5701 1000Base-T
Broadcom BCM5701 1000Base-SX
Broadcom BCM5701 1000Base-T
Broadcom BCM5701
Broadcom BCM5702 1000Base-T
Broadcom BCM5703 1000Base-T
Broadcom BCM5703 1000Base-SX
Broadcom Arbuckle B5703 1000Base-SX
Broadcom BCM5704 CIOB-E 1000Base-T
Broadcom BCM5704 1000Base-T
Broadcom BCM5704 1000Base-SX, T
Broadcom BCM5705 1000Base-T
Broadcom BCM5705M 1000Base-T
Broadcom BCM5721 Gigabit Ethernet
Broadcom NetXtreme Gigabit Ethernet for HPhp
Broadcom BCM5788 1000Base-T
3Com 3C996 10/100/1000 Server NIC
3Com 3C996 Gigabit Fiber-SX Server NIC
3Com 3C996B Gigabit Server NIC
3Com 3C997 Gigabit Server NIC
3Com 3C997 Gigabit Fiber-SX Server NIC
3Com 3C1000 Gigabit NIC
3Com 3C942 Gigabit LOM (31X31)
3Com 3C942 Gigabit LOM (21X21)
HP NC6770 Gigabit Server Adapter
HP NC7760 Gigabit Server Adapter
HP NC7761 Gigabit Server Adapter
HP NC7770 Gigabit Server Adapter
HP NC7771 Gigabit Server Adapter
HP NC7772 Gigabit Server Adapter
HP NC7780 Gigabit Server Adapter
HP NC7781 Gigabit Server Adapter
HP NC7782 Gigabit Server Adapter
HP NC7783 Gigabit Server Adapter
73P9030 - Gigabit Ethernet Expansion
90P3777 - Gigabit Ethernet Expansion
26K4842 - Gigabit Ethernet Expansion

**3Com EtherLink PCI III/XL Series Ethernet NICs**

ESX Server supports many 3Com Ethernet NICs. The ESX Server driver includes two drivers: one based on the Linux 3c90x version 1.0.2 driver and the other based on the Linux 3C990-x version 1.0.0b. The following 3Com NICs are supported as ESX Server devices.

**EtherLink 10/100 PCI NICs**

- 3C905C Family and 3C920 ASICs – EtherLink 10/100 PCI including the -TX and -TX-M
- 3C905B Family and 3C918 ASICs – EtherLink 10/100 PCI including the -TX, -TX-M, and -TX-NM
- 3C905B-COMBO – EtherLink 10/100 PCI COMBO
- 3C905B-T4 – EtherLink 10/100 PCI T4

**EtherLink Server 10/100 PCI NICs**

- 3C980C-TX – EtherLink Server 10/100 PCI
- 3C980B-TX – EtherLink Server 10/100 PCI
- 3C980-TX – EtherLink Server 10/100 PCI

**EtherLink 100 PCI NIC**

- 3C905B-FX – EtherLink 100 PCI Fiber
EtherLink 10 PCI NICs
- 3C900B-TPO – EtherLink 10 PCI TPO
- 3C900B-TPC – EtherLink 10 PCI TPC
- 3C900B-COMBO – EtherLink 10 PCI COMBO
- 3C900B-FL – EtherLink 10 PCI Fiber

In addition, all cards based on the 3c990-x card should be compatible with ESX Server.

IBM BladeCenter NICs
- 73P9030 - IBM BladeCenter GB Ethernet Expansion
- 90P3777 - Intel GB Ethernet Expansion
- 26K4842 - IBM BladeCenter SFF GB Ethernet Expansion

ESX Server 2.5.1
Currently Supported Device Families
VMware currently has ESX Server device drivers available that support specific devices within the following families of I/O controllers. Please examine the detailed list of device models below to make sure your specific device is supported.

SCSI Controllers (Attached to Non-Removable SCSI Devices Only)
- Adaptec Ultra160 and Ultra 320 SCSI controllers
- LSI Logic Symbios and NCR chip set-based SCSI controllers
- LSI Logic Fusion-MPT SCSI controllers

RAID Controllers
- Adaptec RAID
- Dell PercRAID controllers
- HP SmartArray controllers
- Intel RAID controller
- IBM ServeRAID controllers
- LSI MegaRAID controllers
- Mylex AcceleRAID and ExtremeRAID controllers

Fibre Channel Adapters (SCSI Protocol Support Only)
- Emulex Host Bus Adapters
- QLogic Host Bus Adapters

Ethernet NICs
- Intel PRO/100 Ethernet NICs
- Intel PRO/1000 Gigabit Ethernet NICs
- Broadcom NetXtreme 570x series Gigabit NICs
- 3Com Fast Ethernet NICs
VMware may add support for drivers and devices between releases of the product; check the VMware Web site for current information at http://www.vmware.com/support/pubs/.

The detailed list below shows actual vendor chip sets and adapters that VMware believes are compatible with the currently supported drivers. Although we have been careful in compiling the list, we have not tested all of these devices and cannot warrant that they all work. There may also be devices that are not listed but that do work with these device drivers.

Please contact VMware with any questions about current and planned device support.

**Linux Driver Compatibility**

While ESX Server itself is not derived from Linux, it includes a Linux compatibility module to allow Linux storage and networking drivers to be adapted and recompiled for ESX Server. This enables VMware to more easily support a wide range of high performance devices and eases the driver porting effort on the storage and networking device vendors. VMware typically modifies these drivers for one or more of the following reasons:

- To make the driver compatible with the ESX Server
- To tune the driver for performance
- To add I/O resource governing or QoS support to the driver
- To fix generic bugs in the driver

It is not possible to directly load existing, precompiled, Linux device driver binaries into ESX Server.

**VMware Certification**

VMware certifies that specific systems and components are compatible with ESX Server. Through its Preferred Hardware Partner Program, it works with leading server vendors to ensure that appropriate configurations of their current and future server products are certified with ESX Server products. The following table summarizes the driver versions shipped with the current release of ESX Server. Details of the device models supported by each driver are listed in the following table.

**Table 17. Driver Version Supported in ESX Server 2.5.1**

<table>
<thead>
<tr>
<th>Class</th>
<th>Vendor</th>
<th>Driver</th>
<th>Driver Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCSI</td>
<td>Adaptec</td>
<td>aic7xxx</td>
<td>6.2.35</td>
</tr>
<tr>
<td></td>
<td>Adaptec</td>
<td>aic79xx</td>
<td>1.3.7</td>
</tr>
<tr>
<td></td>
<td>Adaptec</td>
<td>adp94xx</td>
<td>0.0.5-7</td>
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<tr>
<td></td>
<td>LSI Logic</td>
<td>ncr53c8xx</td>
<td>3.4.3b</td>
</tr>
<tr>
<td></td>
<td>LSI Logic</td>
<td>sym53c8xx</td>
<td>1.7.3c</td>
</tr>
<tr>
<td></td>
<td>LSI Logic</td>
<td>mptscsi</td>
<td>2.05.16</td>
</tr>
<tr>
<td>RAID</td>
<td>HP</td>
<td>cpqarray</td>
<td>2.4.21</td>
</tr>
<tr>
<td></td>
<td>HP</td>
<td>cciss</td>
<td>2.4.50</td>
</tr>
<tr>
<td></td>
<td>Dell</td>
<td>aacraid</td>
<td>0.9.9ac6-T</td>
</tr>
<tr>
<td></td>
<td>Dell</td>
<td>megaraid</td>
<td>2.10.7</td>
</tr>
<tr>
<td></td>
<td>IBM/Adaptec</td>
<td>ips</td>
<td>7.10.17</td>
</tr>
<tr>
<td></td>
<td>IBM/Adaptec</td>
<td>aacraid-115</td>
<td>1.1-5</td>
</tr>
<tr>
<td></td>
<td>Intel</td>
<td>gdth</td>
<td>2.04</td>
</tr>
<tr>
<td></td>
<td>LSI</td>
<td>MegaRAID</td>
<td>2.10.7</td>
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<td></td>
<td>Mylex</td>
<td>DAC960</td>
<td>2.4.11</td>
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<td>Fibre Channel</td>
<td>Emulex</td>
<td>lpfccd_2xx</td>
<td>2.01g</td>
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<tr>
<td></td>
<td>Qlogic</td>
<td>qla2200_7xx /</td>
<td>7.04.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>qla2300_7xx</td>
<td></td>
</tr>
</tbody>
</table>
Adaptec Ultra160 SCSI Adapters

The ESX Server Adaptec driver is based on the Linux aic7xxx version 6.2.35 driver. The following PCI Adaptec SCSI adapters and motherboard chip set devices should work as ESX Server adapters.

**SCSI Adapters**
- AHA_1480A
- AHA_2902/04/10/15/20/30C
- AHA_2930 (C/CU U/U2)
- AHA_2940 AU_(0/1/CN)
- AHA_2944 (U)
- AHA_3940 (U/AU)
- AHA_3944 (U/AU)
- AHA_3950 (U2B_0/U2B_1/U2D_0/U2D_1)
- AHA_3960 (D/D CPQ)
- AHA_398X (U)
- AHA_4944 (U)
- AHA_29160 (CPQ/N/C/B)
- AHA_19160B

**RAID Adapters**
- 2200/S
- 2120/S

**Motherboard Chip Sets**
- AIC7850
- AIC7855
- AIC7859
- AIC7860
- AIC7870
- AIC7880
- AIC7892
- AIC7895
- AIC7895C

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<td>bcm5700</td>
<td>7.3.5</td>
</tr>
<tr>
<td></td>
<td>Intel</td>
<td>e100</td>
<td>2.3.40</td>
</tr>
<tr>
<td></td>
<td>Intel</td>
<td>e1000</td>
<td>5.2.39</td>
</tr>
</tbody>
</table>
Adaptec Ultra320 SCSI Adapters

The ESX Server Adaptec driver is based on the Linux aic79xx version 1.3.7 driver. The following PCI Adaptec SCSI adapters and motherboard chip set devices should work as ESX Server adapters.

SCSI Adapters
- AHA29320 (A)
- AHA29320 (LP)
- AHA39320 (A/D/DB)

Motherboard Chip Sets
- AIC7901 (A)
- AIC7902 (B)

LSI Logic Symbios and NCR Based SCSI Adapters

Most SCSI adapters based on the LSI Logic Symbios (formerly NCR) 53c8xx family of chip sets are supported as ESX Server devices. ESX Server uses two different drivers to support the device family: one based on the Linux ncr53c8xx version 3.4.3b driver and the other on the sym53c8xx version 1.7.3c driver. LSI Logic's Symbios product division was formerly NCR Microelectronics Products Division. Older products may have either NCR or Symbios (SYM) part number prefixes; otherwise the part numbers are interchangeable. The following chip sets and adapters are supported as ESX Server devices.

Supported Symbios Chip Sets
- SYM53C810
- SYM53C810A
- SYM53C815
- SYM53C820
- SYM53C825
- SYM53C860
- SYM53C875
- SYM53C876
- SYM53C895
- SYM53C895A
- SYM53C896
- SYM53C897
Third-party SCSI adapters from Compaq/DEC, Gigabyte, Promise Technology, and Tyan should also work with the ESX Server NCR driver.

**LSI Logic MPT-Fusion SCSI Adapters**

The ESX Server driver is based on the LSI Logic mptlinux mptscsi v 2.05.16 driver and supports the following SCSI controllers. These controllers are also supported in a RAID-1 configuration.

- 53C1020
- 53C1030

**LSI Logic MegaRAID Adapters**

The ESX Server driver is based on the LSI MegaRAID 2.10.7 driver and supports the following SCSI controllers.

- 320-1
- 320-2
- 320-2E ROMB
- 320-2X

**Dell PercRAID Controllers**

VMware ESX Server supports two classes of Perc branded controllers. Some are based on Adaptec RAID chip sets, and some on LSI Logic (formerly American Megatrends, Inc.) MegaRAID chip sets.
The ESX Server driver for Adaptec-based PercRAID controllers is based on the Linux aacraid version 0.9.9ac6-T 2.1.5 driver.

- PERC 2/QC
- PERC 3/Si (PowerEdge 2450 onboard RAID)
- PERC 3/Di (PowerEdge 2550, 2650, and 4400 onboard RAID)

The ESX Server driver for LSI Logic/AMI-based PercRAID controllers is based on the Linux megaraid version 2.10.7 driver.

- PERC 2/DC
- PERC 3/DCL
- PERC 4/eDi
- MegaRAID 418, 428, 438, 466, 762, 467, 471, 490, 493
- Dell PERC 4e/Di internal RAID controllers, also listed as PERC RAID 4ei. (Firmware upgrade 522A is not supported. For further details, refer to KB 5966817 at http://kb.vmware.com/kb/5966817)

- PERC 3/DC
- PERC 3/QC
- PERC 4/DC (Firmware upgrade 352B is not supported. For further details, refer to KB 5966817 at http://kb.vmware.com/kb/5966817)
- PERC 4e/Si
- PERC 4/IM

**HP SmartArray RAID Controllers**

The ESX Server driver is based on the HP cpqarray v 2.4.21 and cciss v 2.4.50 drivers.

**Cpqarray-based Controllers**

- IDA, IDA-2, IAES
- SMART
- SMART-2/E
- SMART-2 (SMART-2/P, SMART-2SL, Smart Array 3200, Smart Array 3100ES, Smart Array 221)
- SMART-4 (Integrated Array, LC2, Smart Array 4200, Smart Array 4250ES, Smart Array 431)

**CCISS-based Controllers**

- SMART-5 (Smart Array 5300 series, Smart Array 5i, Smart Array 5312)
- SMART-6 (Smart Array 641, 6400, 6402, 6404)
- SMART-6i

**IBM ServeRAID RAID Controllers**

The ESX Server drivers are based on the Linux ips version 7.10.17 driver and the aacraid-115 version 1.1-5 driver.

The ips driver supports the following RAID controllers:

- ServeRAID-3H
- ServeRAID/-4L, 4LX
- ServeRAID-4M, 4Mx
ServeRAID-4H
ServeRAID-/5i
ServeRAID-5M
ServeRAID-6M*
ServeRAID-6i*
ServeRAID-6i+*
ServeRAID-7k

*Firmware version 7.10.17 and greater.

The aacraid-115 driver supports the following RAID controllers:
ServeRAID-8i

Intel RAID Controllers
The ESX Server driver is based on the Intel gdth 2.04 driver.
SRCU42L*
* The SRCU42L card is supported only in the Intel SRSH4 and all OEM versions of that system.

Mylex AcceleRAID/eXtremeRAID Controllers
The ESX Server driver is based on the Linux DAC960 version 2.4.11 driver. Specific AcceleRAID and eXtremeRAID controllers are also based on DAC960-compatible controllers.
DAC960 (E, M, PD, PL, PU, PE, PG, Pj, PTL0, PR, PRL, PTL1)
DDAC960 (S, SU, SX, SF, SS, FL, LL, FF, HP)
DAC1164P
EXR2000P
EXR3000P
AcceleRAID 160, 170, 352
eXtremeRAID 1100

Emulex Fibre Channel Adapters
Please see the SAN Compatibility Guide for ESX Server 2.x for more information on the specific drivers, configurations, models, and firmware supported.

QLogic Fibre Channel Adapters
Please see the SAN Compatibility Guide for ESX Server 2.x for more information on the specific drivers, configurations, models, and firmware supported.
Intel PRO/100 Ethernet NICs

The default ESX Server driver for PRO/100 NICs is based on the Intel-supplied e100 Intel(R) PRO/100 Fast Ethernet Adapter version 2.0.302.3.40 driver. This is a comprehensive listing of Intel and OEM models that have been based on these chip sets. You should check the specific chip set used in your card for compatibility.

Table 19.

<table>
<thead>
<tr>
<th>Controller</th>
<th>Adapter Name</th>
<th>Board ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>82558</td>
<td>PRO/100+ PCI Adapter</td>
<td>668081-xxx, 689661-xxx</td>
</tr>
<tr>
<td>82558</td>
<td>PRO/100+ Management Adapter</td>
<td>691334-xxx, 701738-xxx, 721383-xxx</td>
</tr>
<tr>
<td>82558</td>
<td>PRO/100+ Dual Port Server</td>
<td>748568-xxx, 748565-xxx (82559), 748565-xxx</td>
</tr>
<tr>
<td>82558</td>
<td>PRO/100+ PCI Server Adapter</td>
<td>710550-xxx</td>
</tr>
<tr>
<td>82550</td>
<td>PRO/100 S Server Adapter</td>
<td>752438-xxx (82550)</td>
</tr>
<tr>
<td>82559</td>
<td>PRO/100 S Desktop Adapter</td>
<td>751767-xxx (82550)</td>
</tr>
<tr>
<td>82559</td>
<td>PRO/100 S Desktop Adapter</td>
<td>748592-xxx, A12167-xxx, A12318-xxx, A12317-xxx, A12165-xxx, 748569-xxx (82559)</td>
</tr>
<tr>
<td>82559</td>
<td>PRO/100+ Server Adapter</td>
<td>729757-xxx</td>
</tr>
<tr>
<td>82559</td>
<td>PRO/100 S Management Adapter</td>
<td>748564-xxx</td>
</tr>
<tr>
<td>82550</td>
<td>PRO/100 S Dual Port Server</td>
<td></td>
</tr>
<tr>
<td>82551</td>
<td>PRO/100 M Desktop Adapter</td>
<td>A80897-xxx</td>
</tr>
<tr>
<td>82551</td>
<td>PRO/100 S Advanced Management Adapter</td>
<td>747842-xxx, 745171-xxx</td>
</tr>
<tr>
<td>CNR</td>
<td>PRO/100 VE Desktop Adapter</td>
<td>A10386-xxx, A10725-xxx, A23801-xxx, A19716-xxx</td>
</tr>
<tr>
<td>CNR</td>
<td>PRO/100 VM Desktop Adapter</td>
<td>A14323-xxx, A19725-xxx, A23801-xxx, A22220-xxx, A23796-xxx</td>
</tr>
</tbody>
</table>

The specific HP OEM model numbers associated with this driver are:

- NC3120
- NC3121
- NC3123
- NC3131
- NC3132
- NC3133
- NC3134N
- NC3135
- NC3160
- NC3161
- NC3162
NC3163

NC3122

**Intel PRO/1000 Gigabit Ethernet NICs**

The ESX Server driver for Intel PRO/1000 based Gigabit Ethernet cards is based on the Linux v 5.2.39 e1000 driver. Several HP and IBM Gigabit Ethernet cards are based on this controller, but you need to check the OEM model number to ascertain this.

**Table 20.**

<table>
<thead>
<tr>
<th>Controller</th>
<th>Adapter Name</th>
<th>Board IDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>82542</td>
<td>PRO/1000 Gigabit Server Adapter</td>
<td>700262-xxx, 717037-xxx</td>
</tr>
<tr>
<td>82543</td>
<td>PRO/1000 F Server Adapter</td>
<td>738640-xxx, A38888-xxx</td>
</tr>
<tr>
<td>82543</td>
<td>PRO/1000 T Server Adapter</td>
<td>A19845-xxx, A33948-xxx</td>
</tr>
<tr>
<td>82544</td>
<td>PRO/1000 XT Server Adapter</td>
<td>A51580-xxx</td>
</tr>
<tr>
<td>82544</td>
<td>PRO/1000 XF Server Adapter</td>
<td>A50484-xxx</td>
</tr>
<tr>
<td>82544</td>
<td>PRO/1000 T Desktop Adapter</td>
<td>A62947-xxx</td>
</tr>
<tr>
<td>82540</td>
<td>PRO/1000 MT Desktop Adapter</td>
<td>A78408-xxx</td>
</tr>
<tr>
<td>82545</td>
<td>PRO/1000 MT Server Adapter</td>
<td>A92165-xxx</td>
</tr>
<tr>
<td>82546</td>
<td>PRO/1000 MT Dual Port Server Adapter</td>
<td>A92111-xxx</td>
</tr>
<tr>
<td>82545</td>
<td>PRO/1000 MF Server Adapter</td>
<td>A91622-xxx</td>
</tr>
<tr>
<td>82545</td>
<td>PRO/1000 MF Server Adapter (LX)</td>
<td>A91624-xxx</td>
</tr>
<tr>
<td>82546</td>
<td>PRO/1000 MF Dual Port Server Adapter</td>
<td>A91620-xxx</td>
</tr>
<tr>
<td>82546EB</td>
<td>PRO/1000 MT Quad Port Server Adapter</td>
<td></td>
</tr>
<tr>
<td>82546EB</td>
<td>Dual Port Gigabit Ethernet Controller</td>
<td></td>
</tr>
</tbody>
</table>

The specific HP OEM model numbers associated with this driver are:

- NC6134
- NC6136
- NC7131
- NC7170
- NC6170

VMware supports the following IBM OEM versions of the Intel adapters:

- 06P3601 - IBM 10/100 Ethernet Server Adapter
- 09N9901 - 10/100 Fast Etherlink PCI TX Server
- 22P4901 - IBM 10/100 Dual Port Server Adapter
- 22P680 - PRO/1000 XT (PCI-X) Server Adapter
- 31P9601 - PRO/1000 MT Server Ethernet Adapter

**Broadcom Gigabit Ethernet NICs**

The ESX Server driver for Broadcom Gigabit Ethernet cards is based on the Broadcom 5700 driver for Linux v 7.3.5 version driver.

- Broadcom Vigil B5700 1000Base-T
- Broadcom BCM5700 1000Base-T
- Broadcom BCM5700 1000Base-SX
- Broadcom BCM5700
- Broadcom BCM5701 1000Base-T
- Broadcom BCM5701 1000Base-SX
- Broadcom BCM5701
- Broadcom BCM5702 1000Base-T
- Broadcom BCM5703 1000Base-T
- Broadcom BCM5703 1000Base-SX
- Broadcom Arbuckle B5703 1000Base-SX
- Broadcom BCM5704 CIOB-E 1000Base-T
- Broadcom BCM5704 1000Base-T
- Broadcom BCM5704 1000Base-SX, T
- Broadcom BCM5705 1000Base-T
- Broadcom BCM5705M 1000Base-T
- Broadcom BCM5721 Gigabit Ethernet
- Broadcom NetXtreme Gigabit Ethernet for HP
- Broadcom BCM5788 1000Base-T
- 3Com 3C996 10/100/1000 Server NIC
- 3Com 3C996 Gigabit Fiber-SX Server NIC
- 3Com 3C996B Gigabit Server NIC
- 3Com 3C997 Gigabit Server NIC
- 3Com 3C997 Gigabit Fiber-SX Server NIC
- 3Com 3C1000 Gigabit NIC
- 3Com 3C940 Gigabit LOM (21X21)
- 3Com 3C942 Gigabit LOM (31X31)
- HP NC6770 Gigabit Server Adapter
- HP NC7760 Gigabit Server Adapter
- HP NC7761 Gigabit Server Adapter
- HP NC7770 Gigabit Server Adapter
- HP NC7771 Gigabit Server Adapter
- HP NC7772 Gigabit Server Adapter
- HP NC7780 Gigabit Server Adapter
- HP NC7781 Gigabit Server Adapter
- HP NC7782 Gigabit Server Adapter
- HP NC7783 Gigabit Server Adapter
3Com EtherLink PCI III/XL Series Ethernet NICs

ESX Server supports many 3Com Ethernet NICs. The ESX Server driver includes two drivers: one based on the Linux 3c90x version 1.0.2 driver and the other based on the Linux 3C990-x version 1.0.0b. The following 3Com NICs are supported as ESX Server devices.

**EtherLink 10/100 PCI NICs**
- 3C905C Family and 3C920 ASICs – EtherLink 10/100 PCI including the -TX and -TX-M
- 3C905B Family and 3C918 ASICs – EtherLink 10/100 PCI including the -TX, -TX-M, and -TX-NM
- 3C905B-COMBO – EtherLink 10/100 PCI COMBO
- 3C905B-T4 – EtherLink 10/100 PCI T4

**EtherLink Server 10/100 PCI NICs**
- 3C980C-TX – EtherLink Server 10/100 PCI
- 3C980B-TX – EtherLink Server 10/100 PCI
- 3C980-TX – EtherLink Server 10/100 PCI

**EtherLink 100 PCI NIC**
- 3C905B-FX – EtherLink 100 PCI Fiber

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<td>Adaptec</td>
<td>aic79xx</td>
<td>1.3.7</td>
</tr>
<tr>
<td></td>
<td>LSI Logic</td>
<td>ncr53c8xx</td>
<td>3.4.3b</td>
</tr>
<tr>
<td></td>
<td>LSI Logic</td>
<td>sym53c8xx</td>
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<td>LSI Logic</td>
<td>mptscsi</td>
<td>2.05.16</td>
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<td>0.9.9ac6-T</td>
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<td>IBM/Adaptec</td>
<td>ips</td>
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<td>gdth</td>
<td>2.04</td>
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<td>MegaRAID</td>
<td>2.10.7</td>
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<td>DAC960</td>
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<td>Emulex</td>
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<td>bcm5700</td>
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<td>e100</td>
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<td>Intel</td>
<td>e1000</td>
<td>5.2.39</td>
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<td></td>
<td>3Com</td>
<td>3c90x</td>
<td>1.0.2</td>
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<tr>
<td></td>
<td>3Com</td>
<td>3c990-c</td>
<td>1.0.0b</td>
</tr>
</tbody>
</table>

Adaptec Ultra160 SCSI Adapters

The ESX Server Adaptec driver is based on the Linux aic7xxx version 6.2.35 driver. The following PCI Adaptec SCSI adapters and motherboard chip set devices should work as ESX Server adapters.

SCSI Adapters
- AHA_1480A
- AHA_2902/04/10/15/20/30C
- AHA_2930 (C/CU U/U2)
- AHA_2940 AU_0(0/1/CN)
- AHA_2940 (U/UB/UB Pro/U CN/U Dual/U2/U2B/U2B/U2 OEM)
- AHA_2944 (U)
- AHA_3940 (U/AU)
- AHA_3944 (U/AU)
- AHA_3950 (U2B_0/U2B_1/U2D_0/U2D_1)
- AHA_3960 (D/D CPQ)
- AHA_398X (U)
- AHA_4944 (U)
- AHA_29160 (CPQ/N/C/B)
RAID Adapters
- 2200/S
- 2120/S

Motherboard Chip Sets
- AIC7850
- AIC7855
- AIC7859
- AIC7860
- AIC7870
- AIC7880
- AIC7892
- AIC7895
- AIC7895C
- AIC7890/91
- AIC7892
- AIC7895
- AIC7896/97
- AIC7899
- AIC7902

Adaptec Ultra320 SCSI Adapters
The ESX Server Adaptec driver is based on the Linux aic79xx version 1.3.7 driver. The following PCI Adaptec SCSI adapters and motherboard chip set devices should work as ESX Server adapters.

SCSI Adapters
- AHA29320 (A)
- AHA29320 (LP)
- AHA39320 (A/D/DB)

Motherboard Chip Sets
- AIC7901 (A)
- AIC7902 (B)

LSI Logic Symbios and NCR-Based SCSI Adapters
Most SCSI adapters based on the LSI Logic Symbios (formerly NCR) 53c8xx family of chip sets are supported as ESX Server devices. The ESX Server uses two different drivers to support the device family, one based on the Linux ncr53c8xx version 3.4.3b driver and the other on the sym53c8xx version 1.7.3c driver. LSI Logic’s Symbios product division was formerly NCR Microelectronics Products Division. Older products may have either NCR or Symbios (SYM) part number prefixes; otherwise the part numbers are interchangeable. The following chip sets and adapters are supported as ESX Server devices.
Supported Symbios Chip Sets

- SYM53C810
- SYM53C810A
- SYM53C815
- SYM53C820
- SYM53C825
- SYM53C860
- SYM53C875
- SYM53C876
- SYM53C895
- SYM53C895A
- SYM53C896
- SYM53C897
- SYM53C1510D

Table 22. SYM53C1010 Supported Symbios-Based SCSI Adapters

<table>
<thead>
<tr>
<th>Model/Type</th>
<th>Chip Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYM20810 32 bit PCI-to-Fast SCSI</td>
<td>SYM53C810A</td>
</tr>
<tr>
<td>SYM20811 32 bit PCI-to-Fast SCSI</td>
<td>SYM53C810A</td>
</tr>
<tr>
<td>SYM20860 32 bit PCI-to-Ultra SCSI</td>
<td>SYM53C860</td>
</tr>
<tr>
<td>SYM21002 32 bit PCI-to-Ultra2 SCSI</td>
<td>SYM53C896</td>
</tr>
<tr>
<td>SYM22801 PC-to-Dual Ultra SCSI</td>
<td>SYM53C876</td>
</tr>
<tr>
<td>SYM22802 PCI-to-Ultra SCSI</td>
<td>SYM53C876</td>
</tr>
<tr>
<td>SYM22902 Ultra2 MiniHAB</td>
<td>SYM53C895A/SYM53C895</td>
</tr>
<tr>
<td>SYM22910 PCI-to-Dual Ultra2 SCSI</td>
<td>SYM53C896</td>
</tr>
<tr>
<td>815XS</td>
<td>SYM53C815</td>
</tr>
<tr>
<td>8100S</td>
<td>SYM53C810</td>
</tr>
<tr>
<td>SYM8150</td>
<td>SYM53C815</td>
</tr>
<tr>
<td>SYM8251</td>
<td>SYM53C825</td>
</tr>
<tr>
<td>SYM8600SP</td>
<td>SYM53C860</td>
</tr>
<tr>
<td>SYM8750SP</td>
<td>SYM53C875</td>
</tr>
<tr>
<td>SYM8751D</td>
<td>SYM53C875</td>
</tr>
<tr>
<td>SYM87515PE</td>
<td>SYM53C875</td>
</tr>
<tr>
<td>SYM8951U</td>
<td>SYM53C895</td>
</tr>
<tr>
<td>SYM8952U</td>
<td>SYM53C895A/SYM53C895</td>
</tr>
<tr>
<td>SYM8953U</td>
<td>SYM53C895A</td>
</tr>
<tr>
<td>SYM53C1010</td>
<td>Ultra160</td>
</tr>
<tr>
<td>SYM53C1010_66</td>
<td>Ultra160</td>
</tr>
</tbody>
</table>

Third-party SCSI adapters from Compaq/DEC, Gigabyte, Promise Technology, and Tyan should also work with the ESX Server NCR driver.
**LSI Logic MPT-Fusion SCSI Adapters**

The ESX Server driver is based on the LSI Logic mptlinux mptscsi v 2.05.16 driver and supports the following SCSI controllers. These controllers are also supported in a RAID-1 configuration.

- 53C1020
- 53C1030

**LSI Logic MegaRAID Adapters**

The ESX Server driver is based on the LSI MegaRAID 2.10.7 driver and supports the following SCSI controllers.

- 320-1
- 320-2
- 320-2E ROMB

**Dell PercRAID Controllers**

VMware ESX Server supports two classes of Perc branded controllers. Some are based on Adaptec RAID chip sets, and some on LSI Logic (formerly American Megatrends, Inc.) MegaRAID chip sets.

The ESX Server driver for Adaptec-based PercRAID controllers is based on the Linux aacraid version 0.9.9ac6-T 2.1.5 driver.

- PERC 2/QC
- PERC 3/Si (PowerEdge 2450 onboard RAID)
- PERC 3/Di (PowerEdge 2550, 2650, and 4400 onboard RAID)

The ESX Server driver for LSI Logic/AMI-based PercRAID controllers is based on the Linux MegaRAID version 2.10.7 driver.

- PERC 2/DC
- PERC 3/DCL
- PERC 4/eDi
- MegaRAID 418, 428, 438, 466, 762, 467, 471, 490, 493
- Dell PERC 4/e/Di internal RAID controllers, also listed as PERC RAID 4ei. (Firmware upgrade 522A is not supported. For further details, refer to KB 5966817 at [http://kb.vmware.com/kb/5966817](http://kb.vmware.com/kb/5966817))

- PERC 3/DC
- PERC 3/QC
- PERC 4/DC (Firmware upgrade 352B is not supported. For further details, refer to KB 5966817 at [http://kb.vmware.com/kb/5966817](http://kb.vmware.com/kb/5966817))
- PERC 4e/Si
- PERC 4/IM

**HP SmartArray RAID Controllers**

The ESX Server driver is based on the HP cpqarray v 2.4.21 and cciss v 2.4.50 drivers.

**Cpqarray-Based Controllers**

- IDA, IDA-2, IAES
- SMART
I/O Compatibility Guide For ESX Server 2.x
ESX Server 2.5

SMART-2/E
SMART-2 (SMART-2/P, SMART-2SL, Smart Array 3200, Smart Array 3100ES, Smart Array 221)
SMART-4 (Integrated Array, LC2, Smart Array 4200, Smart Array 4250ES, Smart Array 431)

CCISS-Based Controllers
SMART-5 (Smart Array 5300 series, Smart Array 5i, Smart Array 5312)
SMART-6 (Smart Array 641, 6400, 6402, 6404)
SMART-6i

IBM ServeRAID RAID Controllers
The ESX Server driver is based on the Linux ips v 7.10.17 driver.
ServeRAID-3H
ServeRAID-4L, 4LX
ServeRAID-4M, 4Mx
ServeRAID-4H
ServeRAID-5i
ServeRAID-5M
ServeRAID-6M*
ServeRAID-6i*
ServeRAID-6i+*
ServeRAID-7k
*Firmware version 7.10.17 and greater.

Intel RAID Controllers
The ESX Server driver is based on the Intel gdth 2.04 driver.
SRCU42L*
* The SRCU42L card is supported only in the Intel SRSH4 and all OEM versions of that system.

Mylex AcceleRAID/eXtremeRAID Controllers
The ESX Server driver is based on the Linux DAC960 version 2.4.11 driver. Specific AcceleRAID and eXtremeRAID controllers are also based on DAC960-compatible controllers.
DAC960 (E, M, PD, PL, PU, PE, PG, PJ, PTL0, PR, PRL, PTL1)
DDAC960 (S, SU, SX, SF, SS, FL, LL, FF, HP)
DAC1164P
EXR2000P
EXR3000P
AcceleRAID 160, 170, 352
eXtremeRAID 1100
Emulex Fibre Channel Adapters
Please see the SAN Compatibility Guide for ESX Server 2.x for more information on the specific drivers, configurations, models, and firmware supported.

QLogic Fibre Channel Adapters
Please see the SAN Compatibility Guide for ESX Server 2.x for more information on the specific drivers, configurations, models, and firmware supported.

Intel PRO/100 Ethernet NICs
The default ESX Server driver for PRO/100 NICs is based on the Intel-supplied e100 Intel(R) PRO/100 Fast Ethernet Adapter version 2.0.302.3.40 driver. This is a comprehensive listing of Intel and OEM models that have been based on these chip sets. You should check the specific chip set used in your card for compatibility.

Table 23.

<table>
<thead>
<tr>
<th>Controller</th>
<th>Adapter Name</th>
<th>Board ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>82558</td>
<td>PRO/100+ PCI Adapter</td>
<td>668081-xxx, 689661-xxx</td>
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<tr>
<td>82558</td>
<td>PRO/100+ Management Adapter</td>
<td>691334-xxx, 701738-xxx, 721383-xxx</td>
</tr>
<tr>
<td>82558</td>
<td>PRO/100+ Dual Port Server Adapter</td>
<td>714303-xxx, 711269-xxx, A28276-xxx</td>
</tr>
<tr>
<td>82558</td>
<td>PRO/100+ PCI Server Adapter</td>
<td>710550-xxx</td>
</tr>
<tr>
<td>82550</td>
<td>PRO/100 S Server Adapter</td>
<td>752438-xxx (82550)</td>
</tr>
<tr>
<td>82550</td>
<td>PRO/100 S Desktop Adapter</td>
<td>751767-xxx (82550)</td>
</tr>
<tr>
<td>82559</td>
<td>PRO/100 S Desktop Adapter</td>
<td>748592-xxx, A12167-xxx, A12318-xxx, A12317-xxx, A12165-xxx, 748569-xxx (82559)</td>
</tr>
<tr>
<td>82559</td>
<td>PRO/100+ Server Adapter</td>
<td>729757-xxx</td>
</tr>
<tr>
<td>82559</td>
<td>PRO/100 S Management Adapter</td>
<td>748566-xxx, 748564-xxx</td>
</tr>
<tr>
<td>82550</td>
<td>PRO/100 S Dual Port Server Adapter</td>
<td>A56831-xxx</td>
</tr>
<tr>
<td>82551</td>
<td>PRO/100 M Desktop Adapter</td>
<td>A80897-xxx</td>
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<tr>
<td>82551</td>
<td>PRO/100 S Advanced Management Adapter</td>
<td>747842-xxx, 745171-xxx</td>
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<tr>
<td>CNR</td>
<td>PRO/100 VE Desktop Adapter</td>
<td>A10386-xxx, A10725-xxx, A23801-xxx, A19716-xxx</td>
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<tr>
<td>CNR</td>
<td>PRO/100 VM Desktop Adapter</td>
<td>A14323-xxx, A19725-xxx, A23801-xxx, A22220-xxx, A23796-xxx</td>
</tr>
</tbody>
</table>

The specific HP OEM model numbers associated with this driver are:
- NC3120
- NC3121
- NC3123
- NC3131
- NC3132
Intel PRO/1000 Gigabit Ethernet NICs

The ESX Server driver for Intel PRO/ro 1000-based Gigabit Ethernet cards is based on the Linux v 5.2.39 e1000 driver. Several HP and IBM gigabit Ethernet cards are based on this controller, but you need to check the OEM model number to ascertain this.

The specific HP OEM model numbers associated with this driver are:

- NC6134
- NC6136
- NC7131
- NC7170
- NC6170

VMware supports the following IBM OEM versions of the Intel adapters:

- 06P3601 - IBM 10/100 Ethernet Server Adapter
- 09N9901 - 10/100 Fast Etherlink PCI TX Server
- 22P4901 - IBM 10/100 Dual Port Server Adapter
- 22P680 - PRO/1000 XT (PCI-X) Server Adapter

Table 24.

<table>
<thead>
<tr>
<th>Controller</th>
<th>Adapter Name</th>
<th>Board IDs</th>
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<tbody>
<tr>
<td>82542</td>
<td>PRO/1000 Gigabit Server Adapter</td>
<td>700262-xxx, 717037-xxx</td>
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<td>82543</td>
<td>PRO/1000 F Server Adapter</td>
<td>738640-xxx, A38888-xxx</td>
</tr>
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<td>82543</td>
<td>PRO/1000 T Server Adapter</td>
<td>A19845-xxx, A33948-xxx</td>
</tr>
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<td>82544</td>
<td>PRO/1000 XT Server Adapter</td>
<td>A51580-xxx</td>
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<td>82544</td>
<td>PRO/1000 XF Server Adapter</td>
<td>A50484-xxx</td>
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<td>82544</td>
<td>PRO/1000 T Desktop Adapter</td>
<td>A62947-xxx</td>
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<td>82540</td>
<td>PRO/1000 MT Desktop Adapter</td>
<td>A78408-xxx</td>
</tr>
<tr>
<td>82545</td>
<td>PRO/1000 MT Server Adapter</td>
<td>A92165-xxx</td>
</tr>
<tr>
<td>82546</td>
<td>PRO/1000 MT Dual Port Server Adapter</td>
<td>A92111-xxx</td>
</tr>
<tr>
<td>82545</td>
<td>PRO/1000 MF Server Adapter</td>
<td>A91622-xxx</td>
</tr>
<tr>
<td>82545</td>
<td>PRO/1000 MF Server Adapter(LX)</td>
<td>A91624-xxx</td>
</tr>
<tr>
<td>82546</td>
<td>PRO/1000 MF Dual Port Server Adapter</td>
<td>A91620-xxx</td>
</tr>
<tr>
<td>82546EB</td>
<td>PRO/1000 MT Quad Port Server Adapter</td>
<td></td>
</tr>
</tbody>
</table>


- 31P9601 - PRO/1000 MT Server Ethernet Adapter

**Broadcom Gigabit Ethernet NICs**

The ESX Server driver for Broadcom Gigabit Ethernet cards is based on the Broadcom 5700 driver for Linux v2.0.28/v7.3.5 version driver. Due to complexities in the Broadcom implementation, we advise customers to consider either Alteon AceNIC or Intel Pro1000-based gigabit Ethernet cards for deployment with ESX Server.

- Broadcom Vigil B5700 1000Base-T
- Broadcom BCM5700 1000Base-T
- Broadcom BCM5700 1000Base-SX
- Broadcom BCM5700
- Broadcom BCM5701 1000Base-T
- Broadcom BCM5701 1000Base-SX
- Broadcom BCM5701 1000Base-T
- Broadcom BCM5701
- Broadcom BCM5702 1000Base-T
- Broadcom BCM5703 1000Base-T
- Broadcom BCM5703 1000Base-SX
- Broadcom Arbuckle B5703 1000Base-SX
- Broadcom BCM5704 CIOB-E 1000Base-T
- Broadcom BCM5704 1000Base-T
- Broadcom BCM5704 1000Base-SX, T
- Broadcom BCM5705 1000Base-T
- Broadcom BCM5705M 1000Base-T
- Broadcom NetXtreme Gigabit Ethernet for HP
- Broadcom BCM5721
- Broadcom BCM5788 1000Base-T
- 3Com 3C996 10/100/1000 Server NIC
- 3Com 3C996 Gigabit Fiber-SX Server NIC
- 3Com 3C996B Gigabit Server NIC
- 3Com 3C997 Gigabit Server NIC
- 3Com 3C997 Gigabit Fiber-SX Server NIC
- 3Com 3C1000 Gigabit NIC
- 3Com 3C940 Gigabit LOM (21X21)
- 3Com 3C942 Gigabit LOM (31X31)
- HP NC6770 Gigabit Server Adapter
- HP NC7760 Gigabit Server Adapter
- HP NC7761 Gigabit Server Adapter
- HP NC7770 Gigabit Server Adapter
HP NC7771 Gigabit Server Adapter
HP NC7772 Gigabit Server Adapter
HP NC7780 Gigabit Server Adapter
HP NC7781 Gigabit Server Adapter
HP NC7782 Gigabit Server Adapter
HP NC7783 Gigabit Server Adapter
22P7801 - NetXtreme 1000 SX Fiber Ethernet Adapter
31P6301 - NetXtreme 1000 T Ethernet Adapter
31P6401 - NetXtreme Dual Port Gigabit Ethernet Adapter
73P3501 - NetXtreme 1000 T Express Ethernet Adapter
73P4001 - NetXtreme 1000 + SX Fiber Ethernet Adapter
73P4101 - NetXtreme 1000 + Ethernet Adapter
73P4201 - NetXtreme 1000 + Dual port Ethernet Adapter

3Com EtherLink PCI III/XL Series Ethernet NICs
ESX Server supports many 3Com Ethernet NICs. The ESX Server driver includes two drivers: one based on the Linux 3c90x version 1.0.2 driver and the other based on the Linux 3C990-x version 1.0.0b. The following 3Com NICs are supported as ESX Server devices.

EtherLink 10/100 PCI NICs
- 3C905C Family and 3C920 ASICs – EtherLink 10/100 PCI including the -TX and -TX-M
- 3C905B Family and 3C918 ASICs – EtherLink 10/100 PCI including the -TX, -TX-M, and -TX-NM
- 3C905B-COMBO – EtherLink 10/100 PCI COMBO
- 3C905B-T4 – EtherLink 10/100 PCI T4

EtherLink Server 10/100 PCI NICs
- 3C980C-TX – EtherLink Server 10/100 PCI
- 3C980B-TX – EtherLink Server 10/100 PCI
- 3C980-TX – EtherLink Server 10/100 PCI

EtherLink 100 PCI NIC
- 3C905B-FX – EtherLink 100 PCI Fiber

EtherLink 10 PCI NICs
- 3C900B-TPO – EtherLink 10 PCI TPO
- 3C900B-TPC – EtherLink 10 PCI TPC
- 3C900B-COMBO – EtherLink 10 PCI COMBO
- 3C900B-FL – EtherLink 10 PCI Fiber

In addition, all cards based on the 3c990-x card should be compatible with ESX Server.
IBM Bladecenter NICS
- 73P9030 - IBM BladeCenter GB Ethernet Expansion
- 90P3777 - Intel GB Ethernet Expansion
- 26K4842 - IBM BladeCenter SFF GBEthernet Expansion

ESX Server 2.1.2

Currently Supported Device Families
VMware currently has ESX Server device drivers available that support specific devices within the following families of I/O controllers. Please examine the detailed list of device models below to make sure your specific device is supported.

ESX Server 2.1.2 is a minor maintenance release that augments ESX Server 2.1.1 with the following updated versions of device drivers and RAID controller. For all other supported device families, please refer to the “Currently Supported Device Families” on page 71.

Table 25.

<table>
<thead>
<tr>
<th>Class</th>
<th>Vendor</th>
<th>Driver</th>
<th>2.1.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAID</td>
<td>Dell</td>
<td>aacraid</td>
<td>0.9.9ac6</td>
</tr>
<tr>
<td></td>
<td>Dell</td>
<td>megaraid</td>
<td>2.10.7</td>
</tr>
</tbody>
</table>

Dell PercRAID Controllers
- Dell PERC 4e/Di internal RAID controllers, also listed as PERC RAID 4ei. (Firmware upgrade 522A is not supported. For further details, refer to KB 5966817 at http://kb.vmware.com/kb/5966817)

ESX Server 2.1.1

Currently Supported Device Families
VMware currently has ESX Server device drivers available that support specific devices within the following families of I/O controllers. Please examine the detailed list of device models below to make sure your specific device is supported.

SCSI Controllers (Attached to Non-Removable SCSI Devices Only)
- Adaptec Ultra160 and Ultra 320 SCSI controllers
- LSI Logic Symbios and NCR chip set based SCSI controllers
- LSI Logic Fusion-MPT SCSI controllers

RAID Controllers
- Dell PercRAID controllers
- HP SmartArray controllers
- IBM ServeRAID controllers
- Mylex AcceleRAID and ExtremeRAID controllers

Fibre Channel Adapters (SCSI Protocol Support Only)
- Emulex Host Bus Adapters
- QLogic Host Bus Adapters
Ethernet NICs
- Intel PRO/100 Ethernet NICs
- Intel PRO/1000 Gigabit Ethernet NICs
- Broadcom NetXtreme 570x series Gigabit NICs
- 3Com Fast Ethernet NICs

VMware may add support for drivers and devices between releases of the product; check the VMware Web site for current information at http://www.vmware.com/support/pubs/.

The detailed list below shows actual vendor chip sets and adapters that VMware believes are compatible with the currently supported drivers. Although we have been careful in compiling the list, we have not tested all of these devices and cannot warrant that they all work. There may also be devices that are not listed but that work with these device drivers.

Please contact VMware with any questions about current and planned device support.

**Linux Driver Compatibility**

While ESX Server itself is not derived from Linux, it includes a Linux compatibility module to allow Linux storage and networking drivers to be adapted and recompiled for ESX Server. This enables VMware to more easily support a wide range of high performance devices and eases the driver porting effort on the storage and networking device vendors. VMware typically modifies these drivers for one or more of the following reasons:

- To make the driver compatible with the ESX Server
- To tune the driver for performance
- To add I/O resource governing or QoS support to the driver
- To fix generic bugs in the driver

It is not possible to directly load existing, precompiled, Linux device driver binaries into ESX Server.

**VMware Certification**

VMware certifies that specific systems and components are compatible with ESX Server. Through its Preferred Hardware Partner Program, it works with leading server vendors to ensure that appropriate configurations of their current and future server products are certified with ESX Server products. The following table summarizes the driver versions shipped with the current release of ESX Server compared with previous releases. Details of the device models supported by each driver can be found below.

<table>
<thead>
<tr>
<th>Class</th>
<th>Vendor</th>
<th>Driver</th>
<th>2.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCSI</td>
<td>Adaptec</td>
<td>aic7xxx</td>
<td>6.2.35</td>
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<td></td>
<td>Adaptec</td>
<td>aic79xx</td>
<td>1.3.7</td>
</tr>
<tr>
<td></td>
<td>LSI Logic</td>
<td>ncr53c8xx</td>
<td>3.4.3b</td>
</tr>
<tr>
<td></td>
<td>LSI Logic</td>
<td>sym53c8xx</td>
<td>1.7.3c</td>
</tr>
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<td></td>
<td>LSI Logic</td>
<td>mptlinuxmptscsi</td>
<td>2.05</td>
</tr>
<tr>
<td>RAID</td>
<td>HP</td>
<td>cpqarray</td>
<td>2.4.21</td>
</tr>
<tr>
<td></td>
<td>HP</td>
<td>cciss</td>
<td>2.4.45</td>
</tr>
<tr>
<td></td>
<td>Dell</td>
<td>aacraid</td>
<td>0.9.9a2</td>
</tr>
<tr>
<td></td>
<td>Dell</td>
<td>megaraid</td>
<td>1.18j</td>
</tr>
<tr>
<td></td>
<td>IBM/Adaptec</td>
<td>ips</td>
<td>6.10.24</td>
</tr>
<tr>
<td></td>
<td>LSI</td>
<td>megaraid</td>
<td>1.18j</td>
</tr>
<tr>
<td></td>
<td>Mylex</td>
<td>DAC960</td>
<td>2.4.11</td>
</tr>
</tbody>
</table>
Adaptec Ultra160 SCSI Adapters

The ESX Server Adaptec driver is based on the Linux aic7xxx version 6.2.35 driver. The following PCI Adaptec SCSI adapters and motherboard chip set devices should work as ESX Server adapters.

**SCSI Adapters**

- AHA_1480A
- AHA_2902/04/10/15/20/30C
- AHA_2930 (C/CU U/U2)
- AHA_2940 AU_(0/1/CN)
- AHA_2944 (U)
- AHA_3940 (U/AU)
- AHA_3944 (U/AU)
- AHA_3950 (U2B_0/U2B_1/U2D_0/U2D_1)
- AHA_3960 (D/D CPQ)
- AHA_398X (U)
- AHA_4944 (U)
- AHA_29160 (CPQ/N/C/B)
- AHA_19160B

**Motherboard Chip Sets**

- AIC7850
- AIC7855
- AIC7859
- AIC7860
- AIC7870
- AIC7880
- AIC7892
- AIC7895
- AIC7895C
- AIC7890/91
Adaptec Ultra320 SCSI Adapters
The ESX Server Adaptec driver is based on the Linux aic79xx version 1.3.7 driver. The following PCI Adaptec SCSI adapters and motherboard chip set devices should work as ESX Server adapters.

SCSI Adapters
- AHA29320 (A)
- AHA29320 (LP)
- AHA39320 (A/D/DB)

Motherboard Chip Sets
- AIC7901 (A)
- AIC7902 (B)

LSI Logic Symbios and NCR-Based SCSI Adapters
Most SCSI adapters based on the LSI Logic Symbios (formerly NCR) 53c8xx family of chip sets are supported as ESX Server devices. ESX Server uses two different drivers to support the device family: one based on the Linux ncr53c8xx version 3.4.3b driver and the other on the sym53c8xx version 1.7.3c driver. LSI Logic’s Symbios product division was formerly NCR Microelectronics Products Division. Older products may have either NCR or Symbios (SYM) part number prefixes; otherwise the part numbers are interchangeable. The following chip sets and adapters are supported as ESX Server devices.

Supported Symbios Chip Sets
- SYM53C810
- SYM53C810A
- SYM53C815
- SYM53C820
- SYM53C825
- SYM53C860
- SYM53C875
- SYM53C876
- YM53C895
- SYM53C895A
- SYM53C896
- SYM53C897
- SYM53C1510D

Table 27. SYM53C1010 Supported Symbios-Based SCSI Adapters

<table>
<thead>
<tr>
<th>Model/Type</th>
<th>Chip Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYM20810 32 bit PCI-to-Fast SCSI</td>
<td>SYM53C810A</td>
</tr>
</tbody>
</table>
Table 27. SYM53C1010 Supported Symbios-Based SCSI Adapters

<table>
<thead>
<tr>
<th>Model/Type</th>
<th>Chip Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYM20811 32 bit PCI-to-Fast SCSI</td>
<td>SYM53C810A</td>
</tr>
<tr>
<td>SYM20860 32 bit PCI-to-Ultra SCSI</td>
<td>SYM53C860</td>
</tr>
<tr>
<td>SYM21002 32 bit PCI-to-Ultra2 SCSI</td>
<td>SYM53C896</td>
</tr>
<tr>
<td>SYM22801 PCI-to-Dual Ultra SCSI</td>
<td>SYM53C876</td>
</tr>
<tr>
<td>SYM22802 PCI-to-Ultra SCSI</td>
<td>SYM53C876</td>
</tr>
<tr>
<td>SYM22902 Ultra2 MiniHAB</td>
<td>SYM53C895A/SYM53C895</td>
</tr>
<tr>
<td>SYM22910 PCI-to-Dual Ultra2 SCSI</td>
<td>SYM53C896</td>
</tr>
<tr>
<td>815XS</td>
<td>SYM53C815</td>
</tr>
<tr>
<td>8100S</td>
<td>SYM53C810</td>
</tr>
<tr>
<td>SYM8150</td>
<td>SYM53C815</td>
</tr>
<tr>
<td>SYM8251</td>
<td>SYM53C825</td>
</tr>
<tr>
<td>SYM8600SP</td>
<td>SYM53C860</td>
</tr>
<tr>
<td>SYM8750SP</td>
<td>SYM53C875</td>
</tr>
<tr>
<td>SYM8751D</td>
<td>SYM53C875</td>
</tr>
<tr>
<td>SYM8751SPE</td>
<td>SYM53C875</td>
</tr>
<tr>
<td>SYM8951U</td>
<td>SYM53C895</td>
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<tr>
<td>SYM8952U</td>
<td>SYM53C895A/SYM53C895</td>
</tr>
<tr>
<td>SYM8953U</td>
<td>SYM53C895A</td>
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<tr>
<td>SYM53C1010</td>
<td>Ultra160</td>
</tr>
<tr>
<td>SYM53C1010_66</td>
<td>Ultra160</td>
</tr>
</tbody>
</table>

Third-party SCSI adapters from Compaq/DEC, Gigabyte, Promise Technology, and Tyan should also work with the ESX Server NCR driver.

**LSI Logic MPT-Fusion SCSI Adapters**

The ESX Server driver is based on the LSI Logic mptlinux mptscsi v 2.05 driver and supports the following SCSI controllers. These controllers are also supported in a RAID-1 configuration.

- 53C1020
- 53C1030

**LSI Logic MegaRAID Adapters**

The ESX Server driver is based on the LSI MegaRAID 1.18j driver and supports the following SCSI controllers.

- 320-1
- 320-2

**Dell PercRAID Controllers**

VMware ESX Server supports two classes of Perc branded controllers. Some are based on Adaptec RAID chip sets, and some on LSI Logic (formerly American Megatrends, Inc.) MegaRAID chip sets.

The ESX Server driver for Adaptec-based PercRAID controllers is based on the Linux aacraid version 0.9.9ac2 2.1.5 driver.

- PERC 2/QC
- PERC 3/Si (PowerEdge 2450 onboard RAID)
- PERC 3/Di (PowerEdge 2550, 2650, and 4400 onboard RAID)
The ESX Server driver for LSI Logic/AMI-based PercRAID controllers is based on the Linux megaraid version 1.18h driver.

- PERC 2/DC
- PERC 3/DCL
- PERC 4/Di
- MegaRAID 418, 428, 438, 466, 762, 467, 471, 490, 493

**HP SmartArray RAID Controllers**

The ESX Server driver is based on the HP cpqarray v 2.4.21 and cciss v 2.4.45 drivers.

**cpqarray-Based Controllers**

- IDA, IDA-2, IAES
- SMART
- SMART-2/E
- SMART-2 (SMART-2/P, SMART-2SL, Smart Array 3200, Smart Array 3100ES, Smart Array 221)
- SMART-4 (Integrated Array, LC2, Smart Array 4200, Smart Array 4250ES, Smart Array 431)

**cciss-Based Controllers**

- SMART-5 (Smart Array 5300 series, Smart Array 5i, Smart Array 532, 5312)
- SMART-6 (Smart Array 641, 642, 6400, 6402, 6404)

**IBM ServeRAID RAID Controllers**

The ESX Server driver is based on the Linux ips v 6.10.24 driver.

- ServeRAID-3H
- ServeRAID-4L, 4lx
- ServeRAID-4M, 4Mx
- ServeRAID-4H
- ServeRAID-5i
- ServeRAID-5M
- ServeRAID-6M*
- ServeRAID-6i*

*Firmware version 6.10.70 and greater.

**Mylex AcceleRAID/eXtremeRAID Controllers**

The ESX Server driver is based on the Linux DAC960 version 2.4.11 driver. Specific AcceleRAID and eXtremeRAID controllers are also based on DAC960-compatible controllers.

- DAC960 (E, M, PD, PL, PU, PE, PG, Pj, PTL0, PR, PRL, PTL1)
- DDAC960 (S, SU, SX, SF, SS, FL, LL, FF, HP)
- DAC1164P
- EXR2000P
- EXR3000P
- AcceleRAID 160, 170, 352
- eXtremeRAID 1100

**Emulex Fibre Channel Adapters**
Please see the SAN Compatibility Guide for ESX Server 2.x for more information on the specific drivers, configurations, models, and firmware supported.

**QLogic Fibre Channel Adapters**
Please see the SAN Compatibility Guide for ESX Server 2.x for more information on the specific drivers, configurations, models, and firmware supported.

**Intel PRO/100 Ethernet NICs**
The default ESX Server driver for PRO/100 NICs is based on the Intel-supplied e100 Intel(R) PRO/100 Fast Ethernet Adapter version 2.0.302.3.18 driver. This is a comprehensive listing of Intel and OEM models that have been based on these chip sets. You should check the specific chip set used in your card for compatibility.

<table>
<thead>
<tr>
<th>Controller</th>
<th>Adapter Name</th>
<th>Board ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>82558</td>
<td>PRO/100+ PCI Adapter</td>
<td>668081-xxx, 689661-xxx</td>
</tr>
<tr>
<td>82558</td>
<td>PRO/100+ Management Adapter</td>
<td>691334-xxx, 701738-xxx, 721383-xxx</td>
</tr>
<tr>
<td>82558</td>
<td>PRO/100+ Dual Port Server Adapter</td>
<td>714303-xxx, 711269-xxx, A28276-xxx</td>
</tr>
<tr>
<td>82558</td>
<td>PRO/100+ PCI Server Adapter</td>
<td>710550-xxx</td>
</tr>
<tr>
<td>82550</td>
<td>PRO/100 S Server Adapter</td>
<td>752438-xxx (82550)</td>
</tr>
<tr>
<td>82550</td>
<td>PRO/100 S Desktop Adapter</td>
<td>751767-xxx (82550)</td>
</tr>
<tr>
<td>82559</td>
<td>PRO/100 S Desktop Adapter</td>
<td>748592-xxx, A12167-xxx, A12318-xxx, A12317-xxx, A12165-xxx, x, 748569-xxx (82559)</td>
</tr>
<tr>
<td>82559</td>
<td>PRO/100+ Server Adapter</td>
<td>729757-xxx</td>
</tr>
<tr>
<td>82559</td>
<td>PRO/100 S Management Adapter</td>
<td>748566-xxx, 748564-xxx</td>
</tr>
<tr>
<td>82550</td>
<td>PRO/100 S Dual Port Server Adapter</td>
<td>A56831-xxx</td>
</tr>
<tr>
<td>82551</td>
<td>PRO/100 M Desktop Adapter</td>
<td>A80957-xxx</td>
</tr>
<tr>
<td>82551</td>
<td>PRO/100 S Advanced Management Adapter</td>
<td>747842-xxx, 745171-xxx</td>
</tr>
<tr>
<td>CNR</td>
<td>PRO/100 VE Desktop Adapter</td>
<td>A10386-xxx, A10725-xxx, A23801-xxx, A19716-xxx</td>
</tr>
<tr>
<td>CNR</td>
<td>PRO/100 VM Desktop Adapter</td>
<td>A14323-xxx, A19725-xxx, A23801-xxx, A22220-xxx, A23796-xxx</td>
</tr>
</tbody>
</table>

The specific HP OEM model numbers associated with this driver are:
- NC3120
- NC3121
- NC3123
- NC3131
Intel PRO/1000 Gigabit Ethernet NICs

The ESX Server driver for Intel PRO/ro 1000-based Gigabit Ethernet cards is based on the Linux v 5.2.16 e1000 driver. Several HP and IBM gigabit Ethernet cards are based on this controller, but you need to check the OEM model number to ascertain this.

Table 29.

<table>
<thead>
<tr>
<th>Controller</th>
<th>Adapter Name</th>
<th>Board IDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>82542</td>
<td>PRO/1000 Gigabit Server Adapter</td>
<td>700262-xxx, 717037-xxx</td>
</tr>
<tr>
<td>82543</td>
<td>PRO/1000 F Server Adapter</td>
<td>738640-xxx, A38888-xxx</td>
</tr>
<tr>
<td>82543</td>
<td>PRO/1000 T Server Adapter</td>
<td>A19845-xxx, A33948-xxx</td>
</tr>
<tr>
<td>82544</td>
<td>PRO/1000 XT Server Adapter</td>
<td>A51580-xxx</td>
</tr>
<tr>
<td>82544</td>
<td>PRO/1000 XF Server Adapter</td>
<td>A50484-xxx</td>
</tr>
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<td>82544</td>
<td>PRO/1000 T Desktop Adapter</td>
<td>A62947-xxx</td>
</tr>
<tr>
<td>82540</td>
<td>PRO/1000 MT Desktop Adapter</td>
<td>A78408-xxx</td>
</tr>
<tr>
<td>82545</td>
<td>PRO/1000 MT Server Adapter</td>
<td>A92165-xxx</td>
</tr>
<tr>
<td>82546</td>
<td>PRO/1000 MT Dual Port Server Adapter</td>
<td>A92111-xxx</td>
</tr>
<tr>
<td>82545</td>
<td>PRO/1000 MF Server Adapter</td>
<td>A91622-xxx</td>
</tr>
<tr>
<td>82545</td>
<td>PRO/1000 MF Server Adapter(LX)</td>
<td>A91624-xxx</td>
</tr>
<tr>
<td>82546</td>
<td>PRO/1000 MF Dual Port Server Adapter</td>
<td>A91620-xxx</td>
</tr>
<tr>
<td>82546EB</td>
<td>PRO/1000 MT Quad Port Server Adapter</td>
<td></td>
</tr>
</tbody>
</table>

The specific HP OEM model numbers associated with this driver are:

- NC6134
- NC6136
- NC7131
- NC7170
- NC6170

Broadcom Gigabit Ethernet NICs

The ESX Server driver for Broadcom Gigabit Ethernet cards is based on the Broadcom 5700 driver for Linux v 7.1.9. Due to complexities in the Broadcom implementation, we advise customers to consider either Alteon AceNIC or Intel Pro1000-based gigabit ethernet cards for deployment with ESX Server.
- Broadcom Vigil B5700 1000Base-T
- Broadcom BCM5700 1000Base-T
- Broadcom BCM5700 1000Base-SX
- Broadcom BCM5700
- Broadcom BCM5701 1000Base-T
- Broadcom BCM5701 1000Base-SX
- Broadcom BCM5701 1000Base-T
- Broadcom BCM5701
- Broadcom BCM5702 1000Base-T
- Broadcom BCM5703 1000Base-T
- Broadcom BCM5703 1000Base-SX
- Broadcom Arbuckle B5703 1000Base-SX
- Broadcom BCM5704 CIOB-E 1000Base-T
- Broadcom BCM5704 1000Base-T
- Broadcom BCM5704 1000Base-SX
- Broadcom BCM5705 1000Base-T
- Broadcom BCM5705M 1000Base-T
- Broadcom NetXtreme Gigabit Ethernet for HP
- Broadcom BCM5788 1000Base-T
- 3Com 3C996 10/100/1000 Server NIC
- 3Com 3C996 Gigabit Fiber-SX Server NIC
- 3Com 3C996B Gigabit Server NIC
- 3Com 3C997 Gigabit Server NIC
- 3Com 3C997 Gigabit Fiber-SX Server NIC
- 3Com 3C1000 Gigabit NIC
- 3Com 3C940 Gigabit LOM (21X21)
- 3Com 3C942 Gigabit LOM (31X31)
- HP NC6770 Gigabit Server Adapter
- HP NC7760 Gigabit Server Adapter
- HP NC7761 Gigabit Server Adapter
- HP NC7770 Gigabit Server Adapter
- HP NC7771 Gigabit Server Adapter
- HP NC7772 Gigabit Server Adapter
- HP NC7780 Gigabit Server Adapter
- HP NC7781 Gigabit Server Adapter
- HP NC7782 Gigabit Server Adapter
- HP NC7783 Gigabit Server Adapter
3Com EtherLink PCI III/XL Series Ethernet NICs

ESX Server supports many 3Com Ethernet NICs. The ESX Server driver includes two drivers: one based on the Linux 3c90x version 1.0.2 driver, and the other based on the Linux 3C990-x version 1.0.0b. The following 3Com NICs are supported as ESX Server devices.

**EtherLink 10/100 PCI NICs**
- 3C905C Family and 3C920 ASICs – EtherLink 10/100 PCI including the -TX and -TX-M
- 3C905B Family and 3C918 ASICs – EtherLink 10/100 PCI including the -TX, -TX-M, and -TX-NM
- 3C905B-COMBO – EtherLink 10/100 PCI COMBO
- 3C905B-T4 – EtherLink 10/100 PCI T4

**EtherLink Server 10/100 PCI NICs**
- 3C980C-TX – EtherLink Server 10/100 PCI
- 3C980B-TX – EtherLink Server 10/100 PCI
- 3C980-TX – EtherLink Server 10/100 PCI

**EtherLink 100 PCI NIC**
- 3C905B-FX – EtherLink 100 PCI Fiber

**EtherLink 10 PCI NICs**
- 3C900B-TPO – EtherLink 10 PCI TPO
- 3C900B-TPC – EtherLink 10 PCI TPC
- 3C900B-COMBO – EtherLink 10 PCI COMBO
- 3C900B-FL – EtherLink 10 PCI Fiber

In addition, all cards based on the 3c990-x card should be compatible with ESX Server.

**ESX Server 2.1**

**Currently Supported Device Families**
VMware currently has ESX Server device drivers available that support specific devices within the following families of I/O controllers. Please examine the detailed list of device models below to make sure your specific device is supported.

**SCSI Controllers (Attached to Non-Removable SCSI Devices Only)**
- Adaptec Ultra160 and Ultra 320 SCSI controllers
- LSI Logic Symbios and NCR chip set based SCSI controllers
- LSI Logic Fusion-MPT SCSI controllers

**RAID Controllers**
- Dell PercRAID controllers
- HP SmartArray controllers
- IBM ServeRAID controllers
- Mylex AcceleRAID and ExtremeRAID controllers
Fibre Channel Adapters (SCSI Protocol Support Only)
- Emulex Host Bus Adapters
- QLogic Host Bus Adapters

Ethernet NICs
- Intel PRO/100 Ethernet NICs
- Intel PRO/1000 Gigabit Ethernet NICs
- Broadcom NetXtreme 570x series Gigabit NICs
- 3Com Fast Ethernet NICs

VMware may add support for drivers and devices between releases of the product; check the VMware Web site for current information at http://www.vmware.com/support/pubs/.

The detailed list below shows actual vendor chip sets and adapters that VMware believes are compatible with the currently supported drivers. Although we have been careful in compiling the list, we have not tested all of these devices and cannot warrant that they all work. There may also be devices that are not listed but that work with these device drivers.

Please contact VMware with any questions about current and planned device support.

**Linux Driver Compatibility**

While ESX Server itself is not derived from Linux, it includes a Linux compatibility module to allow Linux storage and networking drivers to be adapted and recompiled for ESX Server. This enables VMware to more easily support a wide range of high performance devices and eases the driver porting effort on the storage and networking device vendors.

VMware typically modifies these drivers for one or more of the following reasons:
- To make the driver compatible with the ESX Server
- To tune the driver for performance
- To add I/O resource governing or QoS support to the driver
- To fix generic bugs in the driver

It is not possible to directly load existing, precompiled, Linux device driver binaries into ESX Server.

**VMware Certification**

VMware certifies that specific systems and components are compatible with ESX Server. Through its Preferred Hardware Partner Program, it works with leading server vendors to ensure that appropriate configurations of their current and future server products are certified with ESX Server products. The following table summarizes the driver versions shipped with the current release of ESX Server compared with previous releases. Details of the device models supported by each driver can be found below.

**Table 30.**

<table>
<thead>
<tr>
<th>Class</th>
<th>Vendor</th>
<th>Driver</th>
<th>2.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCSI</td>
<td>Adaptec</td>
<td>aic7xxx</td>
<td>6.2.35</td>
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<tr>
<td></td>
<td>Adaptec</td>
<td>aic79xx</td>
<td>1.3.7</td>
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<tr>
<td></td>
<td>LSI Logic</td>
<td>ncr53c8xx</td>
<td>3.4.3b</td>
</tr>
<tr>
<td></td>
<td>LSI Logic</td>
<td>sym53c8xx</td>
<td>1.7.3c</td>
</tr>
<tr>
<td></td>
<td>LSI Logic</td>
<td>mptlinuxmptscsi</td>
<td>2.05</td>
</tr>
</tbody>
</table>
Table 30.

<table>
<thead>
<tr>
<th>Class</th>
<th>Vendor</th>
<th>Driver</th>
<th>2.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAID</td>
<td>HP</td>
<td>cpqarray</td>
<td>2.4.21</td>
</tr>
<tr>
<td></td>
<td>HP</td>
<td>cciss</td>
<td>2.4.45</td>
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<td>Dell</td>
<td>aacraid</td>
<td>0.9.9ac2</td>
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<td></td>
<td>Dell</td>
<td>megaraid</td>
<td>1.18j</td>
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<td>IBM/Adaptec</td>
<td>ips</td>
<td>6.10.24</td>
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<td>Mylex</td>
<td>DAC960</td>
<td>2.4.11</td>
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<td>Fibre Channel</td>
<td>Emulex</td>
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<td>4.20q, 1.22e</td>
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<td></td>
<td>Qlogic</td>
<td>qla2x00</td>
<td>6.04.02</td>
</tr>
<tr>
<td>Network</td>
<td>Broadcom</td>
<td>bcm5700</td>
<td>7.1.9</td>
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<td>Intel</td>
<td>e100</td>
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<td>Intel</td>
<td>e1000</td>
<td>5.2.16</td>
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<td>3Com</td>
<td>3c90x</td>
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<tr>
<td></td>
<td>3Com</td>
<td>3C990-x</td>
<td>1.0.0b</td>
</tr>
</tbody>
</table>

Adaptec Ultra160 SCSI Adapters

The ESX Server Adaptec driver is based on the Linux aic7xxx version 6.2.35 driver. The following PCI Adaptec SCSI adapters and motherboard chip set devices should work as ESX Server adapters.

**SCSI Adapters**

- AHA_1480A
- AHA_2902/04/10/15/20/30C
- AHA_2930 (C/CU U/U2)
- AHA_2940 AU_(0/1/CN)
- AHA_2944 (U)
- AHA_3940 (U/AU)
- AHA_3944 (U/AU)
- AHA_3950 (U2B_0/U2B_1/U2D_0/U2D_1)
- AHA_3960 (D/D CPQ)
- AHA_398X (U)
- AHA_4944 (U)
- AHA_29160 (CPQ/N/C/B)
- AHA_19160B

**Motherboard Chip Sets**

- AIC7850
- AIC7855
- AIC7859
- AIC7860
- AIC7870
Adaptec Ultra320 SCSI Adapters
The ESX Server Adaptec driver is based on the Linux aic79xx version 1.3.7 driver. The following PCI Adaptec SCSI adapters and motherboard chip set devices should work as ESX Server adapters.

SCSI Adapters
- AHA29320 (A)
- AHA29320 (LP)
- AHA39320 (A/D/DB)

Motherboard Chip Sets
- AIC7901 (A)
- AIC7902 (B)

LSI Logic Symbios and NCR-Based SCSI Adapters
Most SCSI adapters based on the LSI Logic Symbios (formerly NCR) 53c8xx family of chip sets are supported as ESX Server devices. ESX Server uses two different drivers to support the device family: one based on the Linux ncr53c8xx version 3.4.3b driver and the other on the sym53c8xx version 1.7.3c driver. LSI Logic’s Symbios product division was formerly NCR Microelectronics Products Division. Older products may have either NCR or Symbios (SYM) part number prefixes; otherwise the part numbers are interchangeable. The following chip sets and adapters are supported as ESX Server devices.

Supported Symbios Chip Sets
- SYM53C810
- SYM53C810A
- SYM53C815
- SYM53C820
- SYM53C825
- SYM53C860
- SYM53C875
- SYM53C876
- SYM53C895
- SYM53C895A
Table 31. SYM53C1010 Supported Symbios-Based SCSI Adapters

<table>
<thead>
<tr>
<th>Model/Type</th>
<th>Chip Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYM20810 32 bit PCI-to-Fast SCSI</td>
<td>SYM53C810A</td>
</tr>
<tr>
<td>SYM20811 32 bit PCI-to-Fast SCSI</td>
<td>SYM53C810A</td>
</tr>
<tr>
<td>SYM20860 32 bit PCI-to-Ultra SCSI</td>
<td>SYM53C860</td>
</tr>
<tr>
<td>SYM21002 32 bit PCI-to-Ultra2 SCSI</td>
<td>SYM53C896</td>
</tr>
<tr>
<td>SYM22801 PCI-to-Dual Ultra SCSI</td>
<td>SYM53C876</td>
</tr>
<tr>
<td>SYM22802 PCI-to-Ultra SCSI</td>
<td>SYM53C876</td>
</tr>
<tr>
<td>SYM22902 Ultra2 MiniHAB</td>
<td>SYM53C895A/SYM53C895</td>
</tr>
<tr>
<td>SYM22910 PCI-to-Dual Ultra2 SCSI</td>
<td>SYM53C896</td>
</tr>
<tr>
<td>815XS</td>
<td>SYM53C815</td>
</tr>
<tr>
<td>8100S</td>
<td>SYM53C810</td>
</tr>
<tr>
<td>SYM8150</td>
<td>SYM53C815</td>
</tr>
<tr>
<td>SYM8251</td>
<td>SYM53C825</td>
</tr>
<tr>
<td>SYM86005P</td>
<td>SYM53C860</td>
</tr>
<tr>
<td>SYM87505P</td>
<td>SYM53C875</td>
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<tr>
<td>SYM8751D</td>
<td>SYM53C875</td>
</tr>
<tr>
<td>SYM87515PE</td>
<td>SYM53C875</td>
</tr>
<tr>
<td>SYM8951U</td>
<td>SYM53C895</td>
</tr>
<tr>
<td>SYM8952U</td>
<td>SYM53C895A/SYM53C895</td>
</tr>
<tr>
<td>SYM8953U</td>
<td>SYM53C895A</td>
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<tr>
<td>SYM53C1010</td>
<td>Ultra160</td>
</tr>
<tr>
<td>SYM53C1010_66</td>
<td>Ultra160</td>
</tr>
</tbody>
</table>

Third-party SCSI adapters from Compaq/DEC, Gigabyte, Promise Technology, and Tyan should also work with the ESX Server NCR driver.

**LSI Logic MPT-Fusion SCSI Adapters**

The ESX Server driver is based on the LSI Logic mptlinux mptscsi v 2.05 driver and supports the following SCSI controllers. These controllers are also supported in a RAID-1 configuration.

- 53C1020
- 53C1030

**LSI Logic MegaRAID Adapters**

The ESX Server driver is based on the LSI MegaRAID 2.10.7 driver and supports the following SCSI controllers.

- 320-1
- 320-2
- 320-2E ROMB
Dell PercRAID Controllers
VMware ESX Server supports two classes of Perc branded controllers. Some are based on Adaptec RAID chip sets, and some on LSI Logic (formerly American Megatrends, Inc.) MegaRAID chip sets.

The ESX Server driver for Adaptec-based PercRAID controllers is based on the Linux aacraid version 0.9.9ac2 driver.
- PERC 2/QC
- PERC 3/Si (PowerEdge 2450 onboard RAID)
- PERC 3/Di (PowerEdge 2550, 2650, and 4400 onboard RAID)

The ESX Server driver for LSI Logic/AMI-based PercRAID controllers is based on the Linux megaraid version 1.18h driver.
- PERC 2/DC
- PERC 3/DCL
- PERC 4/Di
- MegaRAID 418, 428, 438, 466, 762, 467, 471, 490, 493

HP SmartArray RAID Controllers
The ESX Server driver is based on the HP cpqarray v 2.4.21 and cciss v 2.4.45 drivers.

cpqarray-Based Controllers
- IDA, IDA-2, IAES
- SMART
- SMART-2/E
- SMART-2 (SMART-2/P, SMART-2SL, Smart Array 3200, Smart Array 3100ES, Smart Array 221)
- SMART-4 (Integrated Array, LC2, Smart Array 4200, Smart Array 4250ES, Smart Array 431)

cciss-Based Controllers
- SMART-5 (Smart Array 5300 series, Smart Array 5i, Smart Array 532, 5312)
- SMART-6 (Smart Array 641, 642, 6400, 6402, 6404)

IBM ServeRAID RAID Controllers
The ESX Server driver is based on the Linux ips v 6.10.24 driver.
- ServeRAID-3H
- ServeRAID-4L, 4LX
- ServeRAID-4M, 4Mx
- ServeRAID-4H
- ServeRAID-5i
- ServeRAID-5M
- ServeRAID-6M*
- ServeRAID-6i*

*Firmware version 6.10.70 and greater.
Mylex AcceleRAID/eXtremeRAID Controllers
The ESX Server driver is based on the Linux DAC960 version 2.4.11 driver. Specific AcceleRAID and eXtremeRAID controllers are also based on DAC960-compatible controllers.

- DAC960 (E, M, PD, PL, PU, PE, PG, Pj, PTL0, PR, PRL, PTL1)
- DDAC960 (S, SU, SX, SF, SS, FL, FF, HP)
- DAC1164P
- EXR2000P
- EXR3000P
- AcceleRAID 160, 170, 352
- eXtremeRAID 1100

Emulex Fibre Channel Adapters
Please see the SAN Compatibility Guide for ESX Server 2.x for more information on the specific drivers, configurations, models, and firmware supported.

QLLogic Fibre Channel Adapters
Please see the SAN Compatibility Guide for ESX Server 2.x chapter for more information on the specific drivers, configurations, models, and firmware supported.

Intel PRO/100 Ethernet NICs
The default ESX Server driver for PRO/100 NICs is based on the Intel-supplied e100 Intel(R) PRO/100 Fast Ethernet Adapter version 2.3.18 driver. This is a comprehensive listing of Intel and OEM models that have been based on these chip sets. You should check the specific chip set used in your card for compatibility.

Table 32.

<table>
<thead>
<tr>
<th>Controller</th>
<th>Adapter Name</th>
<th>Board ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>82558</td>
<td>PRO/100+ PCI Adapter</td>
<td>668081-xxx, 689661-xxx</td>
</tr>
<tr>
<td>82558</td>
<td>PRO/100+ Management Adapter</td>
<td>691334-xxx, 701738-xxx, 721383-xxx</td>
</tr>
<tr>
<td>82558</td>
<td>PRO/100+ Dual Port Server Adapter</td>
<td>714303-xxx, 711269-xxx, A28276-xxx</td>
</tr>
<tr>
<td>82558</td>
<td>PRO/100+ PCI Server Adapter</td>
<td>710550-xxx</td>
</tr>
<tr>
<td>82550</td>
<td>PRO/100 S Server Adapter</td>
<td>752438-xxx (82550)</td>
</tr>
<tr>
<td>82550</td>
<td>PRO/100 S Desktop Adapter</td>
<td>751767-xxx (82550)</td>
</tr>
<tr>
<td>82559</td>
<td>PRO/100 S Desktop Adapter</td>
<td>748592-xxx, A12167-xxx, A12318-xxx, A12317-xxx, A12165-xxx, x, 748569-xxx (82559)</td>
</tr>
<tr>
<td>82559</td>
<td>PRO/100+ Server Adapter</td>
<td>729757-xxx</td>
</tr>
<tr>
<td>82559</td>
<td>PRO/100 S Management Adapter</td>
<td>748566-xxx, 748564-xxx</td>
</tr>
<tr>
<td>82550</td>
<td>PRO/100 S Dual Port Server Adapter</td>
<td>A56831-xxx</td>
</tr>
<tr>
<td>82551</td>
<td>PRO/100 M Desktop Adapter</td>
<td>A80897-xxx</td>
</tr>
<tr>
<td>82551</td>
<td>PRO/100 S Advanced Management Adapter</td>
<td>747842-xxx, 745171-xxx</td>
</tr>
</tbody>
</table>
The specific HP OEM model numbers associated with this driver are:

- NC3120
- NC3121
- NC3123
- NC3131
- NC3132
- NC3133
- NC3134N
- NC3135
- NC3160
- NC3161
- NC3162
- NC3163
- NC3122

### Intel PRO/1000 Gigabit Ethernet NICs

The ESX Server driver for Intel PRO/ro 1000-based Gigabit Ethernet cards is based on the Linux v 5.2.16 e1000 driver. Several HP and IBM gigabit Ethernet cards are based on this controller, but you need to check the OEM model number to ascertain this.

#### Table 33.

<table>
<thead>
<tr>
<th>Controller</th>
<th>Adapter Name</th>
<th>Board IDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>82542</td>
<td>PRO/1000 Gigabit Server Adapter</td>
<td>700262-xxx, 717037-xxx</td>
</tr>
<tr>
<td>82543</td>
<td>PRO/1000 F Server Adapter</td>
<td>738640-xxx, A38888-xxx</td>
</tr>
<tr>
<td>82543</td>
<td>PRO/1000 T Server Adapter</td>
<td>A19845-xxx, A33948-xxx</td>
</tr>
<tr>
<td>82544</td>
<td>PRO/1000 XT Server Adapter</td>
<td>A51580-xxx</td>
</tr>
<tr>
<td>82544</td>
<td>PRO/1000 XF Server Adapter</td>
<td>A50484-xxx</td>
</tr>
<tr>
<td>82544</td>
<td>PRO/1000 T Desktop Adapter</td>
<td>A62947-xxx</td>
</tr>
<tr>
<td>82540</td>
<td>PRO/1000 MT Desktop Adapter</td>
<td>A78408-xxx</td>
</tr>
<tr>
<td>82545</td>
<td>PRO/1000 MT Server Adapter</td>
<td>A92165-xxx</td>
</tr>
<tr>
<td>82546</td>
<td>PRO/1000 MT Dual Port Server Adapter</td>
<td>A92111-xxx</td>
</tr>
<tr>
<td>82545</td>
<td>PRO/1000 MF Server Adapter</td>
<td>A91622-xxx</td>
</tr>
<tr>
<td>82545</td>
<td>PRO/1000 MF Server Adapter(LX)</td>
<td>A91624-xxx</td>
</tr>
<tr>
<td>82546</td>
<td>PRO/1000 MF Dual Port Server Adapter</td>
<td>A91620-xxx</td>
</tr>
<tr>
<td>82546EB</td>
<td>PRO/1000 MT Quad Port Server Adapter</td>
<td></td>
</tr>
</tbody>
</table>
The specific HP OEM model numbers associated with this driver are:

- NC6134
- NC6136
- NC7131
- NC7170
- NC6170

**Broadcom Gigabit Ethernet NICs**

The ESX Server driver for Broadcom Gigabit Ethernet cards is based on the Broadcom 5700 driver for Linux v 7.1.9.

- Broadcom Vigil B5700 1000Base-T
- Broadcom BCM5700 1000Base-T
- Broadcom BCM5700 1000Base-SX
- Broadcom BCM5700
- Broadcom BCM5701 1000Base-T
- Broadcom BCM5701 1000Base-SX
- Broadcom BCM5701 1000Base-T
- Broadcom BCM5701
- Broadcom BCM5702 1000Base-T
- Broadcom BCM5703 1000Base-T
- Broadcom BCM5703 1000Base-SX
- Broadcom Arbuckle B5703 1000Base-SX
- Broadcom BCM5704 CIOB-E 1000Base-T
- Broadcom BCM5704 1000Base-T
- Broadcom BCM5704 1000Base-SX
- Broadcom BCM5705 1000Base-T
- Broadcom BCM5705M 1000Base-T
- Broadcom NetXtreme Gigabit Ethernet for HPhp
- Broadcom BCM5788 1000Base-T
- 3Com 3C996 10/100/1000 Server NIC
- 3Com 3C996 Gigabit Fiber-SX Server NIC
- 3Com 3C996B Gigabit Server NIC
- 3Com 3C997 Gigabit Server NIC
- 3Com 3C997 Gigabit Fiber-SX Server NIC
- 3Com 3Cl00 Gigabit NIC
- 3Com 3C940 Gigabit LOM (21X21)
- 3Com 3C942 Gigabit LOM (31X31)
- HP NC6770 Gigabit Server Adapter
- HP NC7760 Gigabit Server Adapter
HP NC7761 Gigabit Server Adapter
HP NC7770 Gigabit Server Adapter
HP NC7771 Gigabit Server Adapter
HP NC7772 Gigabit Server Adapter
HP NC7780 Gigabit Server Adapter
HP NC7781 Gigabit Server Adapter
HP NC7782 Gigabit Server Adapter
HP NC7783 Gigabit Server Adapter

3Com EtherLink PCI III/XL Series Ethernet NICs
ESX Server supports many 3Com Ethernet NICs. The ESX Server driver includes two drivers: one based on the Linux 3c90x version 1.0.2 driver, and the other based on the Linux 3C990-x version 1.0.0b. The following 3Com NICs are supported as ESX Server devices.

EtherLink 10/100 PCI NICs
- 3C905C Family and 3C920 ASICs – EtherLink 10/100 PCI including the -TX and -TX-M
- 3C905B Family and 3C918 ASICs – EtherLink 10/100 PCI including the -TX, -TX-M, and -TX-NM
- 3C905B-COMBO – EtherLink 10/100 PCI COMBO
- 3C905B-T4 – EtherLink 10/100 PCI T4

EtherLink Server 10/100 PCI NICs
- 3C980C-TX – EtherLink Server 10/100 PCI
- 3C980B-TX – EtherLink Server 10/100 PCI
- 3C980-TX – EtherLink Server 10/100 PCI

EtherLink 100 PCI NIC
- 3C905B-FX – EtherLink 100 PCI Fiber

EtherLink 10 PCI NICs
- 3C900B-TPO – EtherLink 10 PCI TPO
- 3C900B-TPC – EtherLink 10 PCI TPC
- 3C900B-COMBO – EtherLink 10 PCI COMBO
- 3C900B-FL – EtherLink 10 PCI Fiber

In addition, all cards based on the 3c990-x card should be compatible with ESX Server.

ESX Server 2.0.1

Currently Supported Device Families
VMware currently has ESX Server device drivers available that support the following families of I/O controllers.

SCSI Controllers
- Adaptec Ultra160 and Ultra 320 SCSI controllers
LSI Logic Symbios and NCR chip set based SCSI controllers
LSI Logic Fusion-MPT SCSI controllers

RAID Controllers
- Dell PercRAID controllers
- HP SmartArray controllers
- IBM ServeRAID controllers
- Mylex AcceleRAID and ExtremeRAID controllers

Fibre Channel Adapters (SCSI Protocol Support Only)
- Emulex Host Bus Adapters
- QLogic Host Bus Adapters

Ethernet NICs
- Intel PRO/100 Ethernet NICs
- Intel PRO/1000 Gigabit Ethernet NICs
- Broadcom NetXtreme 570x series Gigabit NICs
- 3Com Fast Ethernet NICs

VMware may add support for drivers and devices between releases of the product; check the VMware Web site for current information at http://www.vmware.com/support/pubs/.

The detailed list below shows actual vendor chip sets and adapters that VMware believes are compatible with the currently supported drivers. Although we have been careful in compiling the list, we have not tested all of these devices and cannot warrant that they all work. There may also be devices that are not listed but that work with these device drivers.

Please contact VMware with any questions about current and planned device support.

Linux Driver Compatibility
While ESX Server itself is not derived from Linux, it includes a Linux compatibility module to allow Linux storage and networking drivers to be adapted and recompiled for ESX Server. This enables VMware to more easily support a wide range of high performance devices and eases the driver porting effort on the storage and networking device vendors. VMware typically modifies these drivers for one or more of the following reasons:
- To make the driver compatible with the ESX Server
- To tune the driver for performance
- To add I/O resource governing or QoS support to the driver
- To fix generic bugs in the driver

It is not possible to directly load existing, precompiled, Linux device driver binaries into ESX Server.

VMware Certification
VMware certifies that specific systems and components are compatible with ESX Server. Through its Preferred Hardware Partner Program, it works with leading server vendors to ensure that appropriate configurations of their current and future server products are certified with ESX Server products. The following table summarizes the driver
versions shipped with the current release of ESX Server compared with previous releases. Details of the device models supported by each driver can be found below.

Table 34.

<table>
<thead>
<tr>
<th>Class</th>
<th>Vendor</th>
<th>Driver</th>
<th>2.0.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCSI</td>
<td>Adaptec</td>
<td>aic7xxx</td>
<td>6.2.35</td>
</tr>
<tr>
<td></td>
<td>Adaptec</td>
<td>aic79xx</td>
<td>1.3.7</td>
</tr>
<tr>
<td></td>
<td>LSI Logic</td>
<td>ncr53c8xx</td>
<td>3.4.3b</td>
</tr>
<tr>
<td></td>
<td>LSI Logic</td>
<td>sym53c8xx</td>
<td>1.7.3c</td>
</tr>
<tr>
<td></td>
<td>LSI Logic</td>
<td>mptlinuxmptcsic</td>
<td>2.03</td>
</tr>
<tr>
<td>RAID</td>
<td>HP</td>
<td>cpqarray</td>
<td>2.4.21</td>
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<tr>
<td></td>
<td>HP</td>
<td>cciss</td>
<td>2.4.45</td>
</tr>
<tr>
<td></td>
<td>Dell</td>
<td>aacraid</td>
<td>0.9.9ac2</td>
</tr>
<tr>
<td></td>
<td>Dell</td>
<td>megaraid</td>
<td>1.18h</td>
</tr>
<tr>
<td></td>
<td>IBM/Adaptec</td>
<td>ips</td>
<td>6.10.24</td>
</tr>
<tr>
<td></td>
<td>Mylex</td>
<td>DAC960</td>
<td>2.4.11</td>
</tr>
<tr>
<td>Fibre Channel</td>
<td>Emulex</td>
<td>lpfcd</td>
<td>4.20q</td>
</tr>
<tr>
<td></td>
<td>Qlogic</td>
<td>qla2x00</td>
<td>6.04.02</td>
</tr>
<tr>
<td>Network</td>
<td>Broadcom</td>
<td>bcm5700</td>
<td>6.2.4</td>
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<td>Intel</td>
<td>e100</td>
<td>2.0.30</td>
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<td>Intel</td>
<td>e1000</td>
<td>5.0.42</td>
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<td></td>
<td>3Com</td>
<td>3c90x</td>
<td>1.0.2</td>
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<tr>
<td></td>
<td>3Com</td>
<td>3C990-x</td>
<td>1.0.0b</td>
</tr>
</tbody>
</table>

Adaptec Ultra160 SCSI Adapters

The ESX Server Adaptec driver is based on the Linux aic7xxx version 6.2.35 driver. The following PCI Adaptec SCSI adapters and motherboard chip set devices should work as ESX Server adapters.

SCSI Adapters

- AHA_1480A
- AHA_2902/04/10/15/20/30C
- AHA_2930 (C/CU U/U2)
- AHA_2940 AU_.(0/1/CN)
- AHA_2944 (U)
- AHA_3940 (U/AU)
- AHA_3944 (U/AU)
- AHA_3950 (U2B_0/U2B_1/U2D_0/U2D_1)
- AHA_3960 (D/D CPQ)
- AHA_398X (U)
- AHA_4944 (U)
- AHA_29160 (CPQ/N/C/B)
- AHA_19160B
Motherboard Chip Sets
- AIC7850
- AIC7855
- AIC7859
- AIC7860
- AIC7870
- AIC7880
- AIC7892
- AIC7895
- AIC7895C
- AIC7890/91
- AIC7892
- AIC7895
- AIC7896/97
- AIC7899

Adaptec Ultra320 SCSI Adapters
The ESX Server Adaptec driver is based on the Linux aic79xx version 1.3.7 driver. The following PCI Adaptec SCSI adapters and motherboard chip set devices should work as ESX Server adapters.

SCSI Adapters
- AHA29320 (A)
- AHA29320 (LP)
- AHA39320 (A/D/DB)

Motherboard Chip Sets
- AIC7901 (A)
- AIC7902 (B)

LSI Logic Symbios and NCR-Based SCSI Adapters
Most SCSI adapters based on the LSI Logic Symbios (formerly NCR) 53c8xx family of chip sets are supported as ESX Server devices. The ESX Server uses two different drivers to support the device family: one based on the Linux ncr53c8xx version 3.4.3b driver and the other on the sym53c8xx version 1.7.3c driver. LSI Logic’s Symbios product division was formerly NCR Microelectronics Products Division. Older products may have either NCR or Symbios (SYM) part number prefixes; otherwise the part numbers are interchangeable. The following chip sets and adapters are supported as ESX Server devices.

Supported Symbios Chip Sets
- SYM53C810
- SYM53C810A
- SYM53C815
- SYM53C820
- SYM53C825
- SYM53C860
- SYM53C875
- SYM53C876
- SYM53C895
- SYM53C895A
- SYM53C896
- SYM53C897
- SYM53C1510D

### Table 35. SYM53C1010 Supported Symbios-Based SCSI Adapters

<table>
<thead>
<tr>
<th>Model/Type</th>
<th>Chip Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYM20810 32 bit PCI-to-Fast SCSI</td>
<td>SYM53C810A</td>
</tr>
<tr>
<td>SYM20811 32 bit PCI-to-Fast SCSI</td>
<td>SYM53C810A</td>
</tr>
<tr>
<td>SYM20860 32 bit PCI-to-Ultra SCSI</td>
<td>SYM53C860</td>
</tr>
<tr>
<td>SYM21002 32 bit PCI-to-Ultra2 SCSI</td>
<td>SYM53C896</td>
</tr>
<tr>
<td>SYM22801 PCI-to-Dual Ultra SCSI</td>
<td>SYM53C876</td>
</tr>
<tr>
<td>SYM22802 PCI-to-Ultra SCSI</td>
<td>SYM53C876</td>
</tr>
<tr>
<td>SYM22902 Ultra2 MiniHAB</td>
<td>SYM53C895A/SYM53C895</td>
</tr>
<tr>
<td>SYM22910 PCI-to-Dual Ultra2 SCSI</td>
<td>SYM53C896</td>
</tr>
<tr>
<td>815XS</td>
<td>SYM53C815</td>
</tr>
<tr>
<td>81005</td>
<td>SYM53C810</td>
</tr>
<tr>
<td>SYM8150</td>
<td>SYM53C815</td>
</tr>
<tr>
<td>SYM8251</td>
<td>SYM53C825</td>
</tr>
<tr>
<td>SYM8600SP</td>
<td>SYM53C860</td>
</tr>
<tr>
<td>SYM8750SP</td>
<td>SYM53C875</td>
</tr>
<tr>
<td>SYM8751D</td>
<td>SYM53C875</td>
</tr>
<tr>
<td>SYM8751SP</td>
<td>SYM53C875</td>
</tr>
<tr>
<td>SYM8951U</td>
<td>SYM53C895</td>
</tr>
<tr>
<td>SYM8952U</td>
<td>SYM53C895A/SYM53C895</td>
</tr>
<tr>
<td>SYM8953U</td>
<td>SYM53C895A</td>
</tr>
<tr>
<td>SYM53C1010</td>
<td>Ultra160</td>
</tr>
<tr>
<td>SYM53C1010_66</td>
<td>Ultra160</td>
</tr>
</tbody>
</table>

Third-party SCSI adapters from Compaq/DEC, Gigabyte, Promise Technology, and Tyan should also work with the ESX Server NCR driver.

**LSI Logic MPT-Fusion SCSI Adapters**

The ESX Server driver is based on the LSI Logic mptlinux mptscsi v 2.03 driver and supports the following SCSI controllers. These controllers are also supported in a RAID-1 configuration.

- 53C1020
- 53C1030
Dell PercRAID Controllers
VMware ESX Server supports two classes of Perc branded controllers. Some are based on Adaptec RAID chip sets, and some on LSI Logic (formerly American Megatrends, Inc.) MegaRAID chip sets.

The ESX Server driver for Adaptec-based PercRAID controllers is based on the Linux aacraid version 0.9.9ac2 driver.

- PERC 2/QC
- PERC 3/Si (PowerEdge 2450 onboard RAID)
- PERC 3/Di (PowerEdge 2550, 2650, and 4400 onboard RAID)

The ESX Server driver for LSI Logic/AMI-based PercRAID controllers is based on the Linux megaraid version 1.18h driver.

- PERC 2/DC
- PERC 3/DCL
- PERC 4/Di
- MegaRAID 418, 428, 438, 466, 762, 467, 471, 490, 493

HP SmartArray RAID Controllers
The ESX Server driver is based on the HP cpqarray v 2.4.21 and cciss v 2.4.45 drivers.

cpqarray-Based Controllers
- IDA, IDA-2, IAES
- SMART
- SMART-2/E
- SMART-2 (SMART-2/P, SMART-2SL, Smart Array 3200, Smart Array 3100ES, Smart Array 221)
- SMART-4 (Integrated Array, LC2, Smart Array 4200, Smart Array 4250ES, Smart Array 431)

ciss-Based Controllers
- SMART-5 (Smart Array 5300 series, Smart Array 5i, Smart Array 532, 5312)
- SMART-6 (Smart Array 641, 642, 6400, 6402, 6404)

IBM ServeRAID RAID Controllers
The ESX Server driver is based on the Linux ips v 6.10.24 driver.

- ServeRAID-3H
- ServeRAID-/4L, 4LX
- ServeRAID-4M, 4Mx
- ServeRAID-4H
- ServeRAID-/5i
- ServeRAID-5M
- ServeRAID-6M*
- ServeRAID-6i*

*Firmware version 6.10.70 and greater.
Mylex AcceleRAID/eXtremeRAID Controllers

The ESX Server driver is based on the Linux DAC960 version 2.4.11 driver. Specific AcceleRAID and eXtremeRAID controllers are also based on DAC960-compatible controllers.

- DAC960 (E, M, PD, PL, PU, PE, Pj, PTL0, PR, PRL, PTL1)
- DDAC960 (S, SU, SX, SF, SS, FL, FF, HP)
- DAC1164P
- EXR2000P
- EXR3000P
- AcceleRAID 160, 170, 352
- eXtremeRAID 1100

Emulex Fibre Channel Adapters

Please see the SAN Compatibility Guide for ESX Server 2.x for more information on the specific drivers, configurations, models, and firmware supported.

QLogic Fibre Channel Adapters

Please see the SAN Compatibility Guide for ESX Server 2.x for more information on the specific drivers, configurations, models, and firmware supported.

Intel PRO/100 Ethernet NICs

The default ESX Server driver for PRO/100 NICs is based on the Intel-supplied e100 Intel(R) PRO/100 Fast Ethernet Adapter version 2.0.302.0.30 driver. This is a comprehensive listing of Intel and OEM models that have been based on these chip sets. You should check the specific chip set used in your card for compatibility.

Table 36.

<table>
<thead>
<tr>
<th>Controller</th>
<th>Adapter Name</th>
<th>Board ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>82558</td>
<td>PRO/100+ PCI Adapter</td>
<td>668081-xxx, 689661-xxx</td>
</tr>
<tr>
<td>82558</td>
<td>PRO/100+ Management Adapter</td>
<td>691334-xxx, 701738-xxx, 721383-xxx</td>
</tr>
<tr>
<td>82558</td>
<td>PRO/100+ Dual Port Server Adapter</td>
<td>714303-xxx, 711269-xxx, A28276-xxx</td>
</tr>
<tr>
<td>82558</td>
<td>PRO/100+ PCI Server Adapter</td>
<td>710550-xxx</td>
</tr>
<tr>
<td>82550</td>
<td>PRO/100 S Server Adapter</td>
<td>752438-xxx (82550)</td>
</tr>
<tr>
<td>82550</td>
<td>PRO/100 S Desktop Adapter</td>
<td>751767-xxx (82550)</td>
</tr>
<tr>
<td>82559</td>
<td>PRO/100 S Desktop Adapter</td>
<td>748592-xxx, A12167-xxx, A12318-xxx, A12317-xxx, A12165-xxx, x, 748569-xxx (82559), 748565-xxx (82559)</td>
</tr>
<tr>
<td>82559</td>
<td>PRO/100+ Server Adapter</td>
<td>729757-xxx</td>
</tr>
<tr>
<td>82559</td>
<td>PRO/100 S Management Adapter</td>
<td>748566-xxx, 748564-xxx</td>
</tr>
<tr>
<td>82550</td>
<td>PRO/100 S Dual Port Server Adapter</td>
<td>A56831-xxx</td>
</tr>
<tr>
<td>82551</td>
<td>PRO/100 M Desktop Adapter</td>
<td>A80897-xxx</td>
</tr>
</tbody>
</table>
The specific HP OEM model numbers associated with this driver are:

- NC3120
- NC3121
- NC3123
- NC3131
- NC3132
- NC3133
- NC3134N
- NC3135
- NC3160
- NC3161
- NC3162
- NC3163
- NC3122

**Intel PRO/1000 Gigabit Ethernet NICs**

The ESX Server driver for Intel PRO/ro 1000 based Gigabit Ethernet cards is based the Linux v 5.0.42 e1000 driver. Several HP and IBM Gigabit Ethernet cards are based on this controller, but you will need to check the OEM model number to ascertain this.

<table>
<thead>
<tr>
<th>Controller</th>
<th>Adapter Name</th>
<th>Board IDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>82542</td>
<td>PRO/1000 Gigabit Server Adapter</td>
<td>700262-xxx, 717037-xxx</td>
</tr>
<tr>
<td>82543</td>
<td>PRO/1000 F Server Adapter</td>
<td>738640-xxx, A38888-xxx</td>
</tr>
<tr>
<td>82543</td>
<td>PRO/1000 T Server Adapter</td>
<td>A19845-xxx, A33948-xxx</td>
</tr>
<tr>
<td>82544</td>
<td>PRO/1000 XT Server Adapter</td>
<td>A51880-xxx</td>
</tr>
<tr>
<td>82544</td>
<td>PRO/1000 XF Server Adapter</td>
<td>A50484-xxx</td>
</tr>
<tr>
<td>82544</td>
<td>PRO/1000 T Desktop Adapter</td>
<td>A62947-xxx</td>
</tr>
<tr>
<td>82540</td>
<td>PRO/1000 MT Desktop Adapter</td>
<td>A78408-xxx</td>
</tr>
<tr>
<td>82545</td>
<td>PRO/1000 MT Server Adapter</td>
<td>A92165-xxx</td>
</tr>
<tr>
<td>82546</td>
<td>PRO/1000 MT Dual Port Server Adapter</td>
<td>A92111-xxx</td>
</tr>
<tr>
<td>82545</td>
<td>PRO/1000 MF Server Adapter</td>
<td>A91622-xxx</td>
</tr>
<tr>
<td>82545</td>
<td>PRO/1000 MF Server Adapter (LX)</td>
<td>A91624-xxx</td>
</tr>
<tr>
<td>82546</td>
<td>PRO/1000 MF Dual Port Server Adapter</td>
<td>A91620-xxx</td>
</tr>
</tbody>
</table>
The specific HP OEM model numbers associated with this driver are:

- NC6134
- NC6136
- NC7131
- NC7170
- NC6170

**Broadcom Gigabit Ethernet NICs**

The ESX Server driver for Broadcom Gigabit Ethernet cards is based on the Broadcom 5700 driver for Linux v 6.2.4 version driver.

- Broadcom Vigil B5700 1000Base-T
- Broadcom BCM5700 1000Base-T
- Broadcom BCM5700 1000Base-SX
- Broadcom BCM5700
- Broadcom BCM5701 1000Base-T
- Broadcom BCM5701 1000Base-SX
- Broadcom BCM5701 1000Base-T
- Broadcom BCM5701
- Broadcom BCM5702 1000Base-T
- Broadcom BCM5703 1000Base-T
- Broadcom BCM5703 1000Base-SX
- Broadcom Arbuckle B5703 1000Base-SX
- Broadcom BCM5704 CIOB-E 1000Base-T
- Broadcom BCM5704 1000Base-T
- Broadcom BCM5704 1000Base-SX
- Broadcom BCM5705 1000Base-T
- Broadcom BCM5705M 1000Base-T
- Broadcom NetXtreme Gigabit Ethernet for HP
- Broadcom BCM5788 1000Base-T
- 3Com 3C996 10/100/1000 Server NIC
- 3Com 3C996 Gigabit Fiber-SX Server NIC
- 3Com 3C996B Gigabit Server NIC
- 3Com 3C997 Gigabit Server NIC
- 3Com 3C997 Gigabit Fiber-SX Server NIC
3Com 3C1000 Gigabit NIC
3Com 3C940 Gigabit LOM (21X21)
3Com 3C942 Gigabit LOM (31X31)
HP NC6770 Gigabit Server Adapter
HP NC7760 Gigabit Server Adapter
HP NC7761 Gigabit Server Adapter
HP NC7770 Gigabit Server Adapter
HP NC7771 Gigabit Server Adapter
HP NC7772 Gigabit Server Adapter
HP NC7780 Gigabit Server Adapter
HP NC7781 Gigabit Server Adapter
HP NC7782 Gigabit Server Adapter
HP NC7783 Gigabit Server Adapter

3Com EtherLink PCI III/XL Series Ethernet NICs
ESX Server supports many 3Com Ethernet NICs. The ESX Server driver includes two drivers: one based on the Linux 3c90x version 1.0.2 driver, and the other based on the Linux 3C990-x version 1.0.0b. The following 3Com NICs are supported as ESX Server devices.

EtherLink 10/100 PCI NICs
- 3C905C Family and 3C920 ASICs – EtherLink 10/100 PCI including the -TX and -TX-M
- 3C905B Family and 3C918 ASICs – EtherLink 10/100 PCI including the -TX, -TX-M, and -TX-NM
- 3C905B-COMBO – EtherLink 10/100 PCI COMBO
- 3C905B-T4 – EtherLink 10/100 PCI T4

EtherLink Server 10/100 PCI NICs
- 3C980C-TX – EtherLink Server 10/100 PCI
- 3C980B-TX – EtherLink Server 10/100 PCI
- 3C980-TX – EtherLink Server 10/100 PCI

EtherLink 100 PCI NIC
- 3C905B-FX – EtherLink 100 PCI Fiber

EtherLink 10 PCI NICs
- 3C900B-TPO – EtherLink 10 PCI TPO
- 3C900B-TPC – EtherLink 10 PCI TPC
- 3C900B-COMBO – EtherLink 10 PCI COMBO
- 3C900B-FL – EtherLink 10 PCI Fiber

In addition, all cards based on the 3c990-x card should be compatible with ESX Server.
ESX Server 2.0

Currently Supported Device Families
VMware currently has ESX Server device drivers available that support the following families of I/O controllers.

SCSI Controllers
- Adaptec Ultra160 and Ultra 320 SCSI controllers
- LSI Logic Symbios and NCR chip set based SCSI controllers
- LSI Logic Fusion-MPT SCSI controllers

RAID Controllers
- Dell PercRAID controllers
- HP SmartArray controllers
- IBM ServeRAID controllers
- Mylex AcceleRAID and ExtremeRAID controllers

Fibre Channel Adapters (SCSI Protocol Support Only)
- Emulex Host Bus Adapters
- QLogic Host Bus Adapters

Ethernet NICs
- Intel PRO/100 Ethernet NICs
- Intel PRO/1000 Gigabit Ethernet NICs
- Broadcom NetXtreme 570x series Gigabit NICs
- 3Com Fast Ethernet NICs

VMware may add support for drivers and devices between releases of the product; check the VMware Web site for current information at http://www.vmware.com/support/pubs/.

The detailed list below shows actual vendor chip sets and adapters that VMware believes are compatible with the currently supported drivers. Although we have been careful in compiling the list, we have not tested all of these devices and cannot warrant that they all work. There may also be devices that are not listed but that work with these device drivers.

Please contact VMware with any questions about current and planned device support.

Linux Driver Compatibility
While ESX Server itself is not derived from Linux, it includes a Linux compatibility module to allow Linux storage and networking drivers to be adapted and recompiled for ESX Server. This enables VMware to more easily support a wide range of high performance devices and eases the driver porting effort on the storage and networking device vendors. VMware typically modifies these drivers for one or more of the following reasons:

- To make the driver compatible with the ESX Server
- To tune the driver for performance
- To add I/O resource governing or QoS support to the driver
- To fix generic bugs in the driver

It is not possible to directly load existing, precompiled, Linux device driver binaries into ESX Server.
VMware Certification

VMware certifies that specific systems and components are compatible with ESX Server. Through its Preferred Hardware Partner Program, it works with leading server vendors to ensure that appropriate configurations of their current and future server products are certified with ESX Server products. The following table summarizes the driver versions shipped with the current release of ESX Server compared with previous releases. The following table provides details of the device models supported by each driver.

Table 38.

<table>
<thead>
<tr>
<th>Class</th>
<th>Vendor</th>
<th>Driver</th>
<th>ESX Server 2</th>
</tr>
</thead>
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<tr>
<td>SCSI</td>
<td>Adaptec</td>
<td>aic7xxx</td>
<td>6.2.1</td>
</tr>
<tr>
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<td>Adaptec</td>
<td>aic79xx</td>
<td>1.3.0</td>
</tr>
<tr>
<td></td>
<td>LSI Logic</td>
<td>ncr53c8xx</td>
<td>3.4.3b</td>
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<tr>
<td></td>
<td>LSI Logic</td>
<td>sym53c8xx</td>
<td>1.7.3c</td>
</tr>
<tr>
<td></td>
<td>LSI Logic</td>
<td>mptlinuxmptscsi</td>
<td>2.03</td>
</tr>
<tr>
<td>RAID</td>
<td>HP</td>
<td>cpqarray</td>
<td>2.4.21</td>
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<tr>
<td></td>
<td>HP</td>
<td>cciss</td>
<td>2.4.45</td>
</tr>
<tr>
<td></td>
<td>Dell</td>
<td>aacraid</td>
<td>0.9.9ac2</td>
</tr>
<tr>
<td></td>
<td>Dell</td>
<td>megaraid</td>
<td>1.18f</td>
</tr>
<tr>
<td></td>
<td>IBM/Adaptec</td>
<td>ips</td>
<td>6.00.31</td>
</tr>
<tr>
<td></td>
<td>Mylex</td>
<td>DAC960</td>
<td>2.4.11</td>
</tr>
<tr>
<td>Fibre Channel</td>
<td>Emulex</td>
<td>lpfcdd</td>
<td>4.20q</td>
</tr>
<tr>
<td></td>
<td>Qlogic</td>
<td>qla2x00</td>
<td>6.04.02</td>
</tr>
<tr>
<td>Network</td>
<td>Broadcom</td>
<td>bcm5700</td>
<td>6.2.4</td>
</tr>
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<td></td>
<td>Intel</td>
<td>e100</td>
<td>2.0.30</td>
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<td></td>
<td>Intel</td>
<td>e1000</td>
<td>5.0.42</td>
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<tr>
<td></td>
<td>3Com</td>
<td>3c90x</td>
<td>1.0.2</td>
</tr>
<tr>
<td></td>
<td>3Com</td>
<td>3c990-x</td>
<td>1.0.0b</td>
</tr>
</tbody>
</table>

Adaptec Ultra160 SCSI Adapters

The ESX Server Adaptec driver is based on the Linux aic7xxx version 6.2.1 driver. The following PCI Adaptec SCSI adapters and motherboard chip set devices should work as ESX Server adapters.

SCSI Adapters

- AHA_1480A
- AHA_2902/04/10/15/20/30C
- AHA_2930 (C/CU U/U2)
- AHA_2940 AU_(0/1/CN)
- AHA_2944 (U)
- AHA_3940 (U/AU)
- AHA_3944 (U/AU)
- AHA_3950 (U2B_0/U2B_1/U2D_0/U2D_1)
- AHA_3960 (D/D CPQ)
- AHA_398X (U)
- AHA_4944 (U)
Motherboard Chip Sets
- AIC7850
- AIC7855
- AIC7859
- AIC7860
- AIC7870
- AIC7880
- AIC7892
- AIC7895
- AIC7895C
- AIC7890/91
- AIC7892
- AIC7895
- AIC7896/97
- AIC7899

Adaptec Ultra320 SCSI Adapters
The ESX Server Adaptec driver is based on the Linux aic79xx version 1.3.0 driver. The following PCI Adaptec SCSI adapters and motherboard chip set devices should work as ESX Server adapters.

SCSI Adapters
- AHA29320 (A)
- AHA29320 (LP)
- AHA39320 (A/D/DB)

Motherboard Chip Sets
- AIC7901 (A)
- AIC7902 (B)

LSI Logic Symbios and NCR-Based SCSI Adapters
Most SCSI adapters based on the LSI Logic Symbios (formerly NCR) 53c8xx family of chip sets are supported as ESX Server devices. The ESX Server uses two different drivers to support the device family: one based on the Linux ncr53c8xx version 3.4.3b driver and the other on the sym53c8xx version 1.7.3c driver. LSI Logic’s Symbios product division was formerly NCR Microelectronics Products Division. Older products may have either NCR or Symbios (SYM) part number prefixes; otherwise the part numbers are interchangeable. The following chip sets and adapters are supported as ESX Server devices.

Supported Symbios Chip Sets
- SYM53C810
- SYM53C810A
- SYM53C815
- SYM53C820
- SYM53C825
- SYM53C860
- SYM53C875
- SYM53C876
- SYM53C895
- SYM53C895A
- SYM53C896
- SYM53C897
- SYM53C1510D

**Table 39. SYM53C1010 Supported Symbios-Based SCSI Adapters**

<table>
<thead>
<tr>
<th>Model/Type</th>
<th>Chip Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYM20810 32 bit PCI-to-Fast SCSI</td>
<td>SYM53C810A</td>
</tr>
<tr>
<td>SYM20811 32 bit PCI-to-Fast SCSI</td>
<td>SYM53C810A</td>
</tr>
<tr>
<td>SYM20860 32 bit PCI-to-Ultra SCSI</td>
<td>SYM53C860</td>
</tr>
<tr>
<td>SYM21002 32 bit PCI-to-Ultra2 SCSI</td>
<td>SYM53C896</td>
</tr>
<tr>
<td>SYM22801 PCI-to-Dual Ultra SCSI</td>
<td>SYM53C876</td>
</tr>
<tr>
<td>SYM22802 PCI-to-Ultra SCSI</td>
<td>SYM53C876</td>
</tr>
<tr>
<td>SYM22902 Ultra2 MiniHAB</td>
<td>SYM53C895A/SYM53C895</td>
</tr>
<tr>
<td>SYM22910 PCI-to-Dual Ultra2 SCSI</td>
<td>SYM53C896</td>
</tr>
<tr>
<td>815XS</td>
<td>SYM53C815</td>
</tr>
<tr>
<td>8100S</td>
<td>SYM53C810</td>
</tr>
<tr>
<td>SYM8150</td>
<td>SYM53C815</td>
</tr>
<tr>
<td>SYM8251</td>
<td>SYM53C825</td>
</tr>
<tr>
<td>SYM8600SP</td>
<td>SYM53C860</td>
</tr>
<tr>
<td>SYM8750SP</td>
<td>SYM53C875</td>
</tr>
<tr>
<td>SYM8751D</td>
<td>SYM53C875</td>
</tr>
<tr>
<td>SYM87515PE</td>
<td>SYM53C875</td>
</tr>
<tr>
<td>SYM8951U</td>
<td>SYM53C895</td>
</tr>
<tr>
<td>SYM8952U</td>
<td>SYM53C895A/SYM53C895</td>
</tr>
<tr>
<td>SYM8953U</td>
<td>SYM53C895A</td>
</tr>
<tr>
<td>SYM53C1010</td>
<td>Ultra160</td>
</tr>
<tr>
<td>SYM53C1010_66</td>
<td>Ultra160</td>
</tr>
</tbody>
</table>

Third-party SCSI adapters from Compaq/DEC, Gigabyte, Promise Technology, and Tyan should also work with the ESX Server NCR driver.

**LSI Logic MPT-Fusion SCSI Adapters**

The ESX Server driver is based on the LSI Logic mptlinux mptscsi v 2.03 driver and supports the following SCSI controllers. These controllers are also supported in a RAID-1 configuration.
Dell PercRAID Controllers
VMware ESX Server supports two classes of Perc branded controllers. Some are based on Adaptec RAID chip sets, and some on LSI Logic (formerly American Megatrends, Inc.) MegaRAID chip sets.

The ESX Server driver for Adaptec-based PercRAID controllers is based on the Linux aacraid version 0.9.9ac2 2.1.5 driver.

- PERC 2/QC
- PERC 3/Si (PowerEdge 2450 onboard RAID)
- PERC 3/Di (PowerEdge 2550, 2650, and 4400 onboard RAID)

The ESX Server driver for LSI Logic/AMI-based PercRAID controllers is based on the Linux megaraid version 1.18f driver.

- PERC 2/DC
- PERC 3/DCL
- PERC 4/Di
- MegaRAID 418, 428, 438, 466, 762, 467, 471, 490, 493

HP SmartArray RAID Controllers
The ESX Server driver is based on the HP cpqarray v 2.4.21 and cciss v 2.4.45 drivers.

cpqarray-Based
- IDA, IDA-2, IAES
- SMART
- SMART-2/E
- SMART-2 (SMART-2/P, SMART-2SL, Smart Array 3200, Smart Array 3100ES, Smart Array 221)
- SMART-4 (Integrated Array, LC2, Smart Array 4200, Smart Array 4250ES, Smart Array 431)

ccis-Based Controllers
- SMART-5 (Smart Array 5300 series, Smart Array 5i, Smart Array 532, 5312)
- SMART-6 (Smart Array 641, 642, 6400)

IBM ServeRAID RAID Controllers
The ESX Server driver is based on the Linux ips v 6.00 driver.

- ServeRAID-3H
- ServeRAID-/4L, 4LX
- ServeRAID-4M, 4Mx
- ServeRAID-4H
- ServeRAID-/5i

Support for the 6i/6M controllers is forthcoming in a future edition of ESX Server.
Mylex AcceleRAID/eXtremeRAID Controllers

The ESX Server driver is based on the Linux DAC960 version 2.4.11 driver. Specific AcceleRAID and eXtremeRAID controllers are also based on DAC960-compatible controllers.

- DAC960 (E, M, PD, PU, PE, Pj, PT0, PR, PRL, PTL1)
- DDAC960 (S, SU, SX, SF, SS, FL, FF, HP)
- DAC1164P
- EXR2000P
- EXR3000P
- AcceleRAID 160, 170, 352
- eXtremeRAID 1100

Emulex Fibre Channel Adapters

Please see the SAN Compatibility Guide for ESX Server 2.x for more information on the specific drivers, configurations, models, and firmware supported.

QLogic Fibre Channel Adapters

Please see the SAN Compatibility Guide for ESX Server 2.x for more information on the specific drivers, configurations, models, and firmware supported.

Intel PRO/100 Ethernet NICs

The default ESX Server driver for PRO/100 NICs is based on the Intel-supplied e100 Intel(R) PRO/100 Fast Ethernet Adapter version 2.0.30 driver. This is a comprehensive listing of Intel and OEM models that have been based on these chip sets. You should check the specific chip set used in your card for compatibility.

<table>
<thead>
<tr>
<th>Controller</th>
<th>Adapter Name</th>
<th>Board ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>82558</td>
<td>PRO/100+ PCI Adapter</td>
<td>668081-xxx, 689661-xxx</td>
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<tr>
<td>82558</td>
<td>PRO/100+ Management Adapter</td>
<td>691334-xxx, 701738-xxx, 721383-xxx</td>
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<tr>
<td>82558</td>
<td>PRO/100+ Dual Port Server Adapter</td>
<td>714303-xxx, 711269-xxx, A28276-xxx</td>
</tr>
<tr>
<td>82558</td>
<td>PRO/100+ PCI Server Adapter</td>
<td>710550-xxx</td>
</tr>
<tr>
<td>82550</td>
<td>PRO/100 S Server Adapter</td>
<td>752438-xxx (82550)</td>
</tr>
<tr>
<td>82550</td>
<td>PRO/100 S Desktop Adapter</td>
<td>751767-xxx (82550)</td>
</tr>
<tr>
<td>82559</td>
<td>PRO/100 S Desktop Adapter</td>
<td>748592-xxx, A12167-xxx, A12318-xxx, A12317-xxx, A12165-xxx, x, 748569-xxx (82559)</td>
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<tr>
<td>82559</td>
<td>PRO/100+ Server Adapter</td>
<td>729757-xxx</td>
</tr>
<tr>
<td>82559</td>
<td>PRO/100 S Management Adapter</td>
<td>748566-xxx, 748564-xxx</td>
</tr>
<tr>
<td>82550</td>
<td>PRO/100 S Dual Port Server Adapter</td>
<td>A56831-xxx</td>
</tr>
<tr>
<td>82551</td>
<td>PRO/100 M Desktop Adapter</td>
<td>A80897-xxx</td>
</tr>
<tr>
<td>82551</td>
<td>PRO/100 S Advanced Management Adapter</td>
<td>747842-xxx, 745171-xxx</td>
</tr>
</tbody>
</table>
The specific HP OEM model numbers associated with this driver are:

- NC3120
- NC3121
- NC3123
- NC3131
- NC3132
- NC3133
- NC3134N
- NC3135
- NC3160
- NC3161
- NC3162
- NC3163
- NC3122

**Intel PRO/1000 Gigabit Ethernet NICs**

The ESX Server driver for Intel PRO/ro 1000 based Gigabit Ethernet cards is based on the Linux v 5.0.42 e1000 driver. Several HP and IBM Gigabit Ethernet cards are based on this controller, but you need to check the OEM model number to ascertain this.

<table>
<thead>
<tr>
<th>Controller</th>
<th>Adapter Name</th>
<th>Board IDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>82542</td>
<td>PRO/1000 Gigabit Server Adapter</td>
<td>700262-xxx, 717037-xxx</td>
</tr>
<tr>
<td>82543</td>
<td>PRO/1000 F Server Adapter</td>
<td>738640-xxx, A38888-xxx</td>
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<td>82543</td>
<td>PRO/1000 T Server Adapter</td>
<td>A19845-xxx, A33948-xxx</td>
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<tr>
<td>82544</td>
<td>PRO/1000 XT Server Adapter</td>
<td>A51580-xxx</td>
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<tr>
<td>82544</td>
<td>PRO/1000 XF Server Adapter</td>
<td>A50484-xxx</td>
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<td>82544</td>
<td>PRO/1000 T Desktop Adapter</td>
<td>A62947-xxx</td>
</tr>
<tr>
<td>82540</td>
<td>PRO/1000 MT Desktop Adapter</td>
<td>A78408-xxx</td>
</tr>
<tr>
<td>82545</td>
<td>PRO/1000 MT Server Adapter</td>
<td>A92165-xxx</td>
</tr>
<tr>
<td>82546</td>
<td>PRO/1000 MT Dual Port Server Adapter</td>
<td>A92111-xxx</td>
</tr>
<tr>
<td>82545</td>
<td>PRO/1000 MF Server Adapter</td>
<td>A91622-xxx</td>
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<tr>
<td>82545</td>
<td>PRO/1000 MF Server Adapter (LX)</td>
<td>A91624-xxx</td>
</tr>
<tr>
<td>82546</td>
<td>PRO/1000 MF Dual Port Server Adapter</td>
<td>A91620-xxx</td>
</tr>
</tbody>
</table>

The specific HP OEM model numbers associated with this driver are:
Broadcom Gigabit Ethernet NICs

The ESX Server driver for Broadcom Gigabit Ethernet cards is based on the Broadcom 5700 driver for Linux v 6.2.4 version driver.

- Broadcom Vigil B5700 1000Base-T
- Broadcom BCM5700 1000Base-T
- Broadcom BCM5700 1000Base-SX
- Broadcom BCM5700
- Broadcom BCM5701 1000Base-T
- Broadcom BCM5701 1000Base-SX
- Broadcom BCM5701 1000Base-T
- Broadcom BCM5701
- Broadcom BCM5702 1000Base-T
- Broadcom BCM5703 1000Base-T
- Broadcom BCM5703 1000Base-SX
- Broadcom Arbuckle B5703 1000Base-SX
- Broadcom BCM5704 CI0B-E 1000Base-T
- Broadcom BCM5704 1000Base-T
- Broadcom BCM5704 1000Base-SX
- Broadcom BCM5705 1000Base-T
- Broadcom BCM5705M 1000Base-T
- Broadcom NetXtreme Gigabit Ethernet for HP
- Broadcom BCM5788 1000Base-T
- 3Com 3C996 10/100/1000 Server NIC
- 3Com 3C996 Gigabit Fiber-SX Server NIC
- 3Com 3C996B Gigabit Server NIC
- 3Com 3C997 Gigabit Server NIC
- 3Com 3C997 Gigabit Fiber-SX Server NIC
- 3Com 3C1000 Gigabit NIC
- 3Com 3C940 Gigabit LOM (21X21)
- 3Com 3C942 Gigabit LOM (31X31)
- HP NC6770 Gigabit Server Adapter
- HP NC7760 Gigabit Server Adapter
HP NC7761 Gigabit Server Adapter
HP NC7770 Gigabit Server Adapter
HP NC7771 Gigabit Server Adapter
HP NC7772 Gigabit Server Adapter
HP NC7780 Gigabit Server Adapter
HP NC7781 Gigabit Server Adapter
HP NC7782 Gigabit Server Adapter
HP NC7783 Gigabit Server Adapter

3Com EtherLink PCI III/XL Series Ethernet NICs
ESX Server supports many 3Com Ethernet NICs. The ESX Server driver includes two drivers: one based on the Linux 3c90x version 1.0.2 driver, and the other based on the Linux 3C990-x version 1.0.0b. The following 3Com NICs are supported as ESX Server devices.

**EtherLink 10/100 PCI NICs**
- 3C905C Family and 3C920 ASICs – EtherLink 10/100 PCI including the -TX and -TX-M
- 3C905B Family and 3C918 ASICs – EtherLink 10/100 PCI including the -TX, -TX-M, and -TX-NM
- 3C905B-COMBO – EtherLink 10/100 PCI COMBO
- 3C905B-T4 – EtherLink 10/100 PCI T4

**EtherLink Server 10/100 PCI NICs**
- 3C980C-TX – EtherLink Server 10/100 PCI
- 3C980B-TX – EtherLink Server 10/100 PCI
- 3C980-TX – EtherLink Server 10/100 PCI

**EtherLink 100 PCI NIC**
- 3C905B-FX – EtherLink 100 PCI Fiber

**EtherLink 10 PCI NICs**
- 3C900B-TPO – EtherLink 10 PCI TPO
- 3C900B-TPC – EtherLink 10 PCI TPC
- 3C900B-COMBO – EtherLink 10 PCI COMBO
- 3C900B-FL – EtherLink 10 PCI Fiber

In addition, all cards based on the 3c990-x card should be compatible with ESX Server.
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