RELEASE 6

SCO® OpenServer™

APPLICATIONS PLATFORM SOLUTIONS GUIDE

www.sco.com

SCO® OpenServer™ Release 6 is the applications platform of choice by computer professionals for reliable, stable, and secure deployment on Intel® and compatible computer systems.

OPENSERVER 6 – NEW AND IMPROVED

SCO® OpenServer™ is the applications platform of choice by computer professionals for reliable, stable, and secure deployment on Intel and compatible computer systems. Now, with the release of SCO OpenServer 6 these attributes have been refined to meet the challenges of a global economy. The greatest improvements in OpenServer 6 include multi-threaded application support, large file support (up to 1 terabyte), and an updated look and feel. With the introduction of the SVR5 kernel technology, SCO OpenServer 6 customers have reported up to 1000% increase in performance.

Key features include:

> *File support up to 1 TB*
> *Multi-processor support increased to 32 processors*
> *Memory support up to 64 GB*
> *Adding the power of the SVR5 kernel*
> *Dramatic performance improvement*

BUILT FOR PRODUCTIVITY

SCO OpenServer 6 contains many features that improves your business and your employee productivity. System management, performance, and ease of use improves greater productivity for administrators too.

BUILT FOR SECURITY

Businesses are built on a foundation of reliability and stability. Many businesses rely on SCO's UNIX platform to provide the high-level of security needed in a demanding, fast transaction business. Businesses need systems that are always up and always responsive, and they demand a level of security able to meet customer demands. SCO OpenServer 6 is the most dependable UNIX-on-Intel platform available in the market.

BUILT FOR AGILITY

Businesses today need instant information on new, mobile devices and clients. Stronger business collaboration tools enable business managers to make more intelligent decisions at a faster pace. With the increasing mobile nature of business, strong server support is necessary to serve up instant information to a mobile workforce.

OpenServer 6 connects clients like PDAs, smart-phones and other handhelds to the corporate backbone. It also provides support for provisioning and deploying applications on mobile devices. OpenServer 6 includes security management tools for wireless device connectivity and allows system administrators to monitor the health of their systems and mission critical applications while on the move.

BUILT TO PROTECT YOUR INVESTMENT

SCO recognizes the significant investment that companies make in their hardware and software IT solutions. With a large number of small businesses running SCO UNIX, a long term return on investment is imperative. With SCO OpenServer 6 businesses have significant investment protection, including the ability to scale solutions both up and out, support for large file systems to handle growth of business data, as well as the assurance of backward compatibility as future versions are released.

SCO OpenServer 6 has the power to run some of the largest businesses in the world, yet is so simple to install and maintain that the smallest organization can manage it.

QUICK FACTS ABOUT SCO UNIX PLATFORMS

> *SCO UNIX has more than 40% market share among U.S. pharmacy retailers*
> *Six of the top 10 global retailers are SCO UNIX customers*
> *Seven of the top 10 U.S. retailers are SCO UNIX customers*
> *SCO UNIX helps process 5,000 transactions a second for NASDAQ*
> *SCO UNIX helps McDonald's restaurants serve billions of meals worldwide*
> *Most voice mail systems run on SCO UNIX*
> *SCO UNIX helps run BMW Service Centers*
> *SCO UNIX runs thousands of branches of the Bank of Russia*
> *SCO UNIX helps the German train system run on time*
> *SCO UNIX runs thousands of locations throughout China for the China Post*

COMPETITIVE ADVANTAGES

Reliability continues to be the most important SCO OpenServer 6 differentiator. OpenServer is known for its phenomenal stability and quality. An IDC survey of 1000 IT professionals found UNIX to be superior to Linux in multi-processing, integration, security, and skills availability. Overall UNIX was more likely to meet expectations for features, overall performance and manageability. Recent studies have also concluded that UNIX is more secure than either Linux or Windows. Additional competitive advantages include low total cost of ownership and established reseller relationships.

In addition, SCO offers a wide range of global services to meet partners' and end-users' business requirements. Customized and standard options are available. For more information about SCO's support offerings contact your local SCO sales representative, or in the Americas, phone *1 (800) 726-6561* or in the rest of the world, phone *+44 8700 994 992*.

SCO OpenServer is the applications platform of choice

SCO OPENSERVER 6 – AN APPLICATIONS PLATFORM

SCO OpenServer 6 is an applications, or solutions, platform. It provides the productivity, security, agility, and investment protection required of a modern operating system, yet it extends far beyond the traditional limits of an operating system. SCO OpenServer 6 is the productivity foundation for both large and small businesses.

SINGLE CERTIFICATION

OpenServer 6 brings even tighter compatibility with SCO UnixWare because it is now possible to certify a solution on specified releases of OpenServer or UnixWare and be assured that most solutions (application software or device driver) will run unchanged on both platforms.

Independent Hardware Vendors (IHVs), Independent Software Vendors (ISVs), and Vertical Solution Providers (VSPs) who have certified to UnixWare 7.1.x will benefit, since they will be able to provide the same binary solution to the larger, combined UnixWare and OpenServer 6 markets. End-users will benefit because of the availability of a vastly larger pool of applications.

OPERATING SYSTEMS

COMMUNICATIONS
> User Interface
> Print Services
> Network Services
> File Services
> Ethernet
> RS232
> Etc.

APPLICATIONS
> Web
> Text
> Email
> Desktop
> Etc.

SYSTEM MANAGEMENT
> Job Management
> Data Management
> File Management
> Task Management
> Device Management

LANGUAGES
> C/C++
> Java
> PHP
> Python
> Perl
> Etc.

KERNEL
> SVR5 + Extensions

DATABASE MGMT SYSTEMS
> PostgreSQL
> Third-Party
> Etc.

SPECIAL PURPOSE ADD-ONS

The Optional Services are a series of enhancement products that extend and complement the built-in functionality provided in OpenServer 6 UnixWare 7.1.4 products.

SCO HA Clusters - is a high availability clustering solution for any size business that requires high levels of application and data availability. Businesses today are increasingly dependent on large servers to support their information processing needs, and any interruption in these services can be enormously expensive.
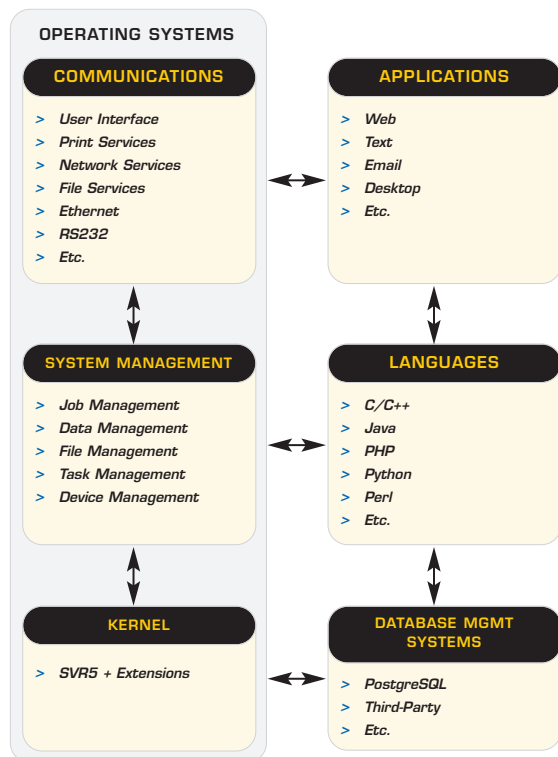
See www.sco.com/products/clustering

Online Data Manager - provides enterprise data management features such as online volume administration, online filesystem backup, improved synchronous write performance and further enhances filesystem I/O performance using enhanced I/O clustering.

Disk Mirroring - provides increased data availability by providing fault tolerance against disk failures and faster access via simple disk mirroring. By adding a second disk to the system and enabling Disk Mirroring, administrators will automatically have access to their business-critical data should one disk fail.

Both Online Data Manager (ODM) and Mirroring can be coupled with any standard disk system, including the new low cost Serial ATA (SATA) drives. Using these new tools with low cost disk systems will significantly lower the cost of installations that demand eas-to-use data management features and highly reliable data security.

See www.sco.com/products/openserver6/odm.html

APPLICATION PLATFORMS NATIVE TO OPENSERVER 6

SCO OpenServer 6 bundles a variety of ready-made applications platforms with the award-winning enterprise-strength SCO UNIX SVR5 kernel. Each application platform is tuned to optimal performance by SCO Admin.

These application solutions can be configured "out of the box" with the SCO OpenServer 6 application platform. Specific configuration considerations for end-users can best be made by consulting with any of the thousands of SCO qualified reseller partners located in 114 countries. To find SCO near you, click ***www.sco.com/worldwide***.

Database Server Solutions Platform. A database server allows two or more computers, acting as clients, to access a common database, thereby ensuring data integrity to all users in an environment where low maintenance costs are essential. SCO OpenServer 6 provides a complete solution with these components:

> **>** PostgreSQL   **>** SCO Admin

Windows® Virtual Machine Solutions Platform. Because many computer programs (applications) are written for a specific family of operating systems, it's important to be able to run the programs you wish on the computer system at your desk. That's why it's important to consider a Windows virtual machine. That way you'll experience the power and stability of SCO UNIX and be able to run the most common Windows applications too. SCO OpenServer 6 provides a complete solution with these components:

> **>** Merge   **>** SCO Admin

Network Server Solutions Platform. A network server connects two or more computers together. The network server provides common services to all users, often combining several servers in a single computer system to provide file and printer sharing (file and print server), access to a common database (database server), email (mail server), and other services. SCO OpenServer 6 provides a complete solution with these components:

> **>** DHCP   **>** DNS   **>** Mail
> **>** Remote Login   **>** SCO Admin

Security Solutions Platform. Computer users are more mindful of data theft than ever before. Computer systems must be protected against unauthorized access, data theft, and data corruption. SCO OpenServer 6 provides data encryption and access to data only by multiple layers of access authorization. SCO OpenServer 6 provides a complete solution with these components:

> **>** SSL   **>** SLP   **>** SSH
> **>** VPN   **>** Firewall / NAT   **>** SCO Admin
> **>** Encrypted File Systems

Web Server Solutions Platform. A Web server is a computer that serves or delivers Web pages to a client. Customers wanting to host their own Websites will need a Web server solution platform. SCO OpenServer 6 is the ideal platform for all your Web hosting needs. SCO OpenServer 6 provides a complete solution with these components:

> **>** PHP   **>** Apache   **>** Tomcat
> **>** Squid   **>** Web Services   **>** SCO Admin
> **>** JBoss   **>** Perl

File & Print Server Solutions Platform. A file and print server provides common file sharing to two or more computers. When looking for a file and print server, consider the stability, security, and reliability of SCO OpenServer 6. SCO OpenServer 6 provides a complete solution with these components:

> **>** SAMBA   **>** CUPS   **>** SCO Admin

Developer Solutions Platform. Computer users who are developing their own applications will value the stability, reliability, and performance of SCO OpenServer 6. Availability of industry-standard tools for open, cross-platform application development is a hallmark of SCO UNIX. SCO OpenServer 6 provides a complete solution with these components:

> **>** Java   **>** C/C++   **>** Graphical Debugger
> **>** SCO Admin   **>** Memory Leak Detection

Desktop Solutions Platform. Some business computer users prefer the speed and the effectiveness of the command line interface, the traditional administrative interface for UNIX. However more and more administrators are preferring a windowed, graphical interface. SCO OpenServer 6 gives you both. You decide which is best for your business environment.

> KDE   > Audio   > Mozilla

> SCO Admin

SCO OPENSERVER CASE STUDIES

From time to time, SCO publishes case studies relating to the successful implementation of SCO OpenServer application platforms. The following application platforms have been built by SCO's reseller channel for customers who count on the reliability, performance, stability, and flexibility of SCO OpenServer.

Learn more about these and other OpenServer case studies by pointing your browser to the *www.sco.com/company/success*. For more information about building a solution platform for your business with SCO OpenServer 6, please email us at *sales@sco.com*. The following are just a few of our success stories.

FEATURES IN SCO OPENSERVER 6

Multi-core Processing. Multi-core processing is a key technology that helps servers complete multiple tasks using one integrated circuit or chip.

Hot-Plug Memory Support. With OpenServer 6 you can add additional memory into the system without a system reboot.

Fibre Channel-based SAN Support. OpenServer 6 comes with Fibrechannel-based SAN support for HP MSA 1000 systems. SCO supports QLogic Fibre Channel 22xx/23xx controllers.

VXFS File system. High performance VXFS file system is journaled, ensuring data integrity in case of a hardware crash.

Hardware RAID Support. SCO OpenServer 6 will support the following RAID systems: Adaptec hardware RAID controllers, HP/Compaq RAID controllers, Intel Integrated RAID, LSI MegaRAID, and LSI Fusion-MPT RAID.

DVD Backup Support. With OpenServer 6, businesses can utilize DVD backup systems, enabling faster and more cost effective backup of valuable data.

Supports UnixWare® 7.1.4 Applications. With the SVR5 kernel technology embedded in OpenServer 6, UnixWare applications are fully supported.

Serial Attached SCSI (SAS) for HP Proliant Products. SAS is the next generation of host controllers, and will replace slower parallel technologies, as well as control for the first time of both Serial ATA and Serial Attached SCSI hard drives.

BROAD INDUSTRY CERTIFICATION SUPPORT

Many hardware and software manufacturers provide integrated and after-market components that are certified for OpenServer 6. Some of these manufacturers include:

ATI	Acer
Adaptec	AdminUX
Basis	BakBone
BEA	Bio-metric Authentication
Broadcom	Century Software
CloverWorxs	Dell
Digi	Dynamic
Ericom Software	FacetCorp
FilePro	HP
Fujitsu Siemens	Go software
HCL Infosystems Ltd	Intel
Iomega	LSILogic
Lone Star Software	Mardon
Microlite	Maxspeed
Matrox	Marvll
MultiTech Systems	Netmax
Nvidia	Oki
Open Systems Inc.	Qlogic
Progress Software	Pacific CodeWorks
Perle	Rasmussen Software, Inc.
Samsung	Tmax Soft
Siemens	Unisys
SysKonnect	Zim

For an up-to-date list of hardware certifications please see www.sco.com/chwp

Native SATA. OpenServer 6 features full support for Intel's open Advanced Host Controller Interface (AHCI) specification which includes features such as Native Command Queuing and Hot-Plug support.

SCO's Assessment and Migration Services. Specifically designed for OpenServer 6, these services enable customers to make the most efficient use of their IT staff. These options will also be found beneficial in implementing SCO solutions that optimize productivity by leveraging the new and greatly improved features of the operating system.

Multi-Threaded Kernel. By incorporating SVR5 technology into OpenServer 6, this kernel now has support for more modern applications.

Large File Support. OpenServer 6 includes large file support (up to 1 Terabyte) that enables it to drive more modern and powerful applications.

Multi-processor Support. OpenServer 6 has increased multi-processor support from 4 to 32 processors, taking advantage of the power of more modern and up-to-date hardware. SVR5 is a hardened kernel that runs on low cost, industry standard servers and is capable of near-linear scaling as resources are added to the system

Increased Memory Support. Memory support increases from 4 GB to 64 GB in OpenServer 6. This enables the product to run and support more powerful applications and hardware.

Speed and Performance. The SVR5 kernel enhancements in OpenServer 6 have produced significant improvements in speed and performance. Some OpenServer applications are reporting a 1000% speed improvement with OpenServer 6.

Improved support for Async I/0. Asynchronous input/output enables even a single application thread to overlap disk read/write operations with other processing thereby allowing useful work to be done while input/output is occurring in the background.

Dynamic Loadable Drivers. Drivers can be loaded or unloaded on a running system with no reboot required. This allows hotplug of new peripherals such as a tape drive.

LANGUAGE SUPPORT

Language versions include portions of the operating system localized. Not all documentation is localized.

> **English**

> **French**

> **German**

SYSTEM SPECIFICATIONS

Hardware	Minimum	Recommended	Maximum
CPU	A single Intel® Celeron®, Pentium®, Pentium II, Pentium II Xeon™, Pentium III, Pentium III Xeon™, Pentium 4, or Intel Xeon microprocessor, or a micro-processor that is 100% compatible (e.g., AMD Athlon™, Athlon 64, Duron™, Sempron™, or Opteron™ processor).	Pentium P4	32 CPUs
Memory	64MB of Random Access Memory (RAM) is required. For running graphically-intensive applications like Java or KDE, a minimum of 128MB of RAM is required.	256MB	64GB
Disk Space	To install all packages included in the media kit, 4GB of disk space is required. Small footprint installations can run on partitions as small as 1GB.	4GB	1TB per disk
HBA	IDE	SCSI or SATA	1024

SCO OPENSERVER 6 EDITIONS

	Starter Edition	Enterprise Edition
Users	2	10
Memory	1GB	4GB
CPUs	32 logical CPUs	32 logical CPUs
Restrictions	Special user bump	None

GLOSSARY OF TERMS AND ABBREVIATIONS

Computer people tend to use around abbreviations and acronyms that aren't very use-friendly to the actual users of computer systems. Here are a few of the terms we've used to describe SCO OpenServer 6.

AC97. Audio Codec '97 (AC'97) is the specification for high-quality sound.

AFS. Acer Fast Filesystem, one of the Legacy filesystems of SCO Unix.

Apache. The Apache HTTP Web Server.

BIND9. Berkley Internet Name Domain is an implementation of the DNS Protocol Suite.

BTLD. Boot Time Loadable Driver, a device driver that can be loaded into the kernel at install/boot time.

C/C++. C is a high-level programming language that was developed in the mid-1970s. C++ is a programming language that was built off the C language.

CPU. Central Processing Unit.

CUPS. Common Unix Print Subsystem.

cURL. cURL is a command line tool for transferring files with URL syntax, supporting FTP, FTPS, HTTP, HTTPS, GOPHER, TELNET, DICT, FILE and LDAP.

DCU. The Device Configuration Utility.

DHCP. Dynamic Host Configuration Protocol, a protocol for assigning dynamic IP addresses to devices on a network.

Divvy. A utility that allows you to divide a disk partition into up to 15 filesystems.

DNS. Domain Name Service.

DOS. Disk Operating System, early single user operating system for Intel PC from Microsoft.

EAFS. Extended Acer Fast Filesystem, One of the SCO Unix Legacy Filesystems.

ES51K. This should be S51K, not ES51K. Its the AT&T UNIX(R) System V 1KB Filesystem.

FAT32. Microsoft Filesystem (File Allocation Table)shipped in Win 95 and later.

Foomatic. Printer Interface Scripts for CUPS.

FTP. File Transfer Protocol, mechanism for transferring files over the network.

GIMP-print. A set of printer drivers written to take advantage of the full capabilities of a wide range of printers.

HBA. Host Bus Adapter, Another name for a disk controller on OpenServer.

HPIJS. HP Inkjet Printer Driver Package.

HTFS. High Throughput Filesystem, the Journaling filesystem of SCO Openserver 5.

Idbuild. Utility to build the SVR5 Kernel and Kernel Modules on Openserver 6.

IPsec. IP Security Protocol: a set of protocols <protocol.html that support secure exchange of packets <packet.html at the IP <IP.html layer.

Java. A high level programming language developed by Sun Microsystems.

Joliet. Joliet is a Microsoft extension to the ISO 9660 filesystem that allows Unicode characters to be used in file names.

KDE3. The K Desktop Environment, version 3, is a graphical user interface, not unlike that of Microsoft Windows for UNIX- and Linux-based systems.

LFS. Large File Support, specifically files larger than 2Gb on 32-bit systems.

LPO. Loop Protection Option.

MAC. Media Access Control, the hardware address of which uniquely identifies each node of a network.

MMDF. Multi-channel Memo Distribution Facility, a popular mail transport agent (MTA).

MTBSS. Mean time between system stops. A more relevant term than MTBF, mean time between failure.

MySQL. An open source relational database.

NAS. Network-Attached Storage. A server that is dedicated to file sharing.

NAT. Network Address Translation, an Internet standard that enables a local-area network (LAN) to use one set of IP addresses for internal traffic and a second set of addresses for external traffic.

NFSv3. Network File System, a client/server application that allows all network users to access shared files stored on computers of different types.

ODT. On-die termination improves signal integrity of the memory channel, enabling more efficient system operation and lower overall system cost.

OpenDesktop. A platform for office automation that enables the integration of administrative process; a common communications infrastructure.

OpenSSH. A free, open-source implementation of the SSH (Secure SHell) protocols.

OpenSSL. The Open Source toolkit for SSL/TLS.

OSR5. OpenServer Release 5, an implementation of the SVR3.2 UNIX kernel, and the most widely-installed UNIX operating system for Intel hardware.

PCI. Peripheral Component Interconnect is an interconnection system between a microprocessor and attached devices in which expansion slots are spaced closely for high-speed operation.

Perl. Practical Extraction and Reporting Language, a robust programming language frequently used for creating CGI programs on Web servers.

PHP. Self-referentially short for PHP: Hypertext Preprocessor, an open source, server-side, HTML embedded scripting language used to create dynamic Web pages.

PostgreSQL. Open source database software.

PRISM Technology. A wireless hardware chipset standard supported by SCO. OpenServer 6 supports a myriad of wireless devices that are PRISM based enabling more wireless networking capabilities.

S51K. A filesystem format.

Samba. SAMBA is a collection of free software developed to provide Microsoft file system services from UNIX file servers.

SAN. Storage Area Network.

SATA. Serial advanced technology attachment (ATA), an evolution of the parallel ATA physical storage interface.

SCSI. Small Computer System Interface.

Sendmail. A common UNIX-based mail program.

SLP. Service Location Protocol provides a framework to allow networking applications to discover the existence, location, and configuration of networked services in enterprise networks.

SOAP. Simple Object Access Protocol. SOAP is a protocol for accessing a Web Service.

Squid. A full-featured Web proxy cache designed to run on Unix systems.

SSH. Secure Shell is a program to log into another computer over a network, to execute commands in a remote machine, and to move files from one machine to another.

SSL. Secure Sockets Layer, a protocol developed by Netscape for transmitting private documents via the Internet.

SVR5. Unix System 5 (V) Release 5, the foundation of both SCO OpenServer 6 and SCO UnixWare.

TCI/IP. (Transmission Control Protocol / Internet Protocol) - The protocols, or conventions, that computers use to communicate over the Internet.

Tomcat. An open source implementation of Java Servlet and JavaServer Pages technologies that is used by SCM as a Web server.

USB. Universal Serial Bus. USB is a standard port that enables you to connect external devices.

VFAT. The Microsoft Windows 95 and NT version of the File Allocation Table (FAT) file system. Supports long file names.

VPN. Virtual private network, a network that is constructed by using public wires to connect nodes.

VTOC. fdisk disk partition and UnixWare slices.

VxFS. Veritas Journaled FileSystem (VxFS).

Wget. Retrieves files using HTTP, HTTPS and FTP, the most widely-used Internet protocols.

X.org. X.Org is the worldwide consortium empowered with the stewardship and collaborative development of the X Window System technology and standards

X11R5. Version 11 release 5 of the X protocol.

X11R6. Version 11 release 6 of the X Window System.

XAA. Xfree86 Acceleration Architecture (X-Windows).

Xenix. A version of Unix developed by Microsoft.

XML. eXtensible Markup Language. A subset of SGML constituting a particular text markup language for interchange of structured data.

SCO OpenServer 6 Comparison Chart

Features	OpenServer 5.0.7	OpenServer 6.0
Kernel	System V Release 3.2	System V Release 5
Threads	UDK User Level*	Kernel Level and User Level
Large File Support	Maximum of 2GB	Maximum of 1TB
Dynamically Loadable Kernel Modules	No	Yes
Kernel Auto Tuning	No	Yes
Hot Plug PCIx	No	Yes
Hot Plug CPU	No	Yes
Hot Add Memory	No	Yes
Encrypted Filesystem Support	No	Yes
IPsec and VPN Support	No	Yes
Multi Path I/O	No	Yes
Network Interface Failover	No	Yes
Wireless Network Card Support	Prism II	Prism II and Centrino
USB Printer Support	No	Yes
Media Less Boot	TCP boot PROM	PXE
Supported X Servers	X11 R5 X Server	X.org X11 R6 X Server
Emergency Recovery	Floppy and Tape only	Tape, CD-ROM/DVD-ROM
File and Print Server	AFPS 4 and Samba 2.28	Samba 3
Web Server	Apache 1	Apache 1 and 1.3.33
Browser	Mozilla 1.6*	Mozilla 1.7.8
Printer Subsystems	System V LP	System V LP and CUPS
Java 1.4.2	Yes*	Yes
Databases included in product	None	MySQL and PostgreSQL
NFS Version	2	3
CD/DVD Record	CD record*	CD and DVD record
DOS filesystem support	FAT, FAT16	FAT, FAT16, FAT32, VFAT, Joliet
Supported Graphical Desktops	XDT3	KDE 3.3 and XDT3
PPP	SCO PPP, MorningStar PPP	MorningStar PPP
Bundled Support	No	Optional
Application Compatibility	SCO Xenix, SCO UNIX®, SCO OpenServer™ 5 binaries and limited support for UnixWare 7 and SCO OpenServer 6 Binaries	SCO Xenix, SCO UNIX®, SCO OpenServer™ 5, UnixWare 7 and SCO OpenServer 6 binaries
CPU Chipset Support	Intel® 486, Pentium or Greater, AMD32; Intel EM64T and AMD64 in 32-bit mode	Intel® Pentium or greater, Centrino, AMD32; Intel EM64T and AMD64 in 32-bit mode
Number of CPUs supported	Scales up to 4 CPUs	Scales well up to 16 CPUs, Supports up to 32 CPUs
Maximum Memory	4GB	16GB of General Purpose Memory, 64GB of Shared Memory
Disk Controller Support	IDE and SCSI I, II and III, Fibrechannel	IDE, SCSI I, II and III, Serial SCSI, SATA, I2O and Fibrechannel and SAS for HP Proliant product
SAN Support	No	HP MSA1000

Available via maintenance pack or supplement. Note: Update pack features not included.