

Home > Products & Solutions > Hardware > Servers > Midframe & Midrange Servers

* Workgroup Servers

* Midframe & Midrange Servers

* Sun Fire 3800

* Sun Fire 4800

* Sun Fire 4810

* Sun Fire 6800

* Sun Enterprise 3500

* Sun Enterprise 4500

* Sun Enterprise 5500

* Sun Enterprise 6500

* High-End Servers

* Sun HPC Servers

Related:

- Comparison Chart

- Press Releases

- Success Stories

- Documentation

- White Papers

- Awards/Reviews

See Also:

- Solaris 8

- Operating

- Environment

- Sun Services

- Resource

- Management

- Upgrade

- Program

- UltraSPARC

- Processor

- System

- Management

- Sun Cluster

- Sun StorEdge

- Contact Us

ENCLOSURE 3

[Buy Online](#) | [Contact Me](#)

[Server Overview PDF](#)

Introducing the Sun Fire Midframe Servers – Bringing Mainframe-Class Capabilities To The Midrange

The Sun Fire family of servers define a new class of system - the midframe. Based on Sun's award-winning, high-performance UltraSPARC[™] III processors and the Solaris[™] 8 Operating Environment, the Sun Fire servers bring mainframe-class availability, superior balanced performance, and investment protection to midrange servers. These midframe servers feature fault-isolated Dynamic System Domains*, Dynamic Reconfiguration*, full hardware redundancy, and Hot CPU Upgrades*.

*These features will be available in late 2001.

[Sun Fire Overview PDF](#)

Sun Enterprise Midrange Servers – Proven and Award-Winning Servers

With the addition of the Sun Fire Midframe servers, Sun extends the award-winning Sun Enterprise server line to form the industry's most comprehensive server family. Sun Enterprise servers deliver high availability, broad scalability, terabytes of capacity, and seamless connectivity. These servers feature hot-pluggable components, remote monitoring and CPU power control, and Dynamic Reconfiguration and Alternate Pathing (DR/AP).

Midframe & Midrange Servers : [Sun Fire 3800](#) | [Sun Fire 4800](#) | [Sun Fire 4810](#) | [Sun Fire 6800](#) | [Sun Enterprise 3500](#) | [Sun Enterprise 4500](#) | [Sun Enterprise 5500](#) | [Sun Enterprise 6500](#)

- ^ Sun Fire 3800
- Features, Functions & Benefits
- Specifications
- Detailed View
- Interactive Tour

- * Sun Fire 4800
- * Sun Fire 4810
- * Sun Fire 6800
- * Sun Enterprise 3500
- * Sun Enterprise 4500
- * Sun Enterprise 5500
- * Sun Enterprise 6500

Related:

- Companion Chart
- Press Releases
- Success Stories
- Documentation
- White Papers
- Awards/Reviews

See Also:

- Solaris 8 Operating Environment
- Sun Services Resource Management Upgrade Program
- UltraSPARC Processor System

HIGHLIGHTS

 DataSheet PDF

Key Applications:

Internet/intranet services, business intelligence (BI), enterprise resource planning (ERP), email, web hosting, compute services, and business applications.

Key Specifications:

From two to eight UltraSPARC[™] III processors, up to 64 GB of memory, 12 cPCI cards, and one or two Dynamic System Domains. The system offers mainframe-class availability features, including full hardware redundancy, concurrent maintenance, online upgrades and Hot CPU Upgrades. Additionally, this system offers mainframe-class resource management with fully fault isolated Dynamic System Domains. The high performance system interconnect, the Sun[™] Fireplane Interconnect, delivers aggregate bandwidth of 24 GB/sec. and sustained bandwidth and 9.6 GB/sec. The system can be mounted in an industry standard 19" rack or a Sun Fire[™] Cabinet.

Key Benefits:

Continuous uptime from a compact, highly available data center server.

Key Industries:

General purpose server suitable for all industries. Ideal packaging and performance characteristics for email, web and database servers.

Requirements

- Solaris[™] 8 4/01 Operating Environment, or later.

CUSTOMER QUOTE

IN THE SPOTLIGHT

"We get the most flexible system available that is also easy to maintain - it's a total system that is what we think is an ideal future computing environment."

*Henrik Madsen
Professor of Statistics
Danish Technical University*

[More»](#)

FEATURE STORY: TAKE YOUR DATA CENTER TO THE NTH

Sun introduces the Midframe -- combining mainframe capabilities, Sun innovation, and midrange affordability.

GET INSIDE SUN FIRE MIDFRAME SERVERS

Explore "Inside the Servers" with the Sun Fire Midframe Server Interactive tour. The tour delivers rich information to help jumpstart your IT planning.

FIGHTING FIRE WITH SUN FIRE

CEO Scott McNealy on how Sun's new midframe servers address the challenges and opportunities of the Net Effect.

PRESS KIT

Direct links to press releases, customer profiles, whitepapers, executive bios and broadcast media resources

SOLARIS[™] 8 SOFTWARE RATED THE #1 UNIX OPERATING SYSTEM

The Solaris 8[™] Operating Environment leaps ahead of the competition to be named the top-rated UNIX[R] operating system (OS), according to the results of the "2001 UNIX Function Review," completed by industry analyst firm D.H. Brown Associates.

SUN SERVICE PORTFOLIOS FOR SUN FIRE SERVERS

Sun services help maximum availability of your critical systems and services

NEW SUN STOREDGE D240 MEDIA TRAY

A compact, scalable, and highly flexible storage solution specifically designed to support the latest Sun Fire servers.

NEW HOT SWAP NETWORKING CARDS

Sun's new line of 3U CompactPCI network interface cards for the Sun Fire line of servers.

[More»](#)

ABOUT THE SUN FIRE™ 3800

A powerful member of Sun's UltraSPARC III family of binary-compatible, symmetric multiprocessing (SMP) servers, the Sun Fire 3800 system addresses the crucial data center requirement for continuous availability. The compact, highly available Sun Fire 3800 server makes an ideal system for email, Web hosting, business applications, and high-performance compute farms. Featuring the redundantly configurable Sun Fireplane Interconnect, this server delivers impressive total system performance. Full hardware redundancy and a variety of advanced mainframe-class availability features, such as Hot CPU Upgrades* and Dynamic Reconfiguration*, provide for high availability. With Solaris Resource Manager[™] and Dynamic System Domains*, this server has the flexibility to accommodate changing resource requirements across multiple applications. The Sun Fire 3800 system fits into industry standard 19-inch racks, providing the compute density today's data centers require.

*These features will be available late in 2001.

Sun Fire 3800: [Features, Functions & Benefits](#) | [Specifications](#) | [Detailed View](#)

- Features,
Functions &
Benefits

- Specifications
- Detailed View
- Interactive Tour

Related:

- Comparison
Chart
- Press Releases
- Success Stories
- Documentation
- White Papers
- Awards/Reviews

See Also:

- Solaris 8
Operating
Environment
- Sun Services
- Resource
Management
- Upgrade
Program
- UltraSPARC
Processor
- System
Management
- Sun Cluster
- Sun StorEdge
- Contact Us

- AVAILABILITY
- HIGH PERFORMANCE
- SCALABILITY
- INVESTMENT PROTECTION
- RESOURCE MANAGEMENT
- SYSTEM MANAGEMENT

AVAILABILITY

Feature: Full hardware redundancy.

Function: Components such as system clocks, power and cooling are fully redundant. The system interconnect is redundantly configurable.

Benefit: Systems survive most component failures or recover very quickly without requiring an immediate shut-down for maintenance.

Feature: Hot CPU upgrades.*

Function: Allows you to upgrade to faster CPUs while the Solaris[tm] Operating Environment and applications continue to be available.

Benefit: Improves service levels by allowing you to avoid planned downtime.

Feature: Dynamic reconfiguration.*

Function: Allows you to add or remove system resources -- CPUs, memory modules, and I/O controller -- without shutting down the operating system or powering down the system itself.

Benefit: Helps enable you to deliver consistent service levels by adjusting resources on the fly to meet unpredictable demand.

HIGH PERFORMANCE

Feature: Sun[tm] Fireplane Interconnect.

Function: The Sun Fireplane Interconnect is a packet-switched, crossbar architecture. It provides very high aggregated bandwidth, up to 67.2 gigabytes per second, and high sustained bandwidth of 9.6 gigabytes per second.

Benefit: Helps deliver high service levels for a variety of applications, whether they demand memory-intensive computation or high-volume I/O. The low-latency design also translates into more predictable performance since the movement of large volumes of data is accommodated.

Feature: UltraSPARC[tm] III processors.

Function: The microprocessor featured in the Sun Fire[tm] family, delivering second generation 64-bit SPARC[tm] V9 architecture.

Benefit: Two of the key design goals for the UltraSPARC III processor are high performance and massive scalability, supporting from two-way systems to those with hundreds of CPUs. These attributes allow rapid response and consistent performance.

SCALABILITY

Feature: Highly scalable system architecture.

Function: When you add more processors to a Sun Fire server, the Solaris Operating Environment is able to take full advantage of the additional resources because the operating environment has been tuned to scale well beyond 24 processors.

Benefit: You get full performance out of additional CPUs you add to any Sun Fire system, thereby realizing better return on your investment.

INVESTMENT PROTECTION

Feature: SPARC/Solaris/SMP binary compatible architecture.

Function: Sun systems adhere to a consistent, binary compatible system design, based on the SPARC/Solaris/SMP combination. This design consistency, from generation to generation, helps ensure that Sun systems offer a degree of compatibility not available from any other platform vendor.

Benefit: Applications run unchanged across the Sun Fire server family and across Sun server generations, protecting investments in applications and labor.

Feature: Continued support of Sun Enterprise[tm] servers.

Function: While bringing the Sun Fire servers to market, Sun continues to invest in enhancing and supporting the existing Sun Enterprise systems. These servers will have continued performance enhancements, upgrades, and support that will ensure their longevity for many years to come.

Benefit: Continued enhancement and support of the existing Sun Enterprise servers allows customers to continue to purchase them and move to new technology at their own pace, thereby increasing investment protection.

Feature: Sun Upgrade Allowance Program Plus (Sun UAP+).

Function: Sun UAP+ offers a flexible and comprehensive upgrade program that includes the following: full systems, chassis, and CPU/memory/boards. The program covers Sun systems and products from Sun's competitors. The recently enhanced Sun UAP+ program provides additional value for customers trading in newer systems.

Benefit: Sun's trade in program allows customers to defray a portion of the cost of new technology by giving trade-in value for systems no longer needed. The Sun UAP+ program recognizes increased value for newer systems, giving you better return for a recent investment.

Feature: Common components.

Function: Key Sun Fire system components, such as CPU, memory, and system boards are interchangeable across the Sun Fire Midframe server family.

Benefit: Common components offer increased flexibility and serviceability across the product line--thereby enhancing availability. They also add to the overall Sun Fire investment protection strategy.

Feature: Mixed CPU support.*

Function: Add new, higher speed processors to an existing Sun Fire system without having to upgrade existing CPUs. CPUs run at their rated speed.

Benefit: The ability to add faster CPUs to an existing system without having to upgrade existing

processors saves time and money.

RESOURCE MANAGEMENT

Feature: Fully fault isolated Dynamic System Domains.*

Function: Allows you to run multiple, isolated instances of the Solaris Operating Environment and applications on one server. With Dynamic Reconfiguration, you can hot swap resources in and out of a domain while applications continue to run.

Benefit: Provides for very high service levels by giving you the ability to respond quickly to changing resource requirements. It also contributes to investment protection by enabling consolidation of several applications on one server.

SYSTEM MANAGEMENT

Feature: Sun[tm] Management Center 3.0.

Function: Sun Management Center offers a single point of management for Sun systems and storage components, the Solaris Operating Environment, and applications running on Solaris. It integrates into heterogeneous IT environments and scales to allow management from one system to thousands of servers and desktop systems, from anywhere on the network.

Benefit: Sun Management Center software helps lower system management costs while increasing service levels.

Feature: Sun[tm] Remote Services.

Function: Sun's suite of remote management and monitoring services enables proactive, early problem detection and prompt resolution of system events.

Benefit: Contributes to high service levels by delivering faster problem resolution and direct access to Sun experts and design engineers. Helps protect your investments in staff by reducing their monitoring workload and enhancing their expertise.

*These features will be available in late 2001.

[Back to Top](#)

Sun Fire 3800: [Features, Functions & Benefits](#) | [Specifications](#) | [Detailed View](#)

- Features
- Functions & Benefits

- Specifications
- Detailed View
- Interactive Tour

Related:

- Comparison Chart
- Press Releases
- Success Stories
- Documentation
- White Papers
- Awards/Reviews

See Also:

- Solaris 8 Operating Environment
- Sun Services
- Resource Management
- Upgrade Program
- UltraSPARC Processor System Management
- Sun Cluster
- Sun StorEdge
- Contact Us

Number of processors

Two to eight

Architecture Superscalar SPARC[tm] V9, UltraSPARC[tm] III

E-Cache per processor 8 MB

System interconnect Sun Fireplane interconnect
9.6 GB/sec. sustained

Main memory

Up to 64 GB of memory capacity per system

I/O Twelve hot-swappable cPCI slots (four 66-MHz and eight 33-MHz)

System Controller Up to two per system

Redundancy kit (optional) Redundant power supply, fan, system controller

Media device (optional) Sun StorEdge[tm] D240 Media Tray, a four-device tray that supports hard disk, tape, or DVD-ROM. Can be used as a boot, data-storage, data-load and data-interchange, or data-backup device.

AVAILABILITY

Full hardware redundancy, Dynamic System Domains, Dynamic reconfiguration, Hot CPU Upgrades, online upgrades, concurrent maintenance, end-to-end ECC protection, redundant network connections, redundant storage connections, kernel hot patching, hardened operating system kernel, live operating system upgrades, journaling file system, hardened I/O drivers, and cluster support

RESOURCE MANAGEMENT

Dynamic System Domains, Solaris Resource Manager, Solaris Bandwidth Manager

SOFTWARE

Operating system Solaris[tm] Operating Environment, V8 4/01 or later

Languages C, C++, Pascal, FORTRAN, Java[tm]

Networking ONC[tm], NFS, TCP/IP, SunLink[tm] OSI, MHS, X.25, DCE, Netware

System monitoring Sun Management Center

System and network management Solaris Web Start[tm], Solstice AdminSuite[tm], Solstice Domain Manager[tm], Solstice Enterprise Manager[tm], Solstice DiskSuite[tm], Solstice Backup[tm], VERITAS File System, VERITAS Volume Manager, Sun Cluster, Sun HPC ClusterTools[tm]

ENVIRONMENT

AC power 100-120 VAC, 47-63 Hz, 24 Amp
200-240 VAC, 47-63 Hz, 15.6 Amp

Power cords Three

Operating 5° C to 35° C (41° F to 95° F) 20% to 80% relative humidity, noncondensing

Nonoperating -20° C to 60° C (-4° F to 140° F) 5% to 93% relative humidity, noncondensing

REGULATIONS

Meets or exceeds the following requirements:

Safety UL 1950, CSA 950, TUB EN60950, CB Scheme (Nordic Deviation)

RFI/EMI FCC Class A, DOC Class A, E55022 Class A, VCCI Class 1

Immunity EN50082-1

Harmonics EN61000-3-2

DIMENSIONS AND WEIGHT

Height	381 mm (15.0 in.)
Width	450 mm (17.7 in.)
Depth	884 mm (34.8 in.)
Weight	104.6 kg (230.0 lb.)
Power cord	4.6 m (15 ft.)

UPGRADES

Full system upgrades are available for Sun Enterprise[™] 3x00 and 4x00 systems. Older Sun servers are eligible under Sun's Server Consolidation Program, and trade-in programs for other vendors' servers are also available.

[Back to Top](#)

Sun Fire 3800: [Features, Functions & Benefits](#) | [Specifications](#) | [Detailed View](#)

Copyright 1994-2001 Sun Microsystems, Inc. 901 San Antonio Road, Palo Alto, CA 94303 USA. All rights reserved
[Terms of Use](#), [Privacy Policy](#), [Feedback](#)

- Features,
Functions &
Benefits
- Specifications
- Detailed View
- Interactive Tour

Related:

- Comparison
Chart
- Press Releases
- Success Stories
- Documentation
- White Papers
- Awards/Reviews

See Also:

- Solaris 8
Operating
Environment
- Sun Services
- Resource
Management
- Upgrade
Program
- UltraSPARC
Processor
- System
Management
- Sun Cluster
- Sun StorEdge
- Contact Us

- [Overview](#)
- [Investment Protection](#)
- [Compatibility](#)
- [Key Features and Benefits](#)
- [Specifications](#)
- [Key Applications and Markets](#)

Overview

The new Sun Fire[tm] Midframe family of servers marks the next generation in the evolution of Sun's open, binary-compatible, symmetric multiprocessing (SMP) family of server products. Built around Sun's powerful, award-winning UltraSPARC[tm] III processor and the rock-solid Solaris[tm] 8 Operating Environment, the Sun Fire server family brings mainframe-class availability, superior balanced performance, and excellent flexibility to the midrange.

The Sun Fire Midframe servers are an extension of Sun's award-winning Sun Enterprise[tm] family of servers. Sun will continue to enhance and support the Sun Enterprise family for years to come, allowing you to adopt the Sun Fire servers according to your schedule.

The Sun Fire servers continue Sun's innovation found in Sun Enterprise servers. The Sun Fire family brings additional capabilities previously found only in mainframe-class systems - Dynamic System Domains*, Dynamic Reconfiguration*, full hardware redundancy, and Hot CPU Upgrades* - to midrange servers.

The Sun Fire 3800-6800 server family balances the availability and manageability features required to meet today's commercial computing needs with the performance requirements of the high-performance computing community.

*These features will be available in late 2001.

[Back to Top](#)

Investment Protection

Sun protects your IT investments through system architecture, financial programs, and protection of residual value. By adhering to the all SPARC[tm], all Solaris, all SMP design commitment, you can rest assured that your applications will "just run," from Sun's desktop to data center systems and across product generations, as well. The Solaris 8 Application Guarantee further strengthens this commitment. A consistent design helps you leverage the "people costs" in your IT environment, including system administration, application development, and training -- the highest costs on any IT manager's balance sheet.

-Sun's financial instruments, including Capacity on Demand, where available, and Technology Refresh Leasing through Sun Microsystems Finance, are two programs that give you quick access to the latest technology while helping defray your initial capital outlay. The Sun Upgrade Allowance Program Plus (Sun UAP+) program offers trade-in value for equipment -- from Sun or another vendor -- that has served its useful life. Sun UAP+ is now enhanced to offer additional trade-in value for newer equipment, ensuring that purchases designed for short-term life in your data center deliver excellent return on investment.

-Sun further protects your technology investment through a commitment to continuing to enhance, ship, and support Sun Enterprise 3500-6500 systems even after the introduction of the Sun Fire 3800-6800 systems. A unique benefit of the Sun Fire 3800-6800 family is that you can add newer, faster CPUs at the rated speed alongside existing CPUs, further protecting your initial investment.

[Back to Top](#)

Compatibility

The Sun Fire 3800-6800 servers are based on the Solaris 8 4/01 Operating Environment with support for over 12,000 applications. Compatibility with the Solaris Operating Environment brings with it the ability to run any existing Solaris application developed for the SPARC 32- or 64-bit architecture. The application programming interfaces (APIs) and application binary interface (ABI) are consistent between the Solaris 8 Operating Environment and previous versions of Solaris software.

The Solaris Application Guarantee provides additional assurance that migrations from previous versions of Solaris and/or earlier versions of the SPARC architecture are worry free.

The following Sun StorEdge[tm] products are compatible with the Sun Fire 3800-6800 servers:

- StorEdge UniPack for F4800 Deskside
- StorEdge MultiPack for F4800 Deskside
- StorEdge D240 Media Tray
- StorEdge D1000
- StorEdge A1000
- StorEdge A5200
- StorEdge A3500
- StorEdge T3

In addition, the Sun Fire servers support a full range of PCI and cPCI I/O adapters.

[Back to Top](#)

Key Features and Benefits

System Architecture

The Sun Fire 3800-6800 is a family of large-scale, shared memory, SMP systems based on the UltraSPARC III processor. Sun's commitment to this SPARC/Solaris/SMP architecture across the product line and from generation to generation protects your investments in applications and labor.

The architecture of the Sun Fire 3800 to 6800 server family is built

around the redundantly configurable Sun[tm] Fireplane Interconnect. With a system clock of 150 MHz, the Sun Fire 6800 server has a sustained data bandwidth of 9.6 GB/sec and an aggregate bandwidth of 67.2 GB/sec. There are no slot tradeoffs in the Sun Fire servers, so a system can be configured with maximum CPU and maximum I/O.

You can expand the availability of I/O connectivity through industry-standard, high-performance PCI and cPCI I/O cards. In addition, cPCI offers hot swap capabilities.

Full Hardware Redundancy

Sun Fire servers provide full hardware redundancy. Should any key component fail -- whether it is a system controller, power supply, cooling unit, interconnect or system clock -- the system is able to recover, and in many cases continue to run uninterrupted. Full hardware redundancy includes the following components:

- Redundant CPUs
- Memory
- CPU/memory boards
- I/O assemblies
- I/O adapters (if configured)
- Redundant system controllers
- Redundant system clock with automatic failover
- Redundant Sun Fireplane switches
- Redundant AC power sources, facilitated by the Redundant Transfer Switch
- Redundant power supplies and intelligent power switching mechanism that will failover to remaining power modules
- Dual power grid option on Sun Fire 6800 system

Fault-isolated Dynamic System Domains

Dynamic System Domains allow you to run multiple mission-critical applications on a single server. Each domain is fully isolated from hardware or software faults that may occur in another domain. In addition, system resources may be moved dynamically from one domain to another to support fluctuations in business workloads. Hot swapping resources in and out of a domain through Dynamic Reconfiguration increases manageability and availability.

Hot Pluggable Components, Hot Swappable Components, and Dynamic

Reconfiguration

Hot Plug means you can add or remove components without powering down the system. Hot Swap allows newly inserted components to be added to the running system, without reboot. Dynamic Reconfiguration can enable changes to the system's hardware resources while the system is running, reducing system downtime for upgrades, repairs, and changes in resource allocation.

Mixed-speed CPU support

Mixed-speed CPU support* helps enable you to add additional, faster CPUs into the system without having to upgrade the existing processors. All CPUs run at their rated speeds, delivering the full benefit each processor's power.

*These features will be available in late 2001.

Hot CPU Upgrades

With Hot CPU Upgrades, you can upgrade CPUs online while the Solaris Operating Environment and applications continue to be available. It is supported by the combination of mixed-speed CPUs and Dynamic Reconfiguration.

Solaris 8 Operating Environment

The Solaris Operating Environment offers industry leading availability and scalability with support for over 12,000 applications.

With Live Upgrades you can build a new version of the Solaris Operating Environment software while the old version is running. A simple reboot brings up the new environment. Should a problem occur, you can easily revert to the old version of Solaris software. Hot patching allows you to apply patches to the operating environment while the Solaris Operating Environment is running.

IP Multipathing can be employed to map out a dual-path network connection with automatic network failover capability. This assures that the failure of a single I/O card will not cause a network outage.

UltraSPARC III Processor

The UltraSPARC III processor delivers increased clock frequencies, as well as additional capabilities that contribute to increased system availability, multi-processor performance, reliability, scalability, and investment protection.

Built using Sun's second-generation 64-bit design, the UltraSPARC III

processor offers extensive Error Checking and Correction (ECC) and a new error isolation feature called the Uptime Bus. The processor has an on-chip memory controller that maximizes multi-processor scalability and performance. Large data caches reduce on-chip latencies to increase overall application throughput.

At the same time, this new generation of processor offers software compatibility with existing UltraSPARC processor-based systems. Tight integration with the Solaris 8 Operating Environment and Sun's system architecture further contributes to overall system performance and reliability.

[Back to Top](#)

Specifications

Number of processors	Two to eight
Architecture	Superscalar SPARC[tm] V9, UltraSPARC[tm] III
E-Cache per processor	8 MB
System interconnect	Sun Fireplane interconnect 9.6 GB/sec. sustained

SYSTEM

Main memory	Up to 64 GB of memory capacity per system
I/O	Twelve hot-swappable cPCI slots (four 66-MHz and eight 33-MHz)
System Controller	Up to two per system
Redundancy kit (optional)	Redundant power supply, fan, system controller
Media device (optional)	Sun StorEdge[tm] D240 Media Tray, a four-device tray that supports hard disk, tape, or DVD-ROM. Can be used as a boot, data-storage, data-load and data-interchange, or data-backup device.

AVAILABILITY

Full hardware redundancy, Dynamic System Domains, Dynamic reconfiguration, Hot CPU Upgrades, online upgrades, concurrent maintenance, end-to-end ECC protection, redundant network connections, redundant storage connections, kernel hot patching, hardened operating system kernel, live operating system upgrades, journaling file system, hardened I/O drivers, and cluster support

RESOURCE MANAGEMENT

Dynamic System Domains, Solaris Resource Manager, Solaris Bandwidth Manager

SOFTWARE

Operating system	Solaris[tm] Operating Environment, V8 4/01 or later
Languages	C, C++, Pascal, FORTRAN, Java[tm]
Networking	ONC[tm], NFS, TCP/IP, SunLink[tm] OSI, MHS, X.25, DCE, Netware
System monitoring	Sun Management Center
System and network management	Solaris Web Start[tm], Solstice AdminSuite[tm], Solstice Domain Manager[tm], Solstice Enterprise Manager[tm], Solstice DiskSuite[tm], Solstice Backup[tm], VERITAS File System, VERITAS Volume Manager, Sun Cluster, Sun HPC ClusterTools[tm]

ENVIRONMENT

AC power	100-120 VAC, 47-63 Hz, 24 Amp 200-240 VAC, 47-63 Hz, 15.6 Amp
Power cords	Three
Operating	5° C to 35° C (41° F to 95° F) 20% to 80% relative humidity, noncondensing
Nonoperating	-20° C to 60° C (-4° F to 140° F) 5% to 93% relative humidity, noncondensing

REGULATIONS

Meets or exceeds the following requirements:

Safety	UL 1950, CSA 950, TUB EN60950, CB Scheme (Nordic Deviation)
RFI/EMI	FCC Class A, DOC Class A, E55022 Class A, VCCI Class 1
Immunity	EN50082-1
Harmonics	EN61000-3-2

DIMENSIONS AND WEIGHT

Height	381 mm (15.0 in.)
Width	450 mm (17.7 in.)
Depth	884 mm (34.8 in.)

Weight 104.6 kg (230.0 lb.)

Power cord 4.6 m (15 ft.)

Upgrades

Full system upgrades are available for Sun Enterprise[™] 3x00 and 4x00 systems. Older Sun servers are eligible under Sun's Server Consolidation Program, and trade-in programs for other vendors' servers are also available.

[Back to Top](#)

Key Applications and Markets

The Sun Fire 3800-6800 family of general-purpose servers is suitable for all industries, including manufacturing, finance, telecommunications, government, health care, retail, design automation, and oil and gas exploration.

Product	Overview	Applications
Sun Fire 3800 server	Compact, affordable, rackmount server with unprecedented availability, performance and flexibility for a system of its size. Offers exceptional investment protection with components common to larger systems in the family.	<ul style="list-style-type: none">• Internet/intranet services• Business Intelligence (BI)• Enterprise Resource Planning (ERP)• Email• Web hosting• Business applications
Sun Fire 4800 server	A versatile server with exceptional value and scalability for companies requiring an affordable, highly available business server with tremendous computing power, and the ability to scale system performance and capacity.	<ul style="list-style-type: none">• Internet/intranet services• Business applications• Databases• Compute services• Server consolidation• Decision support applications• High Performance Computing
Sun Fire 4810 server	Offers same features as the Sun Fire 4800 server, with 100% front access to all components and a shallower rack depth.	<ul style="list-style-type: none">• Internet/intranet services• Business applications• Databases• Compute services• Server consolidation• Decision support applications• High Performance Computing

Sun Fire 6800 Highly available 24-CPU system offering mainframe-class availability features and advanced resource management, including fault-isolated Dynamic System Domains. Ideal for server consolidation, data warehousing, data mining, OLTP, and large databases.

- Mission critical data center applications
- Databases
- Data warehousing
- Data mining
- Server consolidation
- Decision support applications
- High Performance Computing

[Back to Top](#)

Sun Fire 3800: [Features, Functions & Benefits](#) | [Specifications](#) | [Detailed View](#)

Copyright 1994-2001 Sun Microsystems, Inc. 901 San Antonio Road, Palo Alto, CA 94303 USA. All rights reserved
[Terms of Use](#), [Privacy Policy](#), [Feedback](#)

Workgroup Servers

Midframe & Midrange Servers

Sun Fire 3800

Sun Fire 4800

Sun Fire 4810

Sun Fire 6800

Sun Enterprise 3500

Sun Enterprise 4500

Sun Enterprise 5500

Sun Enterprise 6500

High-End Servers

Sun HPC Servers

Related:

Comparison Chart

Press Releases

Success Stories

Documentation

White Papers

Awards/Reviews

See Also:

Solaris 8

Operating Environment

Sun Services

Resource

Management

Upgrade

Program

UltraSPARC

Processor

System

Management

Sun Cluster

Sun StorEdge

Contact Us

Experience the Sun Fire[™] Midframe Server Interactive Tour

Learn how Sun delivers a brand new class of system --the midframe-- combining mainframe capabilities and midrange affordability.

Explore on your own or take a guided tour to discover the excitement generated around the midframe. This multimedia presentation allows you to go "Inside the Servers" with details on key components and delivers information to help jumpstart your IT planning. Learn why your data center will benefit with Sun Fire Midframe servers by starting your tour -- right now.

Start the *Sun Fire[®] Interactive Tour* 

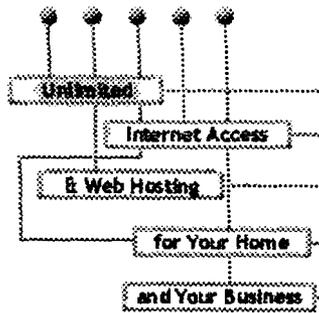
System Requirements

- [Macromedia Flash Player 5](#)
- Solaris[™] 7.0 or higher operating environment, Mac OS, or Windows 98/Me/NT
- UltraSPARC[™], Power PC, or 266 MHz processor
- 32 MB RAM

Special note for users running the Solaris[™] 8 Operating Environment with Sun Ray[™] appliances: [click here](#)



Midframe & Midrange Servers : [Sun Fire 3800](#) | [Sun Fire 4800](#) | [Sun Fire 4810](#) | [Sun Fire 6800](#) | [Sun Enterprise 3500](#) | [Sun Enterprise 4500](#) | [Sun Enterprise 5500](#) | [Sun Enterprise 6500](#)



DialUp Net is an Internet Service Provider (ISP) that provides nationwide access to the Internet. With more than 4,000 ISPs in the US and Canada, high speed access is what sets us apart.

Speed of access refers to how quickly you can send and receive information over the Internet.

ENCLOSURE 4

Business Services

Home Users

Customer Service

DialUp Net's super high speed, supervised bandwidth provided by multiple OC-3 connections, helps ensure that you can easily access the Web, send and retrieve e-mail, and transfer files. If you're deciding, or if you're already connected, you already know that not all ISPs are alike. Only few offer you the network you need to do business efficiently, and only WE offer it at **for Unlimited Access.**

DialUp Net has over 400 access numbers nationwide that will deliver like no other can.

© 1999
DialUp Net

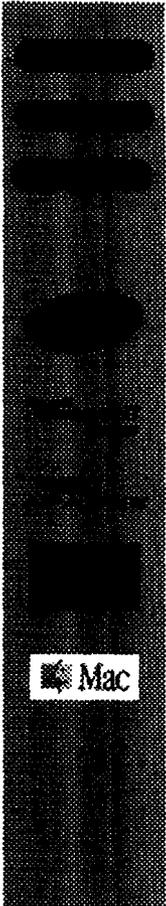
| Business Services | Home Users | Customer Service |



Microsoft
**Windows NT
Server**

Powered by
APACHE





Welcome to DialUp Net's Business User Page!

Why is DialUp Net the right choice for your business?

**Value
Server**

As we have indicated on our home page, what makes our service stand out from the competition is our network. DialUp Net uses multiple high-speed OC-3 lines and supervised bandwidth to ensure that your data transfer runs smoothly and fast. DialUp Net also specializes in virtual servers which means that you can establish a powerful Internet presence on state of the art, super high speed OC-3 connections at a fraction of the cost of a dedicated server.

Why is DialUp Net's virtual server system superior to the typical virtual hosting system?

The core services of DialUp Net's Virtual Server System - WWW, FTP, CGI, and E-mail - are completely configurable under Red Hat Linux OS or Windows NT, whichever platform you prefer. Your virtual server includes an entire directory tree. We give you the power to customize and configure *your virtual server to meet your specific needs*. In other words, *you* are in complete control of your virtual server.

“Establish a powerful Internet presence for you or your business today! DialUp Net offers the best value for Internet access and web hosting **anywhere.**”

How do I know what I need?

For internet access.... DialUp Net offers several options. If you just need one internet access account so your small business can get online, you can sign up for Unlimited Internet Access for only \$14.95 a month with NO setup fee! **A Static IP number is available in many locations for an additional \$5.00 per month.** If you will be establishing multiple simultaneous connections, you can purchase several of these accounts, or, if you prefer, sign up for our DSL or IP Connect service. These give you have a constant connection to the internet and comes with up to 30 *static* IP numbers so you can put your entire office online in no time.

If ISDN is what you're after, DialUp Net delivers: with ISDN single channel access (64 kbps) being priced as the same for a regular analog modem access, you can surf digitally at no extra charge. If you want dual channel (128 kbps), that's only \$30.95 a month. And both ISDN accounts come with *NO setup fee!*

For Web Hosting.... Dialup Net *really* delivers for your business. We have virtual servers starting at only \$8.95 with NO CONTRACT and freedom to cancel at any time. Here's a quick-reference:

- **Web Discovery**: If you need a small business web site, this is the plan for you. A fully functional virtual server for only **\$8.95 a month**. You can add CGI or secure server access to it at any time for no additional charge.
- **Value Server**: This is our most popular service. It's the perfect full service E-Commerce web solution at only **\$18.95 a month**. It gives you full CGI and secure server use, along with unlimited data transfer rate, and full use of our unlimited shopping cart for secure e-commerce. **Establish your online storefront today.**
- **Business Pro Server**: If you need a large space (over 200 megs) with all the bells and whistles, this is the plan for you. It even

includes internet access!

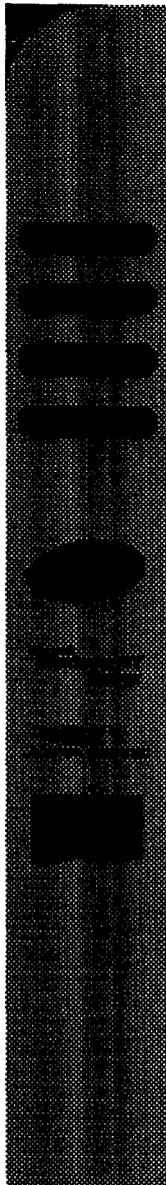
- **Enterprise Partner:** Establish your place on the web... by selling it. **Web Designers who want to give hosting options to their clients or anyone who wants to start a web hosting business, this is a great way to begin.**

For Domain Name Services.... FREE Domain Name Registration with ANY Hosting plan, or ***FREE Domain Name Parking with registration and renewal of domain name for only \$20.00 per year.***

DialUp Net also offers generous Referral Incentives which gives you credit for every customer you refer to us.

Please take this opportunity to read our Hosting Agreement and Domain Registration Agreement You will need to accept them in order start a hosting account or register a domain with us.

Please take a look at our comprehensive Services page to see the large variety of account types available for the business customer. If you sign up today through our automated sign-up system *you can be online within minutes*. If you need hosting, we will *have your server ready within 24 hours!*

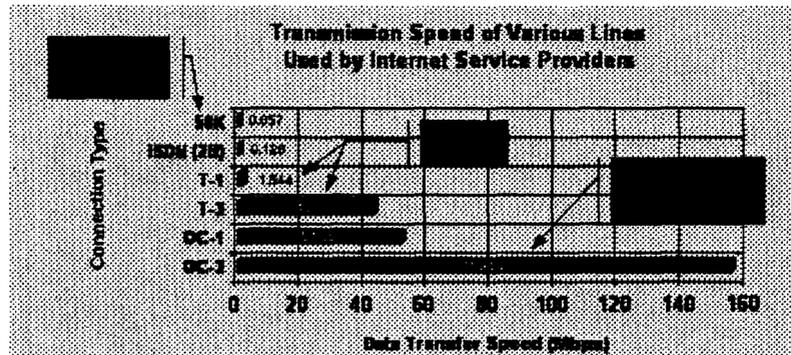


Business Services / Home Users : OC-3 & Bandwidth

What is an OC-3 line and why does it matter?

**Full
Circuit
Access**

The chart below shows a comparison of transfer rate capacity for the different kinds of network lines that are currently available. Remember, most ISPs today rely on T1 and T3 lines for their service.



What is bandwidth?

Simply put, bandwidth is used to measure the amount of time it takes for a web page to fully load, a file to transfer, or an e-mail to be delivered. Some networks carry voice and data, some carry consumer and business traffic, and others are designed in a way that reduces the efficiency of the data transferred. Dialup Net's network is designed specifically for Internet traffic so your information travels fast without the delays caused by other traffic.

I/O DABT SYSTEM REQUIREMENTS TO MEET THE INSTANTANEOUS COMMUNICATIONS WITH BOTH 1000 RCTs AND 1000 LOCAL TELEPHONE EXCHANGES (LTEs) ARE AS FOLLOWS:

kbps = 1,000 bits/second

Mbps = 1,000,000 bits/second

kBps = 1,000 Bytes/second

MBps = 1,000,000 Bytes/second

G = Giga = 1,000,000,000

RCTs

**MINIMUM RCT TRANSMISSION SPEED IS
FOR 1,000 RCTS IS WOULD REQUIRE**

56kbps

56Mbps

**DESIRED MINIMUM RCT I/O SPEED IS
FOR 1,000 RCTS IS WOULD REQUIRE**

250kbps

250Mbps

31.25MBps

LTEs

**MINIMUM LTE TRANSMISSION SPEED IS
FOR 1,000 RCTS IS WOULD REQUIRE**

56kbps

56Mbps

**DESIRED SPEED LTE I/O SPEED IS
FOR 1,000 RCTS IS WOULD REQUIRE**

250kbps

250Mbps

31.25MBps

**TOTAL DESIRED I/O DATA
TRANSFER SPEED**

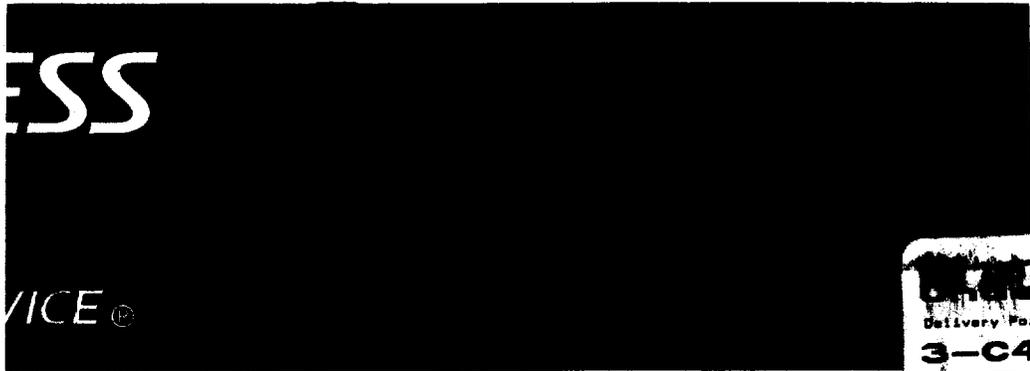
500Mbps

62.5MBps

0.0625GBps

OC-3 (OPTICAL CARRIER, LEVEL 3) CABLE IS RECOMMENDED TO BE USED FOR CONNECTING OUR SERVERS TO THE INTERNET WEB-RING. EACH OC-3 CABLE DATA TRANSFER SPEED IS AT THE RATE OF 155 Mbps or 19.375 MBps or 0.019375 GBps

TO MEET THE ABOVE REQUIREMENT, A MINIMUM OF FOUR (4) OC-3 (OPTICAL CARRIER, LEVEL 3) CABLES WOULD NEED TO BE INSTALLED FROM THE INTERNET WEB-RING TO OUR SERVERS.



ESS

VICE

RECEIVED BY STAGE OR
PUBLIC SAFETY DIV
CORPORATE ACCOUNT L
Adhiere

DELIVERED

Delivery Point
3-C405

Fitz-Gibbon, Thomas 04/20/01
202-418-8693 EB 11:57:40

Pkg/Bill #
ET279092810US

Please Rush To Addressee

vor de entregar urgentemente al destinatario

FOR PICK
Para recolect



RECEIVED
APR 20 2001
FCC MAIL ROOM



POST OFFICE TO ADDRESSEE



* E T 2 7 9 0 9 2 8 1 0 U S *

Form with handwritten entries: '4-20-01', '16', '0928', '10'. Includes fields for 'Flat Rate Envelope', 'Postage', 'Return Receipt', 'Insured', 'Signature'.

Delivery attempt table with columns: Delivery Attempt, Time, Employee Signature. Includes 'NO DELIVERY' checkbox and 'Customer Signature' line.

Addresssee Copy
Label 11-B, August 2000

CUSTOMER USE ONLY TO FILE A CLAIM FOR DAMAGE OR LOSS OF CONTENTS, THE POSTMASTER WILL RETURN THE ARTICLE, CONTAINER AND PACKAGING TO THE OFFICE OF ORIGIN.

FROM: (PLEASE PRINT) PHONE 617 877-4511
DARTCOM Technologies Inc
60 State Street, 10th Floor
Boston, MA 02109

TO: (PLEASE PRINT) PHONE 617 418-8693
THOMAS D. FITZ-GIBBON Esq
Enforcement Bureau
7-1000
445 1st St. Room 7-A-826
BOSTON, MA 02109