

Stratus® VOS Operating System

Count on Stratus for
The Smarter Approach to Uptime.™

***Time-tested
and trusted***



***Secure data
management***



***Easy-to-use programming
environment***

Count On Stratus


Get the Stratus VOS advantage for critical applications that must not fail

In a world where a few short minutes of downtime can spell disaster, business enterprises across a broad spectrum of industries and geographies count on the Stratus Virtual Operating System (VOS). Whatever their business, VOS users have one thing in common — they must support the most demanding computing environments found today. Perfected by two decades of engineering enhancements, VOS works seamlessly and transparently with the availability, reliability, and serviceability features built into every Stratus Continuum and V Series system, ensuring continuous availability for mission-critical applications.



The VOS operating system runs on Stratus® Continuum® and ftServer® V Series systems

As key components of Stratus' availability strategy, VOS and the Stratus fault-tolerant architecture were expressly designed to complement and strengthen each other. Together, they provide maximum availability and performance, even in the face of failure and reconfiguration.

VOS enables developers to bring applications into production quickly and simply. VOS supports open-system flexibility and capability for languages and communications as well as a comprehensive range of WAN and LAN protocols for distributed environments. Open StrataLINK® with TCP/IP software enables Stratus VOS-based systems to communicate in a standard network environment.

Designed as a high-security transaction-processing environment, VOS offers you optimum power, flexibility and efficiency for critical online computing tasks. Users and developers benefit from convenient program development facilities with efficient system and user resource scheduling and allocation — along with extensive networking capabilities.

Availability and reliability you can count on

VOS takes full advantage of the Stratus multiprocessor architecture. A single copy of the operating system manages tightly coupled processors within a module. This enables processors to be added to a module without modifying software or shutting down the system. And because multiprocessors share the workload for the greatest throughput, system performance is maximized.

VOS users benefit from the advantages of the most powerful computing environments offered by Stratus along with one of the strongest availability programs in the industry. The scalability features of these systems ensure an easy migration and growth path, further protecting the significant investments you've made in online transaction processing (OLTP) applications. Because continuous availability is built into Stratus' hardware architecture, it is achieved automatically at the application level — without special coding or failover scripting. As a result, VOS applications are easier to write, simpler to maintain, portable, and economical to customize and administer. Recognizing these strengths, Stratus software partners offer a broad portfolio of leadership VOS applications and tools with a proven record of success across a range of industries.

Easy-to-use programming environment

VOS offers a secure, easy-to-use programming environment that incorporates an advanced set of development tools. Exceptionally loyal to VOS, programmers and developers find it easier to write applications and rate the VOS multi-process debugging facilities superior to those found on any other system.

- **Programming languages**

The selection of high-level programming languages available to VOS developers includes C++, C, COBOL, PL/1, FORTRAN, Pascal, and Perl — with full ANSI-compliant versions of the major programming languages.

- **Symbolic debugger**

The VOS debugging facility works with any of the available languages to significantly reduce the amount of time required to bring an application into production. The powerful industry-standard gdb debugger works with all VOS compilers.

- **Secure data management**

The Transaction Protection Facility protects the consistency and integrity of data and provides tools for creating and administering a fast and efficient transaction processing system.

- **Large number of communications protocols**

VOS communications software products offer a full range of functionality, including networking, device emulation, and terminal connectivity.

Keeping VOS highly functional and up-to-date for tomorrow's needs



OpenVOS technologies expand the possibilities for integrating the VOS platform with other computing environments and platforms.

Stratus recognizes the importance of keeping VOS highly functional and up-to-date for tomorrow's needs. Our overall strategy is to increase VOS compatibility with features and capabilities provided by third-party open-source technologies.

Advanced Development Tools

- POSIX[®].1 compliance
- Programmability in high-level languages such as C++, C, COBOL, FORTRAN, Pascal, PL/I, and Perl
- Powerful symbolic debugger, including gdb
- Protected and simplified data management through the Transaction Protection Facility (TPF)
- CORBA compliance

OpenVOS layered products for developers

POSIX	A widely accepted standard for UNIX, helps port POSIX-compliant applications to VOS, and develop new, standards-based applications. Also includes the popular 'bash' shell, many POSIX commands, and a comprehensive API
GNU C/C++	The most popular compiler available today to support both new development and application porting
Samba	Makes VOS a fault-tolerant file server for Windows [®] clients. Samba also enables your programmers to develop on a Windows platform and recompile on VOS
Perl5	The most popular scripting language

User Interface Features

- Simple, direct access to operating system functions such as file and device I/O through the VOS command language
- Display form function that gives users a form for every command by displaying command arguments and a range of allowed values
- A command-macro facility that offers a command-programming capability for creating time-saving tools for system and application tasks
- International Character Set Support (ICSS) for European and Asian language and date formats
- National Computer Security Center (NCSC) C2-type security
- StrataDOC: VOS documentation and manuals on a convenient CD-ROM
- STCP-STREAMS-based TCP provides a standards-based implementation of TCP and supports new Internet protocols and functionality

OpenVOS layered products for system administration

RADIUS	An open, powerful security protocol enhances system protection
Open SSL, Open SSH	Enables VOS users and applications to securely transport data using advanced encryption technologies
IBM[®] MQSeries[®]	The most popular platform-independent queue management middleware
IPsec	Provides application-transparent encryption services for IP traffic
Apache Web Server	The world's most popular web server, provides fault-tolerant web services

Ways to extend your investment in VOS applications with OpenVOS

Increase VOS compatibility with open systems technologies

Gain the following advantages by making VOS POSIX-compliant and adding commonly used development tools, such as C++:

- Increased VOS interoperability and data sharing
- Improved development environment for creating new VOS applications that are robust and more interoperable in multi-vendor environments

Internet-enable VOS

VOS is especially well suited to supporting the Internet, the business channel of the future, with 99.999% continuous availability. Open technologies: Apache Web Server, RADIUS, IPsec, Open SSL, Open SSH, Samba, and MQSeries allow you to Internet-enable VOS. You'll gain:

- Optimal performance and protection for web-based applications
- Preservation of your current VOS application investments

Enable porting of non-VOS applications to fault-tolerant VOS

Technologies such as C++ and POSIX facilitate porting of non-VOS applications to the trusted VOS platform, allowing you to take advantage of the superior levels of reliability and availability offered by VOS.



ftServer V Series
Systems



Continuum Systems

The Smarter Approach to Uptime™

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