

# Stratus® OpenVOS 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 OpenVOS advantage for critical applications that must not fail



The OpenVOS operating system runs on Stratus® ftServer® V Series systems

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 Open Virtual Operating System (OpenVOS). Whatever their business, OpenVOS users have one thing in common — they must support the most demanding computing environments found today. Perfected by two decades of engineering enhancements, OpenVOS works seamlessly and transparently with the availability, reliability, and serviceability features built into every Stratus V Series system, ensuring continuous availability for mission-critical applications.

As key components of Stratus' availability strategy, OpenVOS 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.

OpenVOS enables developers to bring applications into production quickly and simply. OpenVOS 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 OpenVOS-based systems to communicate in a standard network environment.

Designed as a high-security transaction-processing environment, OpenVOS 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**

OpenVOS takes full advantage of the Stratus multi-processor 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.

OpenVOS 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, OpenVOS 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 OpenVOS applications and tools with a proven record of success across a range of industries.

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

OpenVOS 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 OpenVOS multi-process debugging facilities superior to those found on any other system.

- **Programming languages**

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

- **Symbolic debugger**

The OpenVOS 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 OpenVOS compilers.

- **Secure data management**

The Transaction Processing 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**

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

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



OpenVOS technologies expand the possibilities for integrating the V-Series platform with other computing environments and platforms.

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

## Advanced Development Tools

- POSIX<sup>®</sup>.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 Processing Facility (TPF)
- CORBA compliance

## OpenVOS layered products for developers

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

## User Interface Features

- Simple, direct access to operating system functions such as file and device I/O through the OpenVOS 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: OpenVOS documentation and manuals on a convenient CD-ROM and on the web at: <http://stratadoc.stratus.com>
- STCP-STREAMS-based TCP provides a standards-based implementation of TCP

## OpenVOS layered products for system administration

<b>RADIUS</b>	An open, powerful security protocol enhances system protection
<b>Open SSL, Open SSH</b>	Enables OpenVOS users and applications to securely transport data using advanced encryption technologies
<b>IBM<sup>®</sup> Websphere MQ 6</b>	The most popular platform-independent queue management middleware
<b>IPSec</b>	Provides application-transparent encryption services for IP traffic
<b>Apache Web Server</b>	The world's most popular web server, provides fault-tolerant web services

# Ways to extend your investment with OpenVOS

## Increase compatibility with open systems technologies

OpenVOS is POSIX-compliant. When used with standard development tools, such as C++, you benefit from the following advantages.

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

## Internet-enable OpenVOS

Delivering 99.999% continuous availability, OpenVOS is especially well suited to supporting Internet technology for businesses — now and in the future. Open technologies: Apache Web Server, RADIUS, IPsec, Open SSL, Open SSH, Samba, and MQSeries allow you to Internet-enable OpenVOS. 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 OpenVOS

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



ftServer V Series Systems

## ***The Smarter Approach to Uptime™***

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