

SYSGO

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www.sysgo.com**PikeOS Safe and Secure Virtualization**

PikeOS is an innovative OS providing an embedded systems platform where multiple virtual machines can run simultaneously in a secure environment. The Safe and Secure Virtualization (SSV) technology allows multiple operating systems APIs to run concurrently on one machine. PikeOS provides the widest range of “personalities” on the market. Its microkernel architecture allows it to be used in cost-sensitive, resource-constrained devices as well as large, complex systems. The simplicity, modularity, and compactness of the PikeOS design results in real-time performance that competes head-to-head with conventional proprietary RTOS solutions while offering innovations in platform independence. PikeOS includes CODEO, an Eclipse-based integrated development environment that provides guided configuration, remote debugging (often down to the hardware instruction level), target monitoring, remote application deployment, and timing analyses in addition to standard application development features such as compilers and assemblers.

**FEATURES**

- › Based on separation microkernel
- › Strict time and resource partitioning
- › Combines paravirtualization and hard real-time
- › MILS compliant
- › Eclipse-based development environment
- › Certification to safety-critical standards (DO-178B, IEC 61508, and EN 50128)
- › Personalities examples: Linux, legacy RTOS, ARINC 653, POSIX, RTEMS, PikeOS Native, OSEK, C/C++, Java, Ada
- › Available for PowerPC, x86, ARM, MIPS, SPARC V8/LEON, and others
- › Single and multicore processor support