POSIX (Portable Operating System Interface) is a set of standard [operating system](http://whatis.techtarget.com/definition/operating-system-OS)interfaces based on the [Unix](http://searchdatacenter.techtarget.com/definition/Unix) operating system. The need for [standardization](http://searchsqlserver.techtarget.com/definition/record-standardization) arose because [enterprises](http://searchwindowsserver.techtarget.com/definition/enterprise) using computers wanted to be able to develop programs that could be moved among different manufacturer's computer systems without having to be recoded. Unix was selected as the basis for a standard system interface partly because it was "manufacturer-neutral." However, several major versions of Unix existed so there was a need to develop a common denominator system.

Informally, each standard in the POSIX set is defined by a decimal following the POSIX. Thus, POSIX.1 is the standard for an application program interface in the [C](http://searchwindowsserver.techtarget.com/definition/C) language. POSIX.2 is the standard [shell](http://searchdatacenter.techtarget.com/definition/shell) and [utility](http://whatis.techtarget.com/definition/utility) interface (that is to say, the [user's command interface](http://searchwindowsserver.techtarget.com/definition/command-line-interface-CLI) with the operating system). These are the main two interfaces, but additional interfaces, such as POSIX.4 for [thread](http://whatis.techtarget.com/definition/thread) management, have been developed or are being developed. The POSIX interfaces were developed under the auspices of the Institute of Electrical and Electronics Engineers ([IEEE](http://whatis.techtarget.com/definition/IEEE-Institute-of-Electrical-and-Electronics-Engineers)).

POSIX.1 and POSIX.2 interfaces are included in a somewhat larger interface known as the X/Open Programming Guide (also known as the "Single UNIX Specification" and "[UNIX 03](http://whatis.techtarget.com/definition/Single-UNIX-Specification)"). [The Open Group](http://searchoracle.techtarget.com/definition/The-Open-Group), an industry standards group, owns the UNIX trademark and can thus "brand" operating systems that conform to the interface as "UNIX" systems. IBM's [OS/390](http://searchdatacenter.techtarget.com/definition/OS-390) is an example of an operating system that includes a branded UNIX interface. (Note that the trademark is "UNIX"; the generic terms for these operating systems is "Unix.")