POSIX Basics

Source: https://www.baeldung.com/linux/posix

What is POSIX?

POSIX stands for Portable Operating System Interface. It's a <u>family of standards specified</u> <u>by IEEE</u> for maintaining compatibility(호환성) among operating systems. Therefore, any software that conforms(적합하다) to POSIX standards should be compatible with other operating systems that adhere(준수하다) to the POSIX standards.

POSIX Defined Standards

The C API

POSIX defines its standards in terms of the C language. Therefore, programs are portable to other operating systems at the source code level.

The POSIX C API adds more functions on top of the ANSI C Standard for a number of aspects:

- File operations
- Processes, threads, shared memory, and scheduling parameters
- Networking
- Memory management
- Regular expressions

Character Set

As we know, computers only understand binary, so a character set represents the symbols that computers can process. For that reason, we need a standard character set that conforms to the one defined by POSIX.

Regular Expressions

Directory Structure

Most major Linux distributions conform to the Filesystem Hierarchy Standard (FHS). FHS defines a configurable tree-like directory structure. The first directory in the hierarchy is the root directory, and all the other directories, files, and special files branch out from it.