

code access rights.

System Utility – System Utility programs are responsible to do specialized, individual level tasks.

## Linux Operating System

### Kernel Mode vs User Mode

Kernel component code executes in a special privileged mode called kernel mode with full access to all resources of the computer. This code represents a single process, executes in single address space and do not require any context switch and hence is very efficient and fast. Kernel runs each processes and provides system services to processes, provides protected access to hardware to processes.

Support code which is not required to run in kernel mode is in System Library. User programs and other system programs works in User Mode which has no access to system hardware and kernel code. User programs/ utilities use System libraries to access Kernel functions to get system's low level tasks.

### Basic Features

Following are some of the important features of Linux Operating System.

Portable – Portability means software can works on different types of hardware in same way. Linux kernel and application programs supports their installation on any kind of hardware platform.

Open Source – Linux source code is freely available and it is community based development project. Multiple teams work in collaboration to enhance