Types of System Calls

- File Management: are responsible for file manipulation such as creating a file, reading a file, writing into a file etc.
- Information Maintenance: handle information and its transfer between the operating system and the user program.
- Process Control: deal with processes such as process creation, process termination etc.
- Device Management: are responsible for device manipulation such as reading from device buffers, writing into device buffers etc.
- Signalling: are useful for interprocess communication. They also deal with creating and deleting a communication connection.

SysCall	Description	-NoValue-	-NoValue-	-NoValue-	-NoValue-	-NoValue-	-NoValue-	-NoValue-
-NoValue-	read from a file descriptor	0	-NoValue- $\operatorname{int} \operatorname{fd}$	-NoValue- $^*\mathrm{buf}$	-NoValue- count			
-NoValue-	write to a file descriptor	1	-NoValue- $\operatorname{int} \operatorname{fd}$	-NoValue- char *buf	-NoValue- count			
-NoValue-	open a file or device	2	-NoValue- char *filename	-NoValue- ${ m flags}$	-NoValue- mode			
-NoValue-	close a file descriptor	3	-NoValue- $\operatorname{int} \operatorname{fd}$					
-NoValue-	get file status	4	-NoValue- char *filename	-NoValue- stat *statbuf				
-NoValue-	get file status	5	-NoValue- $\operatorname{int} \operatorname{fd}$	-NoValue- stat *statbuf				
-NoValue-	get file status	6	-NoValue- char *filename					
-NoValue-	wait for some event on a file descriptor	7	-NoValue- $\operatorname{poll}_f d * ufds$	-NoValue- int nfds	-NoValue- $timeout_m secs$			
-NoValue-	reposition read/write file offset	8	-NoValue- int fd	-NoValue- offset	-NoValue- int origin			
-NoValue-	map pages of memory	9	-NoValue- long addr	-NoValue- long len	-NoValue- long prot	-NoValue- long flags	-NoValue- $\log \mathrm{fd}$	-NoValue- long offset
-NoValue-	set protection of memory mapping	10	-NoValue- long start	-NoValue- len	-NoValue- long prot			
-NoValue-	unmap pages of memory	11	-NoValue- $long \ addr$	-NoValue- len				
-NoValue-	change data segment size	12	-NoValue- $long\ brk$					
-NoValue-	examine and change a signal action	13	-NoValue- sig	-NoValue- struct sigaction *act	-NoValue- sigaction *oact	-NoValue- sigsetsize		
-NoValue-	examine and change blocked signals	14	-NoValue- how	-NoValue- *nset	-NoValue- *oset	-NoValue- sigsetsize		
-NoValue-	return from signal handler and cleanup stack frame	15	-NoValue- long					
-NoValue-	control device	16	-NoValue- int fd	-NoValue- int cmd	-NoValue- long arg			
-NoValue-	read from or write to a file descriptor at a given offset	17	-NoValue- long fd	-NoValue- *buf	-NoValue- count	-NoValue- pos		
-NoValue-	a description	n						
-NoValue-	a description	n						
-NoValue-	a description	n						
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References

- An Introduction to Linux System Calls
- \bullet Linux System Call Table for x86_64
- LINUX System Call Quick Reference
- Linux Inside: System Calls