

LINUX ARM SYSCALLS

Basic syscalls in ARM Linux:

Name	Calling				Returns
	Code in r7	r0	r1	r2	r0
exit	1	int exitCode			
read	3	int fileHandle	char * memory	int numBytes	int bytesRead
write	4	int fileHandle	char * memory	int numBytes	
open	5	char * fileName	int flags	int mode	int fileHandle
close	6	int fileHandle			

File Handles:

Standard handles:

- 0 = console input (stdin)
- 1 = console output (stdout)
- 2 = console error stream (stderr)

For actual files, first do open syscall. It returns fileHandle number in r0. Store and use that number in read/write/open calls.

Flags Options:

Add together one or more of the following codes.

Note values are in Octal (base 8) make sure to include leading 0 when entering into assembly. Example:

Write, Create, Truncate would be #01101

00	Read ONLY
01	Write ONLY
02	Read/Write
0100	Create file if does not exist
01000	Truncate existing file
02000	Append to existing file

Mode Options:

What permissions to give the new file.

0644 means you can read/write, everyone else just read (include leading 0 to indicate octal)

For more info see:

<http://ryanstutorials.net/linuxtutorial/permissions.php>