

Compile & Run programs in SMX

For compiling smx user programs, smx provides sunread command to read a SunOS file and writes it on standard output. The way we compile and run a program is to first create this file in solaris, then, we use sunread to import this file to smx. Next thing we do is to run it.

I will illustrate this process here in the document. Notice that the file to be imported must be located in smx/src/tools directory. Assume we are using the “hello world” program:

Under Solaris, we do:

- (1) `cd /home/seed/785/san/smx/src/tools`
- (2) *Create your own program. Assume it is `HelloWorld.c`*

```
#include <stdio.h>
main (int argc, char **argv)
{
    printf ("Hello World\n");
}
```
- (3) `mcc HelloWorld.c -o HelloWorld` (*Note: you can create it anywhere, but you would need to put the program entry in your Makefile*)
- (4) *Run minix, Login as root*
- (5) `sunread HelloWorld > HelloWorld`
- (6) `chmod +x HelloWorld`
- (7) `./HelloWorld`

Here is one thing to remember: ***a copy of this program is located in your src/tools directory.*** Sunread command will look into this directory for the file to be ported.

There is an analogous sunwrite command, which writes a file from a Minix file system into a Solaris file system. Type “man sunread” and “man sunwrite”, in Minix, for more information.

NOTE: if you recompile your libraries (make in src/lib), the newly recompiled libraries *will not be used* until you then recompile the code that uses those libraries. So if you recompile your libraries, then recompile Minix, the Minix test code (if needed), and any Minix user programs that you've written.