

Lua C & Swig

Steven Starr

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1. Create the ath.c file with an add function inside.

ath.c

```
#include <stdio.h>
#include "ath.h"

int add(int x, int y) {
    return x+y;
}
```

2. Create an ath.h header file with your add function prototype.

ath.h

```
extern int add(int x, int y);
```

3. Create an ath.i file that also contains your add function prototypes.

ath.i

```
/* ath.i */
%module ath
%{
    extern int add(int x, int y);
%}
extern int add(int x, int y);
```

4. Build Shared

```
swig -lua ath.i
```

```
gcc -I/usr/include/lua -c ath_wrap.c -o ath_wrap.o
```

```
gcc -c ath.c -o ath.o
```

```
gcc -shared -I/usr/include/lua -L/usr/lib/lua ath_wrap.o ath.o -o ath.so
```

5. Usage Example

```
require ("ath")
```

```
print(ath.add(10, 80))
```
