

Swift File Format and ABI

##ABI

###Name Demangling:

####Simple Protocol:

Swift namespace:

```
_TtPSs(protocol name length)(protocol name)
```

Non-Swift namespace:

```
_TtP(namespace name length)(namespace name)(protocol name length)(proto
```

####Simple Class:

Swift namespace:

```
_TtCSs(class name length)(class name)
```

Non-Swift namespace

```
_TtC(namespace name length)(namespace name)(class name length)(class na
```

##File Format

###Offset: 0x0

####.swiftmodule + .swiftdoc

```
E2 9C A8
```

###Offset: 0x3

####.swiftmodule

```
0E
```

####.swiftdoc

```
07
```

###Offset: 0x4

####.swiftmodule + .swiftdoc

```
01 08 00 00
```

###Offset: 0x8

####.swiftmodule

```
9E 05 00 00
```

####.swiftdoc

```
22 00 00 00
```

...

####.swiftmodule regardless of platform the first 5768 bytes of the file is the same

####.swiftdoc regardless of platform the first 152 bytes of the file is the same

...

####.swiftdoc

name mangling:

```
[4 bytes] = full length of item string  
[4 bytes] = unknown  
s:*#____#____#____  
* = unknown  
# = number of characters per segment of the described item  
____ = name of item
```

comment format:

```
[01 00 00 00] = prefix  
[4 bytes] = length of described comment  
[N bytes] = comment string (non-null terminated.)
```

...

####.swiftmodule + .swiftdoc

end in 12 bytes of zero

00 00 00 00

00 00 00 00

00 00 00 00

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