68.1. DESCRIPTION CHAPTER 68. PERLXS

## 68.1.8 The PACKAGE Keyword

When functions within an XS source file must be separated into packages the PACKAGE keyword should be used. This keyword is used with the MODULE keyword and must follow immediately after it when used.

```
MODULE = RPC PACKAGE = RPC

[ XS code in package RPC ]

MODULE = RPC PACKAGE = RPCB

[ XS code in package RPCB ]

MODULE = RPC PACKAGE = RPC

[ XS code in package RPC ]
```

The same package name can be used more than once, allowing for non-contiguous code. This is useful if you have a stronger ordering principle than package names.

Although this keyword is optional and in some cases provides redundant information it should always be used. This keyword will ensure that the XSUBs appear in the desired package.

## 68.1.9 The PREFIX Keyword

The PREFIX keyword designates prefixes which should be removed from the Perl function names. If the C function is rpcb\_gettime() and the PREFIX value is rpcb\_ then Perl will see this function as gettime().

This keyword should follow the PACKAGE keyword when used. If PACKAGE is not used then PREFIX should follow the MODULE keyword.

```
MODULE = RPC PREFIX = rpc_

MODULE = RPC PACKAGE = RPCB PREFIX = rpcb_
```

## 68.1.10 The OUTPUT: Keyword

The OUTPUT: keyword indicates that certain function parameters should be updated (new values made visible to Perl) when the XSUB terminates or that certain values should be returned to the calling Perl function. For simple functions which have no CODE: or PPCODE: section, such as the sin() function above, the RETVAL variable is automatically designated as an output value. For more complex functions the **xsubpp** compiler will need help to determine which variables are output variables.

This keyword will normally be used to complement the CODE: keyword. The RETVAL variable is not recognized as an output variable when the CODE: keyword is present. The OUTPUT: keyword is used in this situation to tell the compiler that RETVAL really is an output variable.

The OUTPUT: keyword can also be used to indicate that function parameters are output variables. This may be necessary when a parameter has been modified within the function and the programmer would like the update to be seen by Perl.

```
bool_t
rpcb_gettime(host,timep)
    char *host
    time_t &timep
OUTPUT:
    timep
```