68.1.38   The INCLUDE: Keyword

This keyword can be used to pull other files into the XS module. The other files may have XS code. INCLUDE: can also be used to run a command to generate the XS code to be pulled into the module.

The file *Rpcb1.xsh* contains our `rpcb_gettime()` function:

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

The XS module can use INCLUDE: to pull that file into it.

```
INCLUDE: Rpcb1.xsh
```

If the parameters to the INCLUDE: keyword are followed by a pipe (|) then the compiler will interpret the parameters as a command.

```
INCLUDE: cat Rpcb1.xsh |
```

68.1.39   The CASE: Keyword

The CASE: keyword allows an XSUB to have multiple distinct parts with each part acting as a virtual XSUB. CASE: is greedy and if it is used then all other XS keywords must be contained within a CASE:. This means nothing may precede the first CASE: in the XSUB and anything following the last CASE: is included in that case.

A CASE: might switch via a parameter of the XSUB, via the `ix` ALIAS: variable (see §68.1.33), or maybe via the `items` variable (see §68.1.22). The last CASE: becomes the **default** case if it is not associated with a conditional. The following example shows CASE switched via `ix` with a function `rpcb_gettime()` having an alias `x_gettime()`. When the function is called as `rpcb_gettime()` its parameters are the usual (`char *host, time_t *timep`), but when the function is called as `x_gettime()` its parameters are reversed, (`time_t *timep, char *host`).

```
long
rpcb_gettime(a,b)
  CASE: ix == 1
    ALIAS:
      x_gettime = 1
    INPUT:
      # 'a' is timep, 'b' is host
      char *b
      time_t a = NO_INIT
    CODE:
          RETVAL = rpcb_gettime( b, &a );
    OUTPUT:
      a
      RETVAL
  CASE:
      # 'a' is host, 'b' is timep
      char *a
      time_t &b = NO_INIT
    OUTPUT:
      b
      RETVAL
```

That function can be called with either of the following statements. Note the different argument lists.

```
        $status = rpcb_gettime( $host, $timep );

        $status = x_gettime( $timep, $host );
```