## Identification

The Process Wait Table
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## Purpose

The Process Wait Table (PWT) is a table containing a group
of relative pointers to a collection of event-threads
running through the APT.  It is in this table that an
association is made between an event name and an event
thread.

## Description

The PWT is declared as follows:

```
declare 1 pwt(n) based (pwt_ptr),

        2 thread bit(18),   /* to a list of APT entries */

        2 flag bit(1),      /* activation flag */

        2 filler bit(17);
```

The PWT is n entries long, where n is set to be a prime
number which is considerably larger than the maximum number
of loaded processes.  Each PWT entry is the head of an
event thread; a mapping is done from the set of all possible
event names into the set of integers from 1 to n, by dividing
the event name into n and by using the remainder as index
into the PWT.

A PWT entry is said to be inactive when both thread and
flag are reset to zero.  The setting of either thread
or flag to a non-zero value "activates" the PWT entry.

The Traffic Controller subroutine addevent activates an
event by setting its flag to "1"b.  Subroutine wait may
set the thread to non-zero and subroutine notify always
resets the whole entry to zero (deactivates the event).

By convention, event number 0 (zero) is known to the system
supervisor and is used by it for internal purposes (see
Interprocess Communication Facility, destroy_proc).