

Identification

The Active Event Table

Robert L. Rappaport, Michael J. Spier

Purpose

The Active Event Table (AET) 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 AET is declared as follows

```
declare 1 aet(n) based(aet_ptr),
        2 thread bit(18),
        2 flag bit(1) ;
```

The AET 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 AET 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 AET.

An AET 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 AET entry.

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