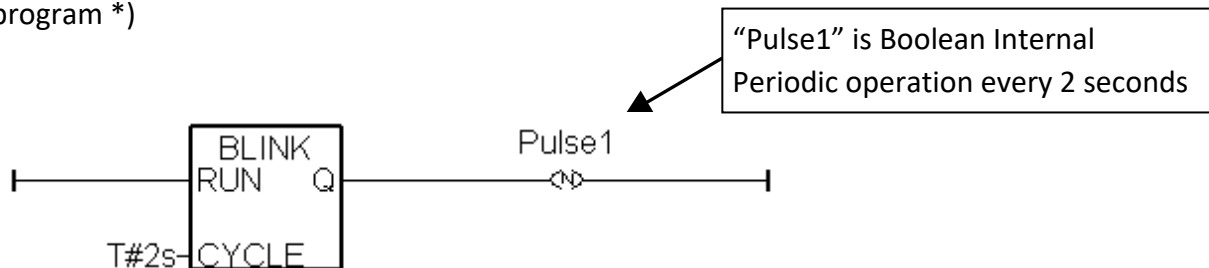


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How to do periodic operation on ISaGRAF PAC?

The The “BLINK” function block can apply to generate a Pulse True periodically. So it can apply in some periodic operations like as below.

(* LD program *)



(* ST program *)

```

IF   Pulse1   THEN      (* above LD program will generate a pulse TRUE in "pulse1" variable *)

    (* do operation *)
    (* .....          *)

END_IF ;

```

The above program has a disadvantage. When the periodic interval time is short, for example – 200ms or smaller, or the PAC’s PLC scan time is bigger, the operation time will not be precise. For example to do a periodic operation every 50 milli-second. Because 50ms is a shorter interval, it is much closer to the PLC scan time compared to interval time of 250 ms or 2 seconds, the result time will not be precise.

To improve this, following codes can be applied.

ST program:

```

IF   INIT   THEN
    INIT := False ;
    T1  := T#0s ;
    T1_next := T1 + T#50ms ;
    Tstart (T1) ;
END_IF ;

```

“INIT” is declared as Boolean Internal
And init as TRUE
“T1” and “T1_next” are Timer Internal

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IF T1 >= T1_next THEN

IF T1 > T#22h THEN

T1 := T#0s;

T1_next := T#0s ;

END_IF ;

T1_next := T1_next + T#50ms ; (* calculate next operation time *)

(* do operation *)

(* *)

END_IF ;

Timer will be overflow if it is ticking to T#23h59m59s999ms. So we can reset it to 0 second when it just reach the "22h" or "16h" whatever a bigger time you like.

Click the link for more ISaGRAF FAQ:

<http://www.icpdas.com/en/faq/index.php?kind=280#751>