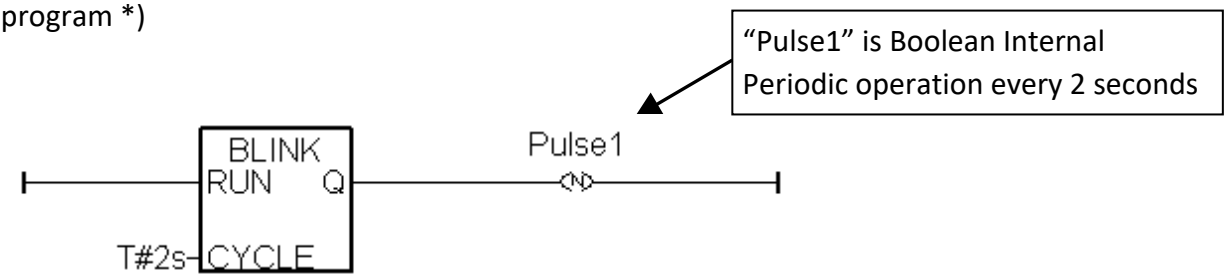
How to do periodic operation on ISaGRAF PAC?

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

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