

RE: Timing events in GNAT GPL 2006

Source: <http://coding.derkeiler.com/Archive/Ada/comp.lang.ada/2007-01/msg00067.html>

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```
--
with Ada.Real_Time; use Ada.Real_Time;
with Ada.Real_Time.Timing_Events; use Ada.Real_Time.Timing_Events;
with Ada.Text_IO; use Ada.Text_IO;

procedure Test_Timing_Event is

protected Clock_Tick is
  procedure Inc_Clock (Ev : Timing_Event);
end Clock_Tick;

Tick : Timing_Event;
One_Sec : constant Time_Span := Seconds (1);

protected body Clock_Tick is
  procedure Inc_Clock (Ev : Timing_Event)
  is
  begin
    Put_Line ("Inc_Sec");
    -- using Time_Span
    Set_Handler (Tick, One_Sec, Handler => Inc_Clock'Access);
  end Inc_Clock;
end Clock_Tick;

begin
  -- using absolute time
  Set_Handler (Tick, Clock + One_Sec, Clock_Tick.Inc_Clock'Access);
  loop null; end loop;
end Test_Timing_Event;

-- >>
```

There are three things wrong with your codes. Two of them are critical.

1. The protected procedure `Inc_Clock` has wrong parameter mode. It must be in out mode.
2. The call `Set_Handler` from the protected procedure will result in a deadlock it is run.
3. Protected object must be declared at the library level. Yours is not. As the result, non-local pointer cannot point to local object error at

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lines 20 and 26

I designed for both one shot and periodic timers using Timing Event. If it is helpful, I will post my code here. Just let me know.

AV

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