COVERGROUP WITH VARIABLE FROM SVA LOCAL VARIABLE

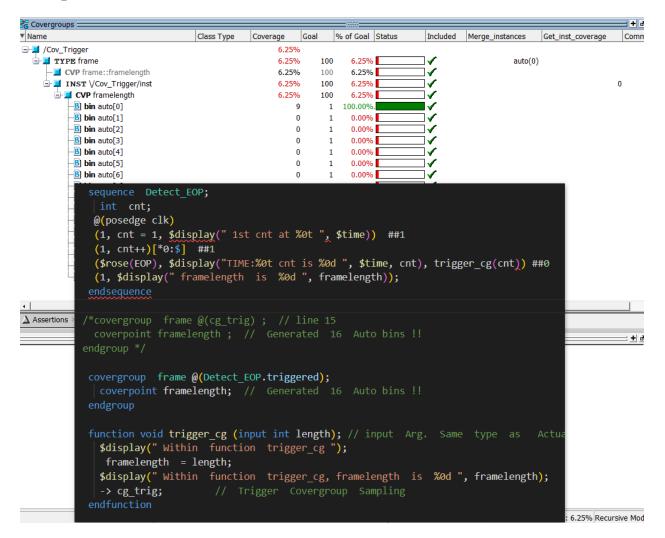
Module variable framelength updated from within sequence_match_item using a function

```
event cg_trig;
 bit clk, SOP, EOP;
 bit [3:0] framelength;
function void trigger_cg (input int length);
  variable ' cnt '
   framelength = length;
    -> cg_trig;
                    // Trigger Covergroup Sampling
endfunction
 property SOP_2_EOP;
  @(posedge clk) $rose(SOP) |-> Detect_EOP;
 endproperty
 assert property (SOP_2_EOP);
sequence Detect EOP;
  int cnt;
  @(posedge clk)
  (1, cnt = 1) \# 1
  (1, cnt++)[*0:$] ##1
  ($rose(EOP), $display("TIME:%0t cnt is %0d ", $time, cnt), trigger_cg(cnt)) ##0
  (1, $display(" framelength is %0d ", framelength));
 endsequence
 k/*covergroup frame @(cg trig); // // SEE different options below
```

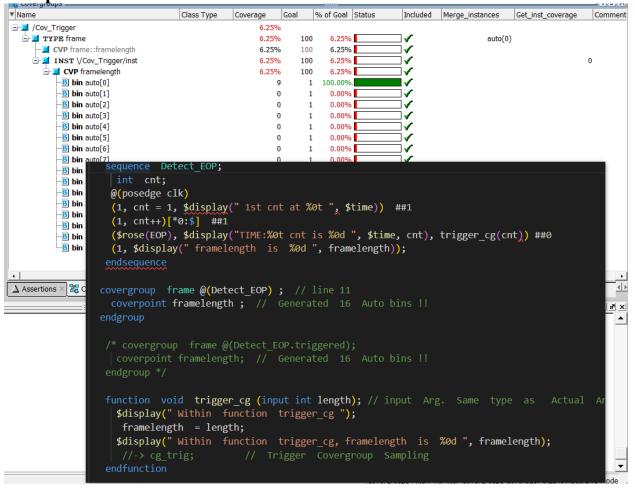
```
/*covergroup frame @(cg_trig); // // SEE different options belo'
coverpoint framelength; // Generated 16 Auto bins !!
endgroup */
```

```
covergroup frame @(Detect_EOP.triggered); // SEE different options below coverpoint framelength; // Generated 16 Auto bins !! endgroup
```

Simulation results with sequence_name.triggered as covergroup trigger Unexpected results



Simulation results with sequence_name as covergroup trigger Unexpected results



Simulation results with event trigger from function as covergroup trigger Expected results

Covergroups								+ ₫ ×
* Name	Class Type	Coverage	Goal	% of Goal Status	Included	Merge_instances	Get_inst_coverage	Comment
□-I /Cov_Trigger		6.25						
- TYPE frame		6.25		00 6.25%		auto(0)	
CVP frame::framelength		6.25		00 6.25%				
□-□ INST \/Cov_Trigger/inst □-□ CVP framelength		6.25 6.25		00 6.25% 00 6.25%				0
B bin auto[0]		0.23	0	1 0.00%	$\exists \checkmark$			
B bin auto[1]			0	1 0.00%	⊣` ∕			
-B] bin auto[2]			õ	1 0.00%	=;			
-B bin auto[3]			0	1 0.00%	_ ∕			
B bin auto[4]			0	1 0.00%				
B bin auto[5]			1	1 100.00%.	_ ∕			
B bin auto[6]			0	1 0.00%	∕			
-B bin auto[7]			0	1 0.00%				
-B bin auto[8]			0	1 0.00%	\checkmark		_	
sequence Detect_I	±0P;							
int cnt;								
<pre>@(posedge clk)</pre>								
(1, cnt = 1, \$dis	splay(" 1st	cnt at	%0t ",	\$time)) ##1				
(1, cnt++)[*0:\$]								
(\$rose(EOP), \$di		.%At cot	ic %0	d" \$time ont) trigg	er cg(cnt) #	1110	
(1, \$display(" fi					,, ,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
	amerengen	12 %0u	, 11 [.]	amerengen));				
endsequence								
Assertion:								()
covergroup frame (@(cg_trig)	; // li	ne 15					
coverpoint frame	length ; /	/ Gener	ated	16 Auto bins !			VISIBILITY	
.ngs=1. endgroup	0 2 .							
chaBr oup								
14 F								
/* covergroup fra								
coverpoint frame	elength; /		ated	16 Auto bins !				
endgroup */								
function void trig	ager ca (in	out int	longth)• // input Ar	ο ς οπο	type as	Actu	
\$display(" With:					5. Sume	cype us	AC CO	
		n criigg	er_cg),				
framelength =								
\$display(" With:	in functio	n trigg	er_cg,	framelength i	.s %0d "	, framelength	ı);	
-> cg trig;	// Tr	igger C	overgr	oup Sampling				-
endfunction							ige: 6.25% Recu	rsive Mode