

An Event-B Specification of
ExtendsMultipleContexts

Test extending from multiple contexts.

1	CONTEXT Alfa	2
1.1	AA	2
1.2	a aa aaa	2
2	CONTEXT Beta	3
2.1	BB	3
2.2	b bb bbb	3
3	CONTEXT Gamma	4
3.1	GG	4
3.2	g gg ggg	4
4	MACHINE Machina	5
4.1	xa xb xg	5

CONTEXT Alfa

1

SETS

1.1

AA

CONSTANTS

1.2

a

aa

aaa

AXIOMS

axm1: partition(AA, {a}, {aa}, {aaa})

END

CONTEXT Beta	2
<hr/>	
SETS	2.1
BB	
CONSTANTS	2.2
b	
bb	
bbb	
AXIOMS	
axm1: partition(BB , { b }, { bb }, { bbb })	
END	

CONTEXT	Gamma	3
<hr/>		
EXTENDS	Alfa Beta	
SETS		3.1
	GG	
CONSTANTS		3.2
	g	
	gg	
	ggg	
AXIOMS		
	axm1: partition(GG, {g}, {gg}, {ggg})	
END		

MACHINE *Machina*

4

SEES *Gamma*

VARIABLES

4.1

xa

xb

xg

INVARIANTS

inv1: *xa* ∈ *AA*

inv2: *xb* ∈ *BB*

inv3: *xg* ∈ *GG*

EVENT *INITIALISATION*

THEN

init1: *xa* := *a*

init2: *xb* := *b*

init3: *xg* := *g*

END

Alfa, 2, 4

Beta, 3, 4

Gamma, 4, 5

INITIALISATION, 5

Machina, 5

xa, 5

xb, 5

xg, 5