

An Event-B Specification of  
ExtendsMultipleContexts

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Test extending from multiple contexts.

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

CONTEXT Alfa

1

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SETS

1.1

AA

CONSTANTS

1.2

a

aa

aaa

AXIOMS

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

END

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

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

MACHINE *Machina*

4

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SEES *Gamma*

VARIABLES

4.1

*xa*

*xb*

*xg*

INVARIANTS

*inv1:*    *xa* ∈ *AA*

*inv2:*    *xb* ∈ *BB*

*inv3:*    *xg* ∈ *GG*

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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