

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

SETS

2.1

BB

CONSTANTS

2.2

b

bb

bbb

AXIOMS

axm1: partition(BB, {b}, {bb}, {bbb})

END

CONTEXT Gamma

3

EXTENDS Alfa Beta

SETS

GG

3.1

CONSTANTS

g

gg

ggg

3.2

AXIOMS

axm1: partition(GG, {g}, {gg}, {ggg})

END

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