

```

1  /*
2  * Scola Tutorial
3  * by Antoine B. Rauzy
4  * Bridge with just blocks and scenarios
5  */
6
7  domain UnitState {WORKING, FAILED} end
8
9  block System
10     block source
11         Boolean outFlow true
12     end
13     block A
14         UnitState _state WORKING
15         Boolean inFlow false
16         Boolean outFlow false
17         assertion Transfer
18             set outFlow (if (eq _state WORKING) inFlow false)
19         end
20     end
21     block B
22         UnitState _state WORKING
23         Boolean inFlow false
24         Boolean outFlow false
25         assertion Transfer
26             set outFlow (if (eq _state WORKING) inFlow false)
27         end
28     end
29     block C
30         UnitState _state WORKING
31         Boolean inFlow false
32         Boolean outFlow false
33         assertion Transfer
34             set outFlow (if (eq _state WORKING) inFlow false)
35         end
36     end
37     block D
38         UnitState _state WORKING
39         Boolean inFlow false
40         Boolean outFlow false
41         assertion Transfer
42             set outFlow (if (eq _state WORKING) inFlow false)
43         end
44     end
45     block target
46         Boolean inFlow false
47     end
48     assertion Transfer
49         set A.inFlow source.outFlow
50         set B.inFlow A.outFlow
51         set C.inFlow A.outFlow
52         set D.inFlow (or B.outFlow C.outFlow)
53         set target.inFlow D.outFlow
54     end
55 end
56
57 scenario SystemPool as System
58     scenario ALane as A
59         state Initial
60         task Failure
61             set _state FAILED
62         end
63         task Repair
64             set _state WORKING
65         end
66         next Initial Failure
67         next Failure Repair
68         next Repair Failure
69     end
70     scenario BLane as B
71         state Initial
72         task Failure

```

```
73         set _state FAILED
74     end
75     task Repair
76         set _state WORKING
77     end
78     next Initial Failure
79     next Failure Repair
80     next Repair Failure
81 end
82 scenario CLane as C
83     state Initial
84     task Failure
85         set _state FAILED
86     end
87     task Repair
88         set _state WORKING
89     end
90     next Initial Failure
91     next Failure Repair
92     next Repair Failure
93 end
94 scenario DLane as D
95     state Initial
96     task Failure
97         set _state FAILED
98     end
99     task Repair
100         set _state WORKING
101     end
102     next Initial Failure
103     next Failure Repair
104     next Repair Failure
105 end
106 end
107
```