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1 |----- MODULE AJupiterH -----|
2 | EXTENDS AJupiter |
3 |-----|
4 | VARIABLE list
5 | varsH  $\triangleq \langle vars, list \rangle$ 
6 |
7 | TypeOKH  $\triangleq TypeOK \wedge (list \subseteq List)$ 
8 |-----|
9 | InitH  $\triangleq Init \wedge list = \{InitState\}$ 
10 |
11 | DoH(c)  $\triangleq Do(c) \wedge list' = list \cup \{state'[c]\}$ 
12 |
13 | RevH(c)  $\triangleq Rev(c) \wedge list' = list \cup \{state'[c]\}$ 
14 |
15 | SRevH  $\triangleq SRev \wedge list' = list \cup \{state'[Server]\}$ 
16 |-----|
17 | NextH  $\triangleq$ 
18 |    $\vee \exists c \in Client : DoH(c) \vee RevH(c)$ 
19 |    $\vee SRevH$ 
20 |
21 | FairnessH  $\triangleq$ 
22 |    $WF_{varsH}(SRevH \vee \exists c \in Client : RevH(c))$ 
23 |
24 | SpecH  $\triangleq InitH \wedge \Box[NextH]_{varsH} \wedge FairnessH$ 
25 |-----|
26 | Weak List Consistency (WLSpec) |
27 |-----|
28 |
29 | WLSpec  $\triangleq Comm(Msg)!EmptyChannel$ 
30 |    $\Rightarrow \forall l1, l2 \in list :$ 
31 |      $\wedge Injective(l1)$ 
32 |      $\wedge Injective(l2)$ 
33 |      $\wedge Compatible(l1, l2)$ 
34 |
35 | THEOREM SpecH  $\Rightarrow WLSpec$ 
36 | Strong List Consistency (SLSpec) |
37 |-----|
38 |
39 | \ * Modification History
40 | \ * Last modified Thu Dec 27 20:36:24 CST 2018 by hengxin
41 | \ * Created Thu Aug 30 21:26:18 CST 2018 by hengxin

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