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1  |----- MODULE XJupiterExtended -----|
   |XJupiter extended with serial views. This is used to show that XJupiter implements CJupiter.|
5  EXTENDS XJupiter, JupiterSerial
6  |-----|
7  VARIABLES      |Simulate the behavior of propagating original operations in CJupiter.|
8      cincomingCJ, cincoming for CJupiter which contains original operations
9                  |instead of transformed ones in XJupiter|
10     sincomingCJ  (not used)
12  commCJVars  $\triangleq$   $\langle \textit{cincomingCJ}, \textit{sincomingCJ} \rangle$ 
13  varsEx  $\triangleq$   $\langle \textit{commCJVars}, \textit{serialVars}, \textit{vars} \rangle$ 
15  commCJ  $\triangleq$  INSTANCE CSComm WITH Msg  $\leftarrow$  Seq(Cop),
16                      cincoming  $\leftarrow$  cincomingCJ, sincoming  $\leftarrow$  sincomingCJ
17  |-----|
18  TypeOKEx  $\triangleq$ 
19       $\wedge$  TypeOK
20       $\wedge$  commCJ! TypeOK
21       $\wedge$  TypeOKSerial
23  InitEx  $\triangleq$ 
24       $\wedge$  Init
25       $\wedge$  commCJ! Init
26       $\wedge$  InitSerial
28  DoEx(c)  $\triangleq$ 
29       $\wedge$  Do(c)
30       $\wedge$  DoSerial(c)
31       $\wedge$  UNCHANGED commCJVars
33  RevEx(c)  $\triangleq$ 
34       $\wedge$  Rev(c)
35       $\wedge$  commCJ! CRev(c)
36       $\wedge$  RevSerial(c)
38  SRevEx  $\triangleq$ 
39       $\wedge$  SRev
40       $\wedge$  LET cop  $\triangleq$  Head(sincoming)
41          IN  $\wedge$  commCJ! SSendSame(ClientOf(cop), cop)
42       $\wedge$  SRevSerial
43       $\wedge$  UNCHANGED sincomingCJ
44  |-----|
45  NextEx  $\triangleq$ 
46       $\vee \exists c \in \textit{Client} : \textit{DoEx}(c) \vee \textit{RevEx}(c)$ 
47       $\vee$  SRevEx
49  FairnessEx  $\triangleq$ 

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50 $\wedge \text{WF}_{\text{varsEx}}(S\text{RevEx} \vee \exists c \in \text{Client} : \text{RevEx}(c))$

52 $\text{SpecEx} \triangleq \text{InitEx} \wedge \Box[\text{NextEx}]_{\text{varsEx}} \wedge \text{FairnessEx}$

53

\ * Modification History

\ * Last modified *Wed Jan 02 21:13:58 CST 2019* by *hengxin*

\ * Created *Tue Oct 30 20:32:27 CST 2018* by *hengxin*