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1  |----- MODULE JupiterCtx -----|
   | Definitions and operators for context-based Jupiter protocols, including AbsJupiter, CJupiter, |
   | and XJupiter. |
6  | EXTENDS JupiterInterface |
7  |-----|
8  | VARIABLES
9      cseq    cseq[c]: local sequence number at client c ∈ Client
10     ds      \ * ds[r]: document state (a set of Oids) of replica r ∈ Replica
12     ctxVars ≜ ⟨cseq⟩
13 |-----|
   | Cop: operation of type Op with context
17     Oid ≜ [c : Client, seq : Nat] operation identifier
18     Cop ≜ [op : Op ∪ {Nop}, oid : Oid, ctx : SUBSET Oid]
   | OT of two operations of type Cop.
22     COT(lcp, rcp) ≜ [lcp EXCEPT !.op = Xform(lcp.op, rcp.op), !.ctx = @ ∪ {rcp.oid}]
23 |-----|
24     TypeOKCtx ≜
25         ∧ cseq ∈ [Client → Nat]
27     InitCtx ≜
28         ∧ cseq = [c ∈ Client ↦ 0]
30     DoCtx(c) ≜
31         ∧ cseq' = [cseq EXCEPT ![c] = @ + 1]
33     RevCtx(c) ≜
34         ∧ UNCHANGED cseq
36     SRevCtx ≜
37         ∧ UNCHANGED cseq
38 |-----|
   | \ * Modification History
   | \ * Last modified Sat Dec 15 17:20:47 CST 2018 by hengxin
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