MODULE $AJupiterImplXJupiter$

EXTENDS $AJupiter$

VARIABLES $c2ss$, $s2ss$

$$
\begin{array}{l}
DoImpl(c,\, op) \triangleq \text{LET } cop \triangleq [op \mapsto op,\, oid \mapsto [c \mapsto c,\, seq \mapsto cseq[c]],\, ctx \mapsto ds[c]] \\
\qquad\qquad\qquad\quad \text{IN } \; c2ss' = [c2ss \text{ EXCEPT } ![c] = \\
\qquad\qquad\qquad\qquad @ \oplus [node \mapsto \{ds'[c]\}, \\
\qquad\qquad\qquad\qquad\quad edge \mapsto \{[from \mapsto ds[c],\, to \mapsto ds'[c],\, cop \mapsto cop]\}]] \\
RevImpl(c,\, m) \triangleq \text{LET } xform \triangleq xFormCopCopsShift(m.cop,\, cbuf[c],\, m.ack) \\
\qquad\qquad\qquad\quad \text{IN } \; c2ss' = [c2ss \text{ EXCEPT } ![c] = @ \oplus xform.xg] \\
SRevImpl(m) \triangleq \text{LET } c \triangleq ClientOf(m.cop) \\
\qquad\qquad\qquad\quad xform \triangleq xFormCopCopsShift(m.cop,\, sbuf[c],\, m.ack) \\
\qquad\qquad\qquad\quad \text{IN } \; s2ss' = [cl \in Client \mapsto \text{IF } cl = c \text{ THEN } s2ss[cl] \oplus xform.xg \\
\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\quad \text{ELSE } \; s2ss[cl] \oplus xform.lg]
\end{array}
$$

$$XJ \triangleq \text{INSTANCE } XJupiter \text{ WITH } c2ss \leftarrow c2ss,\, s2ss \leftarrow s2ss$$