―――――――――――――――― MODULE NB ――――――――――――――――

EXTENDS $Naturals$, $Sequences$, TLC, $Messages$

Message type constants
CONSTANT
    $SubscribeRequest$,
    $SubscribeResponse$

VARIABLE $nbConn$

VARIABLE $nbConnId$

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$InitNBVars \triangleq$
    $\wedge nbConn = [c \in \{\} \mapsto [app \mapsto Nil, appnode \mapsto Nil, ricnode \mapsto Nil, messages \mapsto \langle\rangle]]$

―――

$NBSend(c, m) \triangleq nbConn' = [nbConn$ EXCEPT $![c] = [nbConn[c]$ EXCEPT $!.messages = Append(nbConn[c].$

$NBReceive(c) \triangleq nbConn' = [nbConn$ EXCEPT $![c] = [nbConn[c]$ EXCEPT $!.messages = SubSeq(nbConn[c].n$

$NBReply(c, m) \triangleq nbConn' = [nbConn$ EXCEPT $![c] = [nbConn[c]$ EXCEPT $!.messages = Append(SubSeq(nb$

―――

$NBConnect(app, appnode, ricnode) \triangleq$
    $\wedge nbConnId' = nbConnId + 1$
    $\wedge nbConn' = nbConn @@ (nbConnId' :> [app \mapsto app, appnode \mapsto appnode, ricnode \mapsto ricnode, messages \mapsto$

$NBDisconnect(id) \triangleq$
    $\wedge nbConn' = [c \in \{v \in$ DOMAIN $nbConn : v \neq id\} \mapsto nbConn[c]]$

―――

$NBNext \triangleq$
    $\vee \quad \exists c \in$ DOMAIN $nbConn : NBDisconnect(c)$

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\ * Modification History
\ * Last modified Tue Aug 03 18:57:18 PDT 2021 by $jordanhalterman$
\ * Created Mon Jul 26 10:01:02 PDT 2021 by $jordanhalterman$