───────────────────────── MODULE $E2T$ ─────────────────────────

EXTENDS API

LOCAL INSTANCE $Naturals$

LOCAL INSTANCE $Sequences$

LOCAL INSTANCE $FiniteSets$

CONSTANT $Nodes$

ASSUME $\land IsFiniteSet(Nodes)$
$\qquad\quad \land \forall\, n \in Nodes : n \in$ STRING

$vars \triangleq \langle\rangle$

───────────────────────── MODULE $Store$ ─────────────────────────

$CreateSubscription(s) \triangleq [status \mapsto OK]$

$DeleteSubscription(s) \triangleq [status \mapsto OK]$

$Init \triangleq$ TRUE

$Next \triangleq$ FALSE

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LOCAL $Store \triangleq$ INSTANCE $Store$

───────────────────────── MODULE NB ─────────────────────────

$HandleSubscribeRequest(c,\, m) \triangleq$
$\quad \land$ LET $r \triangleq Store!CreateSubscription(m)$
$\qquad$ IN $\quad API!E2T!Server!Send!SubscribeResponse(c,\, r)$
$\quad \land$ UNCHANGED $\langle e2apApiVars,\, topoApiVars\rangle$

$HandleUnsubscribeRequest(c,\, m) \triangleq$
$\quad \land$ LET $r \triangleq Store!DeleteSubscription(m)$
$\qquad$ IN $\quad API!E2T!Server!Send!UnsubscribeResponse(c,\, r)$
$\quad \land$ UNCHANGED $\langle e2apApiVars,\, topoApiVars\rangle$

$Init \triangleq$
$\quad \land$ TRUE

$Next \triangleq$
$\quad \lor \exists\, s \in Nodes : API!E2T!Server!Serve(s)$
$\quad \lor \exists\, s \in API!E2T!Servers : API!E2T!Server!Stop(s)$
$\quad \lor \exists\, c \in API!E2T!Connections :$
$\qquad \lor API!E2T!Server!Receive!SubscribeRequest(c,\, HandleSubscribeRequest)$

$$\lor API!E2T!Server!Receive!UnsubscribeRequest(c, HandleUnsubscribeRequest)$$

LOCAL $NB \triangleq$ INSTANCE NB

─────────────────────── MODULE SB ───────────────────────

$HandleE2SetupRequest(c, m) \triangleq$
    $\land API!E2AP!Server!Send!E2SetupResponse(c, [status \mapsto OK])$
    $\land$ UNCHANGED $\langle\rangle$

$Init \triangleq$
    $\land$ TRUE

$Next \triangleq$
    $\lor \exists s \in Nodes : API!E2AP!Server!Serve(s)$
    $\lor \exists s \in API!E2AP!Servers : API!E2AP!Server!Stop(s)$
    $\lor \exists c \in API!E2AP!Connections :$
        $\lor API!E2AP!Server!Receive!E2SetupRequest(c, HandleE2SetupRequest)$

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LOCAL $SB \triangleq$ INSTANCE SB

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$Init \triangleq$
    $\land SB!Init$
    $\land NB!Init$
    $\land Store!Init$

$Next \triangleq$
    $\lor SB!Next$
    $\lor NB!Next$
    $\lor Store!Next$

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* Modification History
* Last modified Sat *Aug* 14 12:18:35 *PDT* 2021 by *jordanhalterman*
* Created *Tue Aug* 10 04:55:45 *PDT* 2021 by *jordanhalterman*