
MODULE *xApp*

EXTENDS *E2T*

LOCAL INSTANCE *Naturals*

LOCAL INSTANCE *Sequences*

CONSTANT *AppNode*

AppSendSubscribeRequest(*c*) \triangleq
 $\wedge E2TNB!Send(c, [type \mapsto SubscribeRequest])$
 $\wedge \text{UNCHANGED } \langle \rangle$

AppHandleSubscribeResponse(*c*, *m*) \triangleq
 $\wedge E2TNB!Receive(c)$
 $\wedge \text{UNCHANGED } \langle \rangle$

AppSendUnsubscribeRequest(*c*) \triangleq
 $\wedge E2TNB!Send(c, [type \mapsto UnsubscribeRequest])$
 $\wedge \text{UNCHANGED } \langle \rangle$

AppHandleUnsubscribeResponse(*c*, *m*) \triangleq
 $\wedge E2TNB!Receive(c)$
 $\wedge \text{UNCHANGED } \langle \rangle$

AppHandleMessage(*c*, *m*) \triangleq
 $\wedge \vee \wedge m.type = SubscribeResponse$
 $\wedge AppHandleSubscribeResponse(c, m)$
 $\vee \wedge m.type = UnsubscribeResponse$
 $\wedge AppHandleUnsubscribeResponse(c, m)$
 $\wedge \text{UNCHANGED } \langle \rangle$

AppInit \triangleq TRUE

AppNext \triangleq
 $\vee \exists s \in AppNode, d \in E2TNode : E2TNB!Connect(s, d)$
 $\vee \exists c \in E2TNB!Connections : E2TNB!Handle(c, AppHandleMessage)$

* Modification History
* Last modified Tue Aug 10 06:36:57 PDT 2021 by *jordanhalterman*
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