

EXTENDS *API*

LOCAL INSTANCE *Sequences*

LOCAL INSTANCE *FiniteSets*

CONSTANT *TopoNodes*

LOCAL *Topo* \triangleq INSTANCE *Topo* WITH *Nodes* \leftarrow *TopoNodes*

CONSTANT *E2TNodes*

LOCAL *E2T* \triangleq INSTANCE *E2T* WITH *Nodes* \leftarrow *E2TNodes*

CONSTANT *E2Nodes*

LOCAL *E2Node* \triangleq INSTANCE *E2Node* WITH *Nodes* \leftarrow *E2Nodes*

CONSTANT *xApps*

LOCAL *xApp*(*app*, *nodes*) \triangleq INSTANCE *xApp* WITH *App* \leftarrow *app*, *Nodes* \leftarrow *nodes*

RECURSIVE *SetToSeq*($-$)

LOCAL *SetToSeq*(*S*) \triangleq

IF *Cardinality*(*S*) = 0 THEN $\langle \rangle$

ELSE

LET

x \triangleq CHOOSE *x* \in *S* : TRUE

IN

$\langle x \rangle \circ \text{SetToSeq}(S \setminus \{x\})$

LOCAL *xAppVars* \triangleq *SetToSeq*($\{app \in \text{DOMAIN } xApps : xApp(app, xApps[app])!vars\}$)

Init \triangleq

$\wedge API!E2AP!Init$

$\wedge API!E2T!Init$

$\wedge API!Topo!Init$

$\wedge Topo!Init$

$\wedge E2T!Init$

$\wedge E2Node!Init$

$\wedge \forall app \in \text{DOMAIN } xApps : xApp(app, xApps[app])!Init$

Next \triangleq

$\vee \wedge API!E2AP!Next$

$\wedge \text{UNCHANGED } \langle API!E2T!vars, API!Topo!vars, Topo!vars, E2T!vars, E2Node!vars, xAppVars \rangle$

$\vee \wedge API!E2T!Next$

$\wedge \text{UNCHANGED } \langle API!E2AP!vars, API!Topo!vars, Topo!vars, E2T!vars, E2Node!vars, xAppVars \rangle$

$\vee \wedge API!Topo!Next$

$\wedge \text{UNCHANGED } \langle API!E2AP!vars, API!E2T!vars, Topo!vars, E2T!vars, E2Node!vars, xAppVars \rangle$
 $\vee \wedge Topo!Next$
 $\wedge \text{UNCHANGED } \langle API!E2AP!vars, API!E2T!vars, API!Topo!vars, E2T!vars, E2Node!vars, xAppVa \rangle$
 $\vee \wedge E2T!Next$
 $\wedge \text{UNCHANGED } \langle API!E2AP!vars, API!E2T!vars, API!Topo!vars, Topo!vars, E2Node!vars, xAppVa \rangle$
 $\vee \wedge E2Node!Next$
 $\wedge \text{UNCHANGED } \langle API!E2AP!vars, API!E2T!vars, API!Topo!vars, Topo!vars, E2T!vars, xAppVars \rangle$
 $\vee \wedge \exists app \in \text{DOMAIN } xApps : xApp(app, xApps[app])!Next$
 $\wedge \text{UNCHANGED } \langle API!E2AP!vars, API!E2T!vars, API!Topo!vars, Topo!vars, E2T!vars, E2Node!va \rangle$

\backslash * Modification History
 \backslash * Last modified *Fri Aug 13 17:43:45 PDT 2021* by *jordanhalterman*
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