
MODULE *E2*

The *E2* module provides the specification for the entire *E2* protocol within the *ONOS RIC*.

EXTENDS *Naturals*, *FiniteSets*, *Sequences*, *TLC*

CONSTANTS

NetworkNil

VARIABLES

networkChannels,
networkChannelId

Network \triangleq INSTANCE *Network* WITH
Nil \leftarrow *NetworkNil*,
channels \leftarrow *networkChannels*,
channelId \leftarrow *networkChannelId*

CONSTANTS

TopoNodes,
TopoNil

VARIABLES

topoEntities,
topoRelations

Topo \triangleq INSTANCE *Topo* WITH
Nodes \leftarrow *TopoNodes*,
Nil \leftarrow *TopoNil*,
entities \leftarrow *topoEntities*,
relations \leftarrow *topoRelations*

CONSTANTS

E2SubNodes,
E2SubPhaseCreate,
E2SubPhaseDelete,
E2SubStatusPending,
E2SubStatusComplete,
E2SubNil

VARIABLES

e2SubSubscriptions,
e2SubSubscriptionTasks

$E2Sub \triangleq$ INSTANCE $E2Sub$ WITH
 $Nodes \leftarrow E2SubNodes,$
 $PhaseCreate \leftarrow E2SubPhaseCreate,$
 $PhaseDelete \leftarrow E2SubPhaseDelete,$
 $StatusPending \leftarrow E2SubStatusPending,$
 $StatusComplete \leftarrow E2SubStatusComplete,$
 $Nil \leftarrow E2SubNil,$
 $subscriptions \leftarrow e2SubSubscriptions,$
 $subscriptionTasks \leftarrow e2SubSubscriptionTasks$

CONSTANTS
 $E2TNodes$

$E2T \triangleq$ INSTANCE $E2T$ WITH
 $Nodes \leftarrow E2TNodes$

CONSTANTS
 $E2NodeNodes$

$E2Node \triangleq$ INSTANCE $E2Node$ WITH
 $Nodes \leftarrow E2NodeNodes$

CONSTANTS
 $E2AppNodes$

$E2App \triangleq$ INSTANCE $E2App$ WITH
 $Nodes \leftarrow E2AppNodes$

$Init \triangleq$
 $\wedge Network!Init$
 $\wedge Topo!Init$
 $\wedge E2Sub!Init$
 $\wedge E2T!Init$
 $\wedge E2Node!Init$
 $\wedge E2App!Init$

$Next \triangleq$
 $\vee Network!Next$
 $\vee Topo!Next$
 $\vee E2Sub!Next$
 $\vee E2T!Next$

$\vee E2Node!Next$
 $\vee E2App!Next$

* Modification History
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