Core Information Model (CoreModel)

TR-512-9

Terminology Mapping

Version 1.2
September 20, 2016

ONF Document Type: Technical Recommendation
ONF Document Name: Core Information Model version 1.0

Disclaimer

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Note that the table of contents and figures need to be updated several times as the table length changes the page numbering and the cross references will need to be re-updated.

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Document History

Version	Date	Description of Change
1.0	March 30, 2015	Initial version of the base document of the "Core Information Model" fragment of the ONF Common Information Model (ONF-CIM).
1.1	November 24, 2015	Version 1.1
1.2	September 20, 2016	Version 1.2 [Note Version 1.1 was a single document whereas 1.2 is broken into a number of separate parts]

1 Introduction

This document is an addendum to the TR-512_v1.2 ONF Core Information Model and forms part of the description of the ONF-CIM. For general overview material and references to the other parts refer to TR-512.1 ONF Core IM - Overview.

1.1 References

For a full list of references see TR-512.1.

1.2 Definitions

For a full list of definition see TR-512.1.

1.3 Conventions

See TR-512.1 for an explanation of:

- UML conventions
- Lifecycle Stereotypes
- Diagram symbol set

1.4 Viewing UML diagrams

Some of the UML diagrams are very dense. To view them either zoom (sometimes to 400%) or open the associated image file (and zoom appropriately) or open the corresponding UML diagram via Papyrus (for each figure with a UML diagram the UML model diagram name is provided under the figure or within the figure).

1.5 Understanding the figures

Figures showing fragments of the model using standard UML symbols as well as figures illustrating application of the model are provided throughout this document. Many of the application-oriented figures also provide UML class diagrams for the corresponding model fragments (see TR-512.1 for diagram symbol sets). All UML diagrams depict a subset of the relationships between the classes, such as inheritance (i.e. specialization), association relationships (such as aggregation and composition), and conditional features or capabilities. Some UML diagrams also show further details of the individual classes, such as their attributes and the data types used by the attributes.

2 Introduction to the Terminology Mapping

The focus of this document is mapping of terminology from that used in TR-512 to terminology from some other standards and recommendations. This document only provides a lightweight view and is for information only. The mappings provided are preliminary and may change.

A data dictionary that sets out the details of all classes, data types and attributes is also provided (TR-512.8).

2.1 Terminology mapping table

The table below sets out class mappings between the ONF work and the work of a number of other bodies.

The table does not yet cover:

- The ONF specification classes (where there is a relationship to work in TMF
- Mappings to:
  - Neutron
  - IETF TEAS
  - OpenConfig
  - DMTF
  - Etc

The grey cells indicate that the work of the body does not have specific classes that directly support the meaning of the row (see the right column). The pink cells identify where work is still required to determine the mappings.

Table 1: Class mappings

ONF	OIF	TMF MTNM	TMF GB922 Converged Network ABE	TMF TR225	G.8080	G.800	Tapi	Other terms	Brief meaning of the terms in the row
ForwardingDomain (FD)		Multi-Layer SubNetwork (MLSN)	ForwardingDomain	ForwardingDomain		Subnetwork		Network	A multi-layer form Dealing with connection oriented
		FlowDomain							Dealing with connectionless
		MatrixFlowDomain						Switch fabric Matrix	The switching capability in a network device that may be represented by an FD.
	Subnetwork/Vertex				Subnetwork			Node	Element of a graph
	Routing Area/Topology	Multi-Layer Routing Area (MLRA)			Routing Area			Routing domaun	Domain for routing
	Abstract Node								Abstract node
							Node		The opaque view of an FD
							Topology		The aspect of the FD that is the container of the layout of the topology

ONF	OIF	TMF MTNM	TMF GB922 Converged Network ABE	TMF TR225	G.8080	G.800	Tapi	Other terms	Brief meaning of the terms in the row
Link			TopologicalLink	ForwardingConstruct (use of)			Link		A fixed relationship between NodeEdgePoints in a Topology
					Link	Link			A fixed relationship between subnetwork at a specific (CI) layerProtocol
		SnppLink							A G.800 Link in the context of the ASON control plane
	TopologicalLink								
		TopologicalLink							The abstract essence of the Trail
	Link								
	Edge								Element of a graph
						Transitional Link			A link where the ends are in different layers or sub-layers (e.g. an Ethernet TAG has been added)
								Tunnel	
LinkPort		Element in a list in a TopologicalLink representing an end of the TopologicalLink	Element in a list in a TopologicalLink representing an end of the TopologicalLink or SnppLink	FcEndPoint of ForwardingConstruct		Link Port	LinkPort		A port on the component called Link
LogicalTerminationPoint (LTP)			TPE	TPE					
		TP (PTP/CTP/FTP)				Adaptation function Termination function Forwarding Point Forwarding End Point			The LTP is used to represent any of the G.800 constructs, or a combination of these constructs across multiple layers
	Edge Resource				SNP				An abstraction that represents a CP or TCP
		SNPP			SNPP				Pool of SNPs, for example at the end of a link
								Facility Port Protocol Endpoint	
							NodeEdgePoint		
							ServiceEndPoint		
							ConnectionEndPoint		
LayerProtocol		Element in a list	LayerTermination	LayerTermination					

ONF	OIF	TMF MTNM	TMF GB922 Converged Network ABE	TMF TR225	G.8080	G.800	Tapi	Other terms	Brief meaning of the terms in the row
		in TP							
						Adaptation function Termination function Forwarding Point Forwarding End Point		TTP CTP	The LP is used to represent any of the G.800 constructs, or a combination of these constructs in a single layers
ForwardingConstruct	Connection	SNC	FRE	ForwardingConstruct	Connection	SNC	Connection ConnectivityService		A connection between Connection Points
						Trail			A connection between Access Points
		FDFr							Enabled forwarding for Connectionless.
		MFDFr							Enabled forwarding for Connectionless in a fabric.
	Call	Call			Call				An association between two or more users that supports an instance of a service.
								AccessRelationship Tunnel Line Section CrossConnection	
					SNP Link Connection	LinkConnection			
FcPort		Element in a list in a SNC/Call representing an end of the SNC/Call	Endpoint	FcEndpoint			ConnectionPort ServicePort		A port on a compoenent called ForwardingConstruct
FcSwitch		Attributes in SNC	Attributes in FRE						
FcRoute		Route	Route		Route				
TopologicalEntity									
TransferTiming_Pac									
TransferIntegrity_Pac									
TransferCost_Pac									
RiskParameter_Pac									
TransferCapacity_Pac									
LayerProtocolTransiti									

ONF	OIF	TMF MTNM	TMF GB922 Converged Network ABE	TMF TR225	G.8080	G.800	Tapi	Other terms	Brief meaning of the terms in the row
on_Pac									
Validation_Pac									
SdnController									
NetworkContrrolDomain									
NetworkElement		ManagedElement							
LayerProtocol	Layer	LayerRate	LayerRate			Layer			
GlobalId									
LocalId									
Name									
Address									
Comments on column	Derived from work of and co-developed with ITU-T	Derived from ITU-T work	Derived from ITU-T work	Convergence of several TMF models		Generalized architecture	Pruned/refactored ONF Core Network Model (see figure below).		

2.2 Detailed view of Tapi to core mapping

The figure below is a snapshot of the Tapi to ONF Core IM mapping captured just prior to publication of this document. It is possible that the details of the mapping will change. For the most up to date mapping please refer to [OSSDN-SNOWMASS].

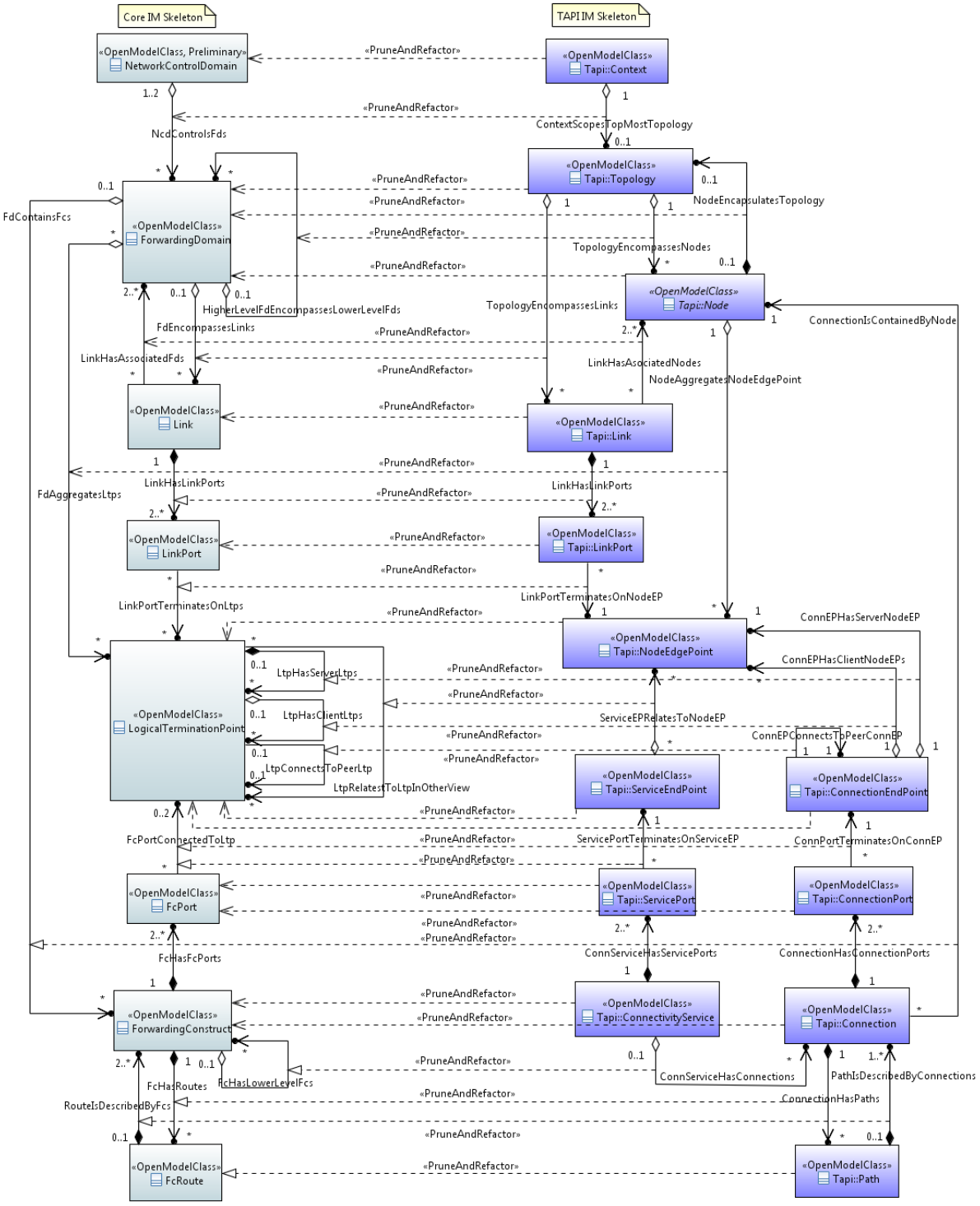

Figure 2-1 Core – Tapi mapping (via pruning and refactoring)

2.3 Model evolution

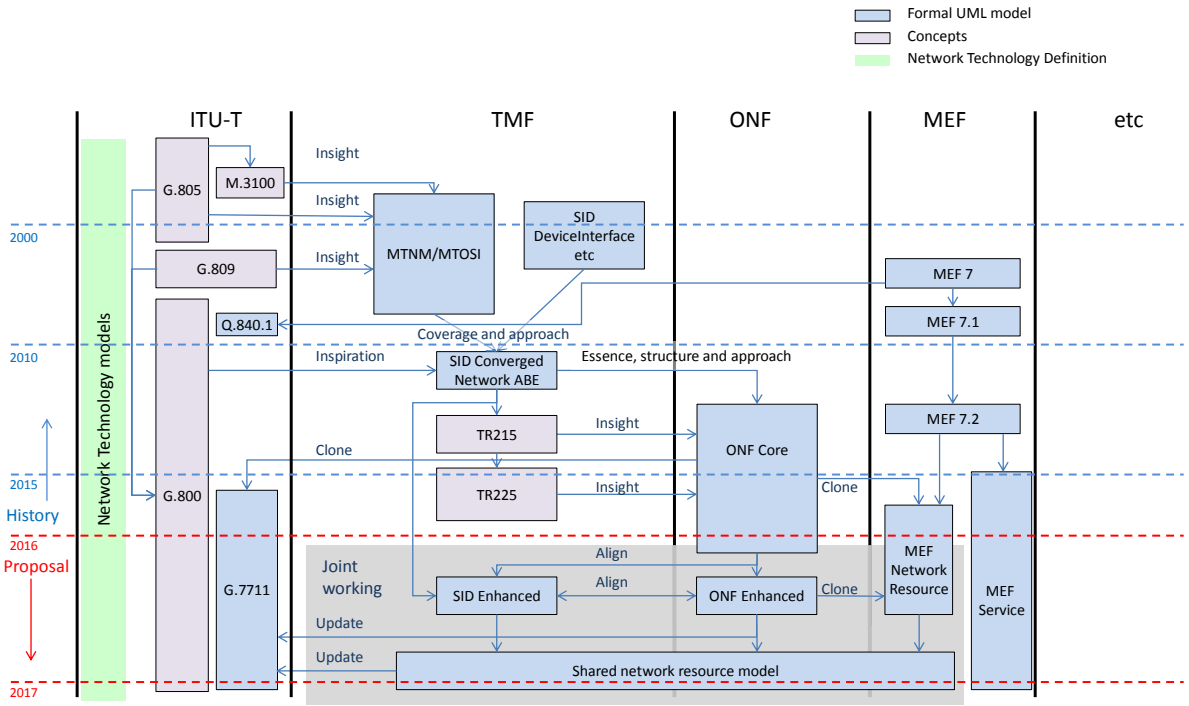

Figure 2-2 Model Evolution History and Proposal

The figure above shows the relationships between some key modeling activities. The slide is somewhat speculative. The joint working proposed has not yet materialized.

End of Document