Core Information Model (CoreModel)
TR-512.TM
Terminology Mapping

Version 1.6
January 2024

ONF Document Type: Technical Recommendation
ONF Document Name: Core Information Model version 1.6

Disclaimer

THIS SPECIFICATION IS PROVIDED "AS IS" WITH NO WARRANTIES WHATSOEVER, INCLUDING ANY WARRANTY OF MERCHANTABILITY, NONINFRINGEMENT, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY WARRANTY OTHERWISE ARISING OUT OF ANY PROPOSAL, SPECIFICATION OR SAMPLE.

Any marks and brands contained herein are the property of their respective owners.

Open Networking Foundation
1000 El Camino Real, Suite 100, Menlo Park, CA 94025
www.opennetworking.org

Important note

This Technical Recommendations has been approved by the Project TST, but has not been approved by the ONF board. This Technical Recommendation is an update to a previously released TR specification, but it has been approved under the ONF publishing guidelines for 'Informational' publications that allow Project technical steering teams (TSTs) to authorize publication of Informational documents. The designation of '-info' at the end of the document ID also reflects that the project team (not the ONF board) approved this TR.

Table of Contents

List of Figures

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]
1.3	September 2017	Version 1.3 [Published via wiki only]
1.3.1	January 2018	Addition of text related to approval status.
1.4	November 2018	No change.
1.5	September 2021	Enhancements to model structure
1.6	January 2024	Updated release and dates.

1 Introduction to document suite

This document is an addendum to the TR-512 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.

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.DD).

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
    - ETSI-NFV
    - 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						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 domain	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 Facility	
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		TTP, CTP	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 (nodal view) Port Protocol Endpoint	
							NodeEdgePoint		
							ServiceEndPoint		
							ConnectionEndPoint		

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
LayerProtocol		Element in a list in TP	LayerTermination	LayerTermination					
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 Pipe Circuit Facility 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				
ForwardingEntity						Topoligical entity			
TransferTiming_Pac									
TransferIntegrity_Pac									
TransferCost_Pac									
RiskParameter_Pac									
TransferCapacity_Pac									
LayerProtocolTransition_Pac									

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
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].

Note that there are some inaccuracies in the diagram below. These will be corrected in the next release of [ONF TR-512].
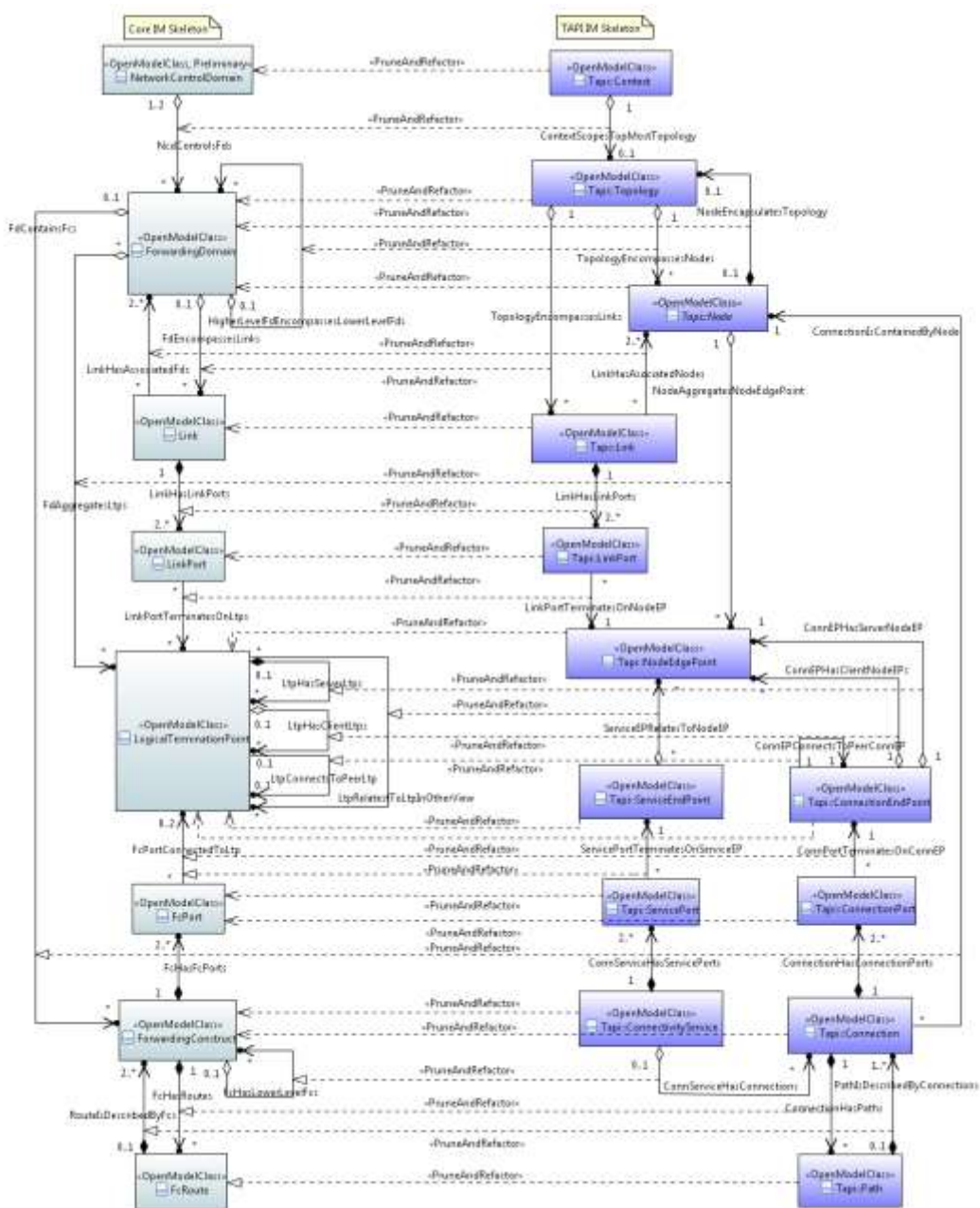

Figure 2-1 Core – Tapi mapping (via pruning and refactoring)

End of Document