



TAPI UML Model

NOTIFICATION

Version 2.5.0

ONF Document Type: Technical Recommendation

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Document History

Version	Date	Description of Change
2.3	May 27, 2021	Model Dump <i>Gendoc generates documentation from Eclipse Modeling Framework (EMF) models using document templates in formats such as OpenOffice Writer (.odt), Microsoft Word (.docx), Microsoft Excel (.xlsx) and Microsoft Powerpoint (.pptx).</i>
2.4.0	December 2022	See high level diff document in Github
2.4.1	March 2023	See high level diff document in Github
2.5.0	October 2023	See high level diff document in Github

1 Notification Model

TapiNotification: This module contains TAPI Notification Model definitions. Source: TapiNotification.uml
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1.1 Diagrams

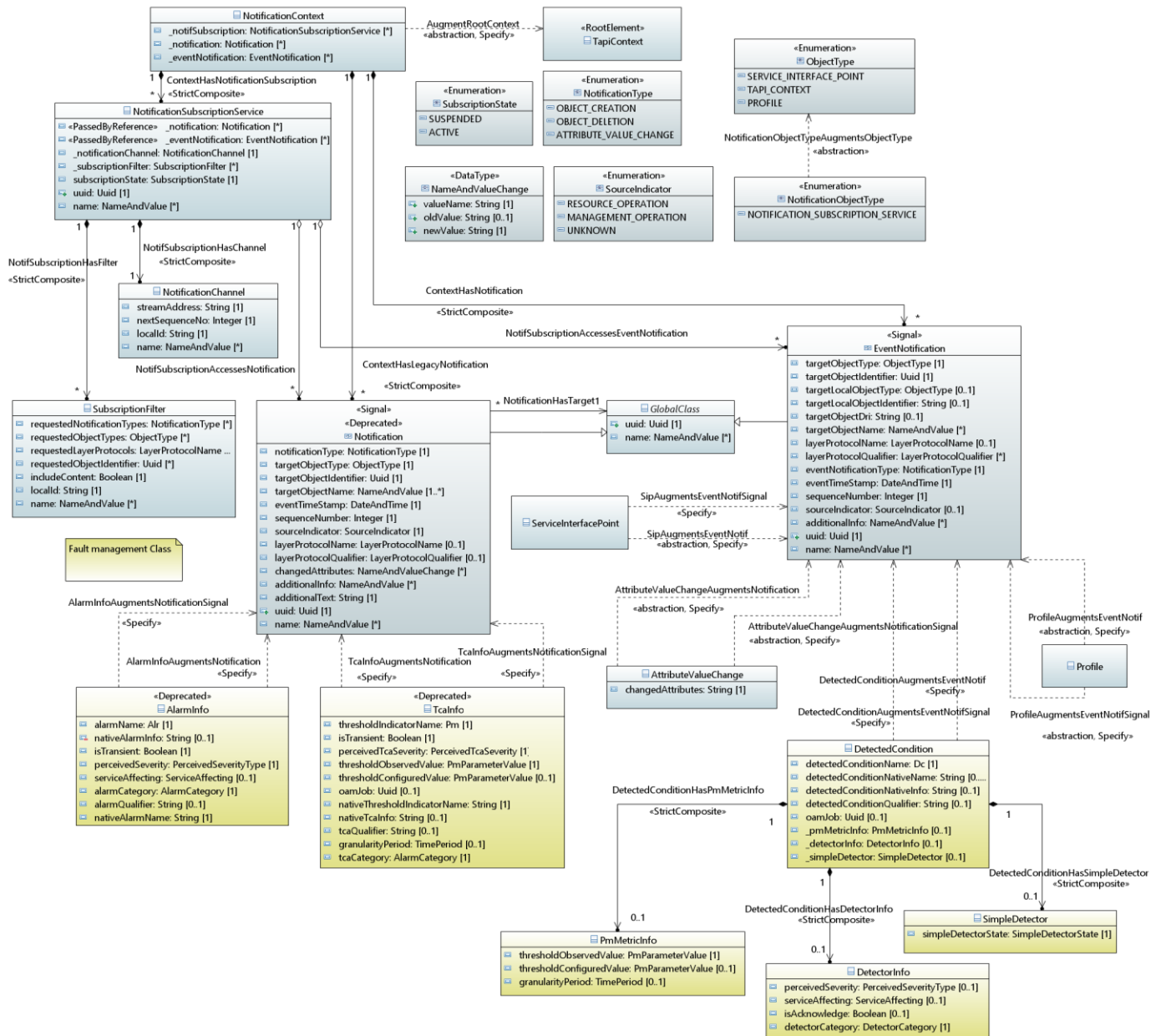


Figure 1 – Diagram *NotificationServiceDetails*

1.2 Classes

1.2.1 AttributeValueChanged

Description:

- Object notification related information.

Applied stereotypes:

- OpenInterfaceModelClass
 - objectCreationNotification: NA

- objectDeletionNotification: NA
- OpenModelClass
 - support: MANDATORY

Attribute Name	Type	Mult.	Access	Stereotypes
changedAttributes	PrimitiveTypes::String	1	R	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The list of relevant changed attributes and their values.			

Table 1 – Attributes for class *AttributeValueChange*

1.2.2 NotificationChannel

Description:

- The channel/stream to which the subscribed notifications are published.

Applied stereotypes:

- OpenInterfaceModelClass
 - objectCreationNotification: NA
 - objectDeletionNotification: NA
- OpenModelClass
 - support: MANDATORY

Attribute Name	Type	Mult.	Access	Stereotypes
streamAddress	PrimitiveTypes::String	1	RW	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The address/location/URI of the channel/stream to which the subscribed notifications are published. The format is typically dependent on the implementation protocol & mechanism and hence is typed as a string.			
nextSequenceNo	PrimitiveTypes::Integer	1	R	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The sequence number of the next notification that will be published on the channel.			

Attribute Name	Type	Mult.	Access	Stereotypes
localId Inherited: <i>TapiCommon::ObjectClasses::LocalClass::localId</i>	PrimitiveTypes::String	1	RW	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: yes – part: 1 • isInvariant: true • valueRange: no range constraint • support: MANDATORY
	Description: An identifier that is unique in the context of the GlobalClass from which it is inseparable.			
name Inherited: <i>TapiCommon::ObjectClasses::LocalClass::name</i>	TapiCommon::TypeDefinitions::NameAndValue	0..*	RW	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: List of names. This value is unique in some namespace but may change during the life of the entity. A name carries no semantics with respect to the purpose of the entity.			

Table 2 – Attributes for class *NotificationChannel*

1.2.3 NotificationContext

Description:

- This object class represents the scope of control that a particular SDN controller has with respect to a particular network, specifically regarding the notification description. An instance of this class includes its NotificationSubscriptionService, (legacy) Notification and EventNotification instances.

Applied stereotypes:

- OpenInterfaceModelClass
 - objectCreationNotification: NA
 - objectDeletionNotification: NA
- OpenModelClass
 - support: MANDATORY

Attribute Name	Type	Mult.	Access	Stereotypes
_notifSubscription Navigable association end of: ContextHasNotificationSubscription	NotificationSubscriptionService	0..*	RW	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The included NotificationSubscriptionService instances.			

Attribute Name	Type	Mult.	Access	Stereotypes
_notification <i>Navigable association end of:</i> ContextHasLegacyNotification		0..*	R	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The included Notification instances.			
_eventNotification <i>Navigable association end of:</i> ContextHasNotification		0..*	R	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The included Event Notification instances.			

Table 3 – Attributes for class *NotificationContext*

1.2.4 NotificationSubscriptionService

Description:

- A NotificationSubscriptionService represents an "intent-like" request for the notification subscription. The NotificationSubscriptionService is a container for subscription request details.

Applied stereotypes:

- OpenInterfaceModelClass
 - objectCreationNotification: NA
 - objectDeletionNotification: NA
- OpenModelClass
 - support: MANDATORY

Attribute Name	Type	Mult.	Access	Stereotypes
_notification <i>Navigable association end of:</i> NotifSubscriptionAccessesNotification		0..*	R	OpenInterfaceModelAttribute • AVC: NA PassedByReference OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The Notification instances associated to this NotificationSubscriptionService instance.			

Attribute Name	Type	Mult.	Access	Stereotypes
_eventNotification <i>Navigable association end of:</i> NotifSubscriptionAccessesEventNotification		0..*	R	OpenInterfaceModelAttribute • AVC: NA PassedByReference OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The EventNotification instances associated to this NotificationSubscriptionService instance.			
_notificationChannel <i>Navigable association end of:</i> NotifSubscriptionHasChannel	NotificationChannel	1	RW	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The NotificationChannel instance of this NotificationSubscriptionService instance.			
_subscriptionFilter <i>Navigable association end of:</i> NotifSubscriptionHasFilter	SubscriptionFilter	0..*	RW	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The SubscriptionFilter instance of this NotificationSubscriptionService instance.			
subscriptionState	SubscriptionState	1	RW	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The SubscriptionState value.			
uuid Inherited: <i>TapiCommon::ObjectClasses::GlobalClass::uuid</i>	TapiCommon::TypeDefinitions::Uuid	1	RW	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: yes – part: 1 • isInvariant: true • valueRange: no range constraint • support: MANDATORY
	Description: UUID: An identifier that is universally unique within an identifier space, where the identifier space is itself globally unique, and immutable. An UUID carries no semantics with respect to the purpose or state of the entity. UUID here uses string representation as defined in RFC 4122. The canonical representation uses lowercase characters. Pattern: [0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12} Example of a UUID in string representation: f81d4fae-7dec-11d0-a765-00a0c91e6bf6			

Attribute Name	Type	Mult.	Access	Stereotypes
name Inherited: <i>TapiCommon::ObjectClasses::GlobalClass::name</i>	TapiCommon::TypeDefinitions::NameAndValue	0..*	RW	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: List of names. This value is unique in some namespace but may change during the life of the entity. A name carries no semantics with respect to the purpose of the entity.			

Table 4 – Attributes for class *NotificationSubscriptionService*

1.2.5 SubscriptionFilter

Description:

- A SubscriptionFilter represents an "intent-like" request for the filters of the related notification subscription. The SubscriptionFilter is a container for filter request details.

Applied stereotypes:

- OpenInterfaceModelClass
 - objectCreationNotification: NA
 - objectDeletionNotification: NA
- OpenModelClass
 - support: MANDATORY

Attribute Name	Type	Mult.	Access	Stereotypes
requestedNotificationTypes	NotificationType	0..*	RW	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The requested NotificationType value(s).			
requestedObjectTypes	TapiCommon::TypeDefinitions::ObjectType	0..*	RW	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The requested ObjectType value(s).			

Attribute Name	Type	Mult.	Access	Stereotypes
requestedLayerProtocols	TapiCommon::TypeDefinitions::LayerProtocolName	0..*	RW	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The requested layer protocol value(s).			
requestedObjectIdentifier	TapiCommon::TypeDefinitions::Uuid	0..*	RW	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The requested object identifier (UUID) value(s).			
includeContent	PrimitiveTypes::Boolean	1	RW	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: Indicates whether the published Notification includes content or just the Notification Id (which enables retrieval of the notification at the later stage).			
localId Inherited: <i>TapiCommon::ObjectClasses::LocalClass::localId</i>	PrimitiveTypes::String	1	RW	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: yes – part: 1 • isInvariant: true • valueRange: no range constraint • support: MANDATORY
	Description: An identifier that is unique in the context of the GlobalClass from which it is inseparable.			
name Inherited: <i>TapiCommon::ObjectClasses::LocalClass::name</i>	TapiCommon::TypeDefinitions::NameAndValue	0..*	RW	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: List of names. This value is unique in some namespace but may change during the life of the entity. A name carries no semantics with respect to the purpose of the entity.			

Table 5 – Attributes for class *SubscriptionFilter*

1.3 Signals

1.3.1 EventNotification

Description:

- The Notification signal. OMG UML(R) Version 2.5.1: "A Signal is a specification of a kind of communication between objects in which a reaction is asynchronously triggered in the receiver without a reply. The data carried by the communication are represented as attributes of the Signal."

Applied stereotypes:

- OpenModelNotification
 - triggerConditionList: invalid
 - support: MANDATORY

Attribute Name	Type	Mult.	Access	Stereotypes
targetObjectType	TapiCommon::TypeDefinitions::ObjectType	1	R	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The Notification instance is related to the object instance (of a global class - with UUID) with this ObjectType value. Alternatively, the Notification is related to the object instance of a local class, whose global object has this ObjectType value.			
targetObjectIdentifier	TapiCommon::TypeDefinitions::Uuid	1	R	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The Notification instance is related to the object instance (of a global class) with this UUID value. Alternatively, the Notification is related to the object instance of a local class, whose global object has this UUID value.			
targetLocalObjectType	TapiCommon::TypeDefinitions::ObjectType	0..1	R	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The Notification instance is related to the object instance of a local class, whose global object has targetObjectType value.			
targetLocalObjectIdentifier	PrimitiveTypes::String	0..1	R	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The Notification instance is related to the object instance of a local class, whose global object has targetObjectIdentifier value.			

Attribute Name	Type	Mult.	Access	Stereotypes
targetObjectDri	PrimitiveTypes::String	0..1	R	OpenInterfaceModelAttribute <ul style="list-style-type: none"> • AVC: NA OpenModelAttribute <ul style="list-style-type: none"> • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: Data Resource Identifier of the target object as per RFC 8040.			
targetObjectName	TapiCommon::TypeDefinitions::NameAndValue	0..*	R	OpenInterfaceModelAttribute <ul style="list-style-type: none"> • AVC: NA OpenModelAttribute <ul style="list-style-type: none"> • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The Notification instance is related to the object instance with this list of names.			
layerProtocolName	TapiCommon::TypeDefinitions::LayerProtocolName	0..1	R	OpenInterfaceModelAttribute <ul style="list-style-type: none"> • AVC: NA OpenModelAttribute <ul style="list-style-type: none"> • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The Notification instance is related to a resource with this layer protocol value.			
layerProtocolQualifier	TapiCommon::TypeDefinitions::LayerProtocolQualifier	0..*	R	OpenInterfaceModelAttribute <ul style="list-style-type: none"> • AVC: NA OpenModelAttribute <ul style="list-style-type: none"> • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The Notification instance is related to a resource with these layer protocol qualifier values.			
eventNotificationType	NotificationType	1	R	OpenInterfaceModelAttribute <ul style="list-style-type: none"> • AVC: NA OpenModelAttribute <ul style="list-style-type: none"> • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: 			
eventTimeStamp	TapiCommon::TypeDefinitions::DateAndTime	1	R	OpenInterfaceModelAttribute <ul style="list-style-type: none"> • AVC: NA OpenModelAttribute <ul style="list-style-type: none"> • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The best knowledge of the time of the event which originated this Notification instance.			
sequenceNumber	PrimitiveTypes::Integer	1	R	OpenInterfaceModelAttribute <ul style="list-style-type: none"> • AVC: NA OpenModelAttribute <ul style="list-style-type: none"> • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: 			

Attribute Name	Type	Mult.	Access	Stereotypes
	Description: A monotonous increasing sequence number associated with the Notification instances. The exact semantics of how this sequence number is assigned (per channel or subscription or source or system) is left undefined.			
sourceIndicator	SourceIndicator	0..1	R	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The possible source of this Notification instance.			
additionalInfo	TapiCommon::TypeDefinitions::NameAndValue	0..*	R	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description:			
uuid	TapiCommon::TypeDefinitions::Uuid	1	RW	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: yes – part: 1 • isInvariant: true • valueRange: no range constraint • support: MANDATORY
Inherited: <i>TapiCommon::ObjectClasses::GlobalClass::uuid</i>	Description: UUID: An identifier that is universally unique within an identifier space, where the identifier space is itself globally unique, and immutable. An UUID carries no semantics with respect to the purpose or state of the entity. UUID here uses string representation as defined in RFC 4122. The canonical representation uses lowercase characters. Pattern: [0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12} Example of a UUID in string representation: f81d4fae-7dec-11d0-a765-00a0c91e6bf6			
name	TapiCommon::TypeDefinitions::NameAndValue	0..*	RW	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
Inherited: <i>TapiCommon::ObjectClasses::GlobalClass::name</i>	Description: List of names. This value is unique in some namespace but may change during the life of the entity. A name carries no semantics with respect to the purpose of the entity.			

1.3.2 Notification

Description:

- The Notification signal. OMG UML(R) Version 2.5.1: "A Signal is a specification of a kind of communication between objects in which a reaction is asynchronously triggered in the receiver without a reply. The data carried by the communication are represented as attributes of the Signal."

Applied stereotypes:

- Deprecated
- OpenModelNotification
 - triggerConditionList: invalid

○ support: MANDATORY

Attribute Name	Type	Mult.	Access	Stereotypes
notificationType	NotificationType	1	R	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The Notification type.			
targetObjectType	TapiCommon::TypeDefinitions::ObjectType	1	R	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The Notification instance is related to the object instance with this ObjectType value.			
targetObjectIdentifier	TapiCommon::TypeDefinitions::Uuid	1	R	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The Notification instance is related to the object instance with this UUID value.			
targetObjectName	TapiCommon::TypeDefinitions::NameAndValue	1..*	R	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The Notification instance is related to the object instance with this list of names.			
eventTimeStamp	TapiCommon::TypeDefinitions::DateAndTime	1	R	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The best knowledge of the time of the event which originated this Notification instance.			
sequenceNumber	PrimitiveTypes::Integer	1	R	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: A monotonous increasing sequence number associated with the Notification instances. The exact semantics of how this sequence number is assigned (per channel or subscription or source or system) is left undefined.			

Attribute Name	Type	Mult.	Access	Stereotypes
sourceIndicator	SourceIndicator	1	R	OpenInterfaceModelAttribute <ul style="list-style-type: none"> • AVC: NA OpenModelAttribute <ul style="list-style-type: none"> • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The possible source of this Notification instance.			
layerProtocolName	TapiCommon::TypeDefinitions::LayerProtocolName	0..1	R	OpenInterfaceModelAttribute <ul style="list-style-type: none"> • AVC: NA OpenModelAttribute <ul style="list-style-type: none"> • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The Notification instance is related to a resource with this layer protocol value.			
layerProtocolQualifier	TapiCommon::TypeDefinitions::LayerProtocolQualifier	0..1	R	OpenInterfaceModelAttribute <ul style="list-style-type: none"> • AVC: NA OpenModelAttribute <ul style="list-style-type: none"> • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The Notification instance is related to a resource with this layer protocol qualifier value.			
changedAttributes	NameAndValueChange	0..*	R	OpenInterfaceModelAttribute <ul style="list-style-type: none"> • AVC: NA OpenModelAttribute <ul style="list-style-type: none"> • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The list of relevant changed attributes and their values.			
additionalInfo	TapiCommon::TypeDefinitions::NameAndValue	0..*	R	OpenInterfaceModelAttribute <ul style="list-style-type: none"> • AVC: NA OpenModelAttribute <ul style="list-style-type: none"> • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: Name and value list available for unspecified content.			
additionalText	PrimitiveTypes::String	1	R	OpenInterfaceModelAttribute <ul style="list-style-type: none"> • AVC: NA OpenModelAttribute <ul style="list-style-type: none"> • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: Text available for unspecified content.			
uuid Inherited: <i>TapiCommon::ObjectClasses::GlobalClass::uuid</i>	TapiCommon::TypeDefinitions::Uuid	1	RW	OpenInterfaceModelAttribute <ul style="list-style-type: none"> • AVC: NA OpenModelAttribute <ul style="list-style-type: none"> • isKey: yes – part: 1 • isInvariant: true • valueRange: no range constraint • support: MANDATORY

Attribute Name	Type	Mult.	Access	Stereotypes
	Description: UUID: An identifier that is universally unique within an identifier space, where the identifier space is itself globally unique, and immutable. An UUID carries no semantics with respect to the purpose or state of the entity. UUID here uses string representation as defined in RFC 4122. The canonical representation uses lowercase characters. Pattern: [0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-' + '[0-9a-fA-F]{4}-[0-9a-fA-F]{12} Example of a UUID in string representation: f81d4fae-7dec-11d0-a765-00a0c91e6bf6			
name Inherited: <i>TapiCommon::ObjectClasses::GlobalClass::name</i>	TapiCommon::TypeDefinitions::NameAndValue	0..*	RW	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: List of names. This value is unique in some namespace but may change during the life of the entity. A name carries no semantics with respect to the purpose of the entity.			

1.4 Associations

1.4.1 ContextHasLegacyNotification

Applied stereotype:

- StrictComposite

Association end role name	Aggreg. type	Navigable	Target Class	Mult.
_notification	composite	Yes	Notification	0..*
notificationcontext	none	No	NotificationContext	1

Table 6 – Member ends for association *ContextHasLegacyNotification*

1.4.2 ContextHasNotification

Applied stereotype:

- StrictComposite

Association end role name	Aggreg. type	Navigable	Target Class	Mult.
_eventNotification	composite	Yes	EventNotification	0..*
notificationcontext	none	No	NotificationContext	1

Table 7 – Member ends for association *ContextHasNotification*

1.4.3 ContextHasNotificationSubscription

Applied stereotype:

- StrictComposite

Association end role name	Aggreg. type	Navigable	Target Class	Mult.
_notifSubscription	composite	Yes	NotificationSubscriptionService	0..*
notificationcontext	none	No	NotificationContext	1

Table 8 – Member ends for association *ContextHasNotificationSubscription*

1.4.4 NotifSubscriptionAccessesEventNotification

Association end role name	Aggreg. type	Navigable	Target Class	Mult.
_eventNotification	shared	Yes	EventNotification	0..*
notificationsubscriptionservice	none	No	NotificationSubscriptionService	1

Table 9 – Member ends for association *NotifSubscriptionAccessesEventNotification*

1.4.5 NotifSubscriptionAccessesNotification

Association end role name	Aggreg. type	Navigable	Target Class	Mult.
_notification	shared	Yes	Notification	0..*
_notifSubscription	none	No	NotificationSubscriptionService	1

Table 10 – Member ends for association *NotifSubscriptionAccessesNotification*

1.4.6 NotifSubscriptionHasChannel

Applied stereotype:

- StrictComposite

Association end role name	Aggreg. type	Navigable	Target Class	Mult.
_notificationChannel	composite	Yes	NotificationChannel	1
_notifSubscription	none	No	NotificationSubscriptionService	1

Table 11 – Member ends for association *NotifSubscriptionHasChannel*

1.4.7 NotifSubscriptionHasFilter

Applied stereotype:

- StrictComposite

Association end role name	Aggreg. type	Navigable	Target Class	Mult.
_subscriptionFilter	composite	Yes	SubscriptionFilter	0..*
_notifSubscription	none	No	NotificationSubscriptionService	1

Table 12 – Member ends for association *NotifSubscriptionHasFilter*

1.4.8 NotificationHasTarget

Association end role name	Aggreg. type	Navigable	Target Class	Mult.
_targetObject	none	Yes	TapiCommon::ObjectClasses::GlobalClass	1
_notification	none	No	Notification	0..*

Table 13 – Member ends for association *NotificationHasTarget*

1.5 Abstractions

1.5.1 AttributeValueChangeAugmentsNotification

Augmenting Class	Augmented Class	Comment
AttributeValueChange	TapiNotification::Notifications::EventNotification	
target: "/TapiCommon:Context:_context/TapiNotification:NotificationContext:_notificationContext/TapiNotification:NotificationContext:_eventNotification"		

Table 14 – Member ends for class abstraction *AttributeValueChangeAugmentsNotification*

1.5.2 AttributeValueChangeAugmentsNotificationSignal

Augmenting Class	Augmented Class	Comment
AttributeValueChange	TapiNotification::Notifications::EventNotification	
target: "/TapiNotification:Notifications:EventNotification"		

Table 15 – Member ends for class abstraction *AttributeValueChangeAugmentsNotificationSignal*

1.5.3 AugmentRootContext

Augmenting Class	Augmented Class	Comment
NotificationContext	TapiCommon::ObjectClasses::TapiContext	Augments the base TAPI Context with NotificationContext model.
target: "/TapiCommon:Context:_context"		

Table 16 – Member ends for class abstraction *AugmentRootContext*

1.5.4 NotificationObjectTypeAugmentsObjectType

Augmenting Enumeration	Augmented Enumeration
NotificationObjectType - NOTIFICATION_SUBSCRIPTION_SERVICE	ObjectType - PROFILE - SERVICE_INTERFACE_POINT - TAPI_CONTEXT
Comment Enumeration Augment.	

Table 17 – Member ends for enum abstraction *NotificationObjectTypeAugmentsObjectType*

1.5.5 ProfileAugmentsEventNotif

Augmenting Class	Augmented Class	Comment
Profile	TapiNotification::Notifications::EventNotification	
target: "/TapiCommon:Context:_context/TapiNotification:NotificationContext:_notificationContext/TapiNotification:NotificationContext:_eventNotification"		

Table 18 – Member ends for class abstraction *ProfileAugmentsEventNotif*

1.5.6 ProfileAugmentsEventNotifSignal

Augmenting Class	Augmented Class	Comment
Profile	TapiNotification::Notifications::EventNotification	
target: "/TapiNotification:Notifications:EventNotification"		

Table 19 – Member ends for class abstraction *ProfileAugmentsEventNotifSignal*

1.5.7 SipAugmentsEventNotif

Augmenting Class	Augmented Class	Comment
ServiceInterfacePoint	TapiNotification::Notifications::EventNotification	
target: "/TapiCommon:Context:_context/TapiNotification:NotificationContext:_notificationContext/TapiNotification:NotificationContext:_eventNotification"		

Table 20 – Member ends for class abstraction *SipAugmentsEventNotif*

1.5.8 SipAugmentsEventNotifSignal

Augmenting Class	Augmented Class	Comment
ServiceInterfacePoint	TapiNotification::Notifications::EventNotification	
target: "/TapiNotification:Notifications:EventNotification"		

Table 21 – Member ends for class abstraction *SipAugmentsEventNotifSignal*

1.6 Data Types

1.6.1 NameAndValueChange

Description:

- A scoped name-value triple, including old value and new value.

Attribute Name	Type	Mult.	Access	Stereotypes
valueName	PrimitiveTypes::String	1	RW	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey: yes – part: 1 • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The name of the value. The value need not have a name.			
oldValue	PrimitiveTypes::String	0..1	RW	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey:No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The old value.			
newValue	PrimitiveTypes::String	1	RW	OpenInterfaceModelAttribute • AVC: NA OpenModelAttribute • isKey:No • isInvariant: false • valueRange: no range constraint • support: MANDATORY
	Description: The new value.			

Table 22 – Attributes for data type *NameAndValueChange*

1.7 Enumerations

1.7.1 NotificationObjectType

Description:

- The list of TAPI Notification Global Object Class types on which Notification signals can be raised.

Contains Enumeration Literals:

- NOTIFICATION_SUBSCRIPTION_SERVICE
 - The NotificationSubscriptionService class.

1.7.2 NotificationType

Description:

- List of supported notification types.

Contains Enumeration Literals:

- OBJECT_CREATION
 - The notification of an object instance creation event.

- **OBJECT_DELETION**
 - The notification of an object instance deletion event.
- **ATTRIBUTE_VALUE_CHANGE**
 - The notification of an attribute value change event.

1.7.3 SourceIndicator

Description:

- The possible source of the notification.

Contains Enumeration Literals:

- **RESOURCE_OPERATION**
 - The notification has been raised as a consequence of a generic state change of resource(s) in the managed network.
- **MANAGEMENT_OPERATION**
 - The notification has been raised as a consequence of a management operation.
- **UNKNOWN**
 - Unknown source of the notification.

1.7.4 SubscriptionState

Description:

- The SubscriptionState types.

Contains Enumeration Literals:

- **SUSPENDED**
 - The subscription is suspended.
- **ACTIVE**
 - The subscription is active.

1.8 Primitives