

INTERNATIONAL TELECOMMUNICATION UNION



TELECOMMUNICATION STANDARDIZATION SECTOR OF ITU



SERIES M: TMN AND NETWORK MAINTENANCE: INTERNATIONAL TRANSMISSION SYSTEMS, TELEPHONE CIRCUITS, TELEGRAPHY, FACSIMILE AND LEASED CIRCUITS

Telecommunications management network

Generic network information model Corrigendum 2

ITU-T Recommendation M.3100 - Corrigendum 2

(Formerly CCITT Recommendation)

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ITU-T Recommendation M.3100

Generic network information model

CORRIGENDUM 2

Summary

This corrigendum corrects defects identified in ITU-T M.3100 and ITU-T M.3100 Amendment 1.

Source

Corrigendum 2 to ITU-T Recommendation M.3100 was revised by ITU-T Study Group 4 (2001-2004) and approved under the WTSA Resolution 1 procedure on 19 January 2001.

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

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As of the date of approval of this Recommendation, ITU had not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database.

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ITU-T Recommendation M.3100

Generic network information model

CORRIGENDUM 2

1 Introduction

This corrigendum corrects a number of defects to ITU-T M.3100 that have previously been documented and resolved in the M.3100 Implementors' Guide. This corrigendum replaces the Implementors' Guide as the authoritative source. However, the Implementors' Guide will be available on the ITU-T server until this corrigendum has been published.

Additional defects and resolutions will again be recorded in the Implementors' Guide and finally be published in an additional corrigendum or a revision of ITU-T M.3100.

1.1 Definitions

There are no new definitions added by this corrigendum.

2 Resolved defects

This corrigendum corrects the following defects reported against ITU-T M.3100 (1995):

Defect number	Issue	Correction No.
DR-M3100-30	Clarification on non-alarmed behaviour	1
DR-M3100-31	Duplication of registration OID	2
DR-M3100-32	The abstractLink usageCost attribute	3
DR-M3100-33	NetworkCTPSource behaviour	4
DR-M3100-34	Node	5
DR-M3100-35	SignalIdentification (signalId) in abstractLinkEnd	16
DR-M3100-36	Missing clientLinkEndPointerPackage in networkTTPSink.	6, 7
DR-M3100-37	Behaviour reference in networkCTPPackage	8,9
DR-M3100-38	Conditional componentPointerPackage of subNetworkConnection	10, 11
DR-M3100-39	Entity Relationships diagram for network level fragment (amendment 1)	12
DR-M3100-40	The behaviour definition of the signal identification	13
DR-M3100-41	accessGroup-layerNetworkDomain name binding semantics	14
DR-M3100-42	Topology objects creation behaviour with respect to signal identification	15, 16, 17, 18

1) New clause I.12 "Behaviour of non-alarmed severity conditions"

Add the following new clause I.12 with clarification of non-alarmed severity conditions:

"When the alarm severity code of a condition is critical, major, minor, or warning, alarm notifications are generated for that condition with a perceived severity equal to the severity code.

When the alarm severity code of a condition is non-alarmed, no alarm notifications are generated for that condition. The probableCause of the condition is still placed in the currentProblemList (if the currentProblemList attribute is present) with an alarmStatus of activePending."

2) Clause 2.2.13 "Network Trail Termination Point Sink "

In clause 2.2.13/M.3100 Amd.1, replace:

"REGISTERED AS {m3100ObjectClass 52};"

with:

"REGISTERED AS {m3100ObjectClass 56};"

3) Clause 2.3.43 "Usage Cost Package"

In clause 2.3.43/M.3100 Amd.1, replace existing usageCostPackage with:

usageCostPackage PACKAGE ATTRIBUTES usageCost GET-REPLACE; REGISTERED AS {m3100Package 91};

4) Clause 2.2.10 "Network Connection Termination Point Source"

In clause 2.2.10/M.3100 Amd.1, replace the paragraph:

"The Connectivity Pointer attribute points to the managed object representing the Connection which relates this instance to the instance representing the Network Connection Termination Point, Source or Bidirectional, that sends information (traffic) to this network termination point, or is null."

with the following:

"The Connectivity Pointer attribute points to the managed object representing the Connection which relates this instance to the instance representing the Network Connection Termination Point, Sink or Bidirectional, that receives information (traffic) from this network termination point, or is null."

5) Node related definitions

Remove the node object class, nodeId attribute, and the associated name bindings from ITU-T M.3100 Amd.1.

6) New clause 2.2.x "Network Trail Termination Point Sink R1"

Add the following new subclass networkTTPSinkR1 managed object class definition in a new clause 2.2.x/M.3100 Amd.1 following clause 2.2.13 "Network Trail Termination Point Sink":

networkTTPSinkR1 MANAGED OBJECT CLASS DERIVED FROM networkTTPSink; CONDITIONAL PACKAGES clientCTPListPackage PRESENT IF "management of the client networkCTPs of this managed object is supported <G.853.1,RELATIONSHIP:networkTTPAdaptsNetworkCTP>";;

REGISTERED AS {m3100ObjectClass 67};

7) New clause 2.2.x "Network Trail Termination Point Bidirectional R1"

Add the following new subclass networkTTPBidirectionalR1 managed object class definition in a new clause 2.2.x/M.3100 Amd.1 following clause 2.2.12 "Network Trail Termination Point Bidirectional":

networkTTPBidirectionalR1 MANAGED OBJECT CLASS DERIVED FROM networkTTPBidirectional, networkTTPSinkR1; REGISTERED AS {m3100ObjectClass 68};

8) Clause 2.2.9 "Network Connection Termination Point Sink"

In clause 2.2.9/M.3100 Amd.1, Network Connection Termination Point Sink, replace:

networkCTPPackage PRESENT IF

"pointers to instances of network termination points at higher or lower levels of subnetwork partitioning are supported by this managed object class <ITU-T G.853.1,RELATIONSHIP:subnetworkTPPoolIsMadeOfSubnetworkTP>",

with:

networkCTPPackage PRESENT IF

"pointers to instances of network termination points at higher or lower levels of subnetwork partitioning are supported by this managed object class

<G.853.1, RELATIONSHIP: subnetwork TPIs Related To Extremity>",

9) Clause 2.2.10 "Network Connection Termination Point Source"

In clause 2.2.10/M.3100 Amd.1, Network Connection Termination Point Source, replace:

networkCTPPackage PRESENT IF

"pointers to instances of network termination points at higher or lower levels of subnetwork partitioning are supported by this managed object class <see ITU-T G.853.1, RELATIONSHIP: subnetwork TPPoolIsMadeOfSubnetwork TP>",

with:

networkCTPPackage PRESENT IF

"pointers to instances of network termination points at higher or lower levels of subnetwork partitioning are supported by this managed object class <see G.853.1,RELATIONSHIP: subnetworkTPIsRelatedToExtremity>",

10) Clause 2.2.17 "Subnetwork Connection"

In clause 2.2.17/M.3100 Amd.1, Subnetwork Connection, replace:

"The componentListPackage is supported where the Subnetwork Connection is made up of a number of component Subnetwork Connections, and Connections, within the same layer.";;

with:

"The componentPackage is supported where the Subnetwork Connection is made up of a number of component Subnetwork Connections, and Link Connections, within the same layer.";;

11) Clause 2.2.17 "Subnetwork Connection"

In clause 2.2.17/M.3100 Amd.1, Subnetwork Connection, replace:

componentPointerPackage PRESENT IF

"the Subnetwork Connection is made up of a number of component Subnetwork Connections, and Connections, within the same layer (partitioned subnetworks)

<ITU-T G.853.1, RELATIONSHIP: subnetworkConnection is MadeOfTransportEntities>",

3

with:

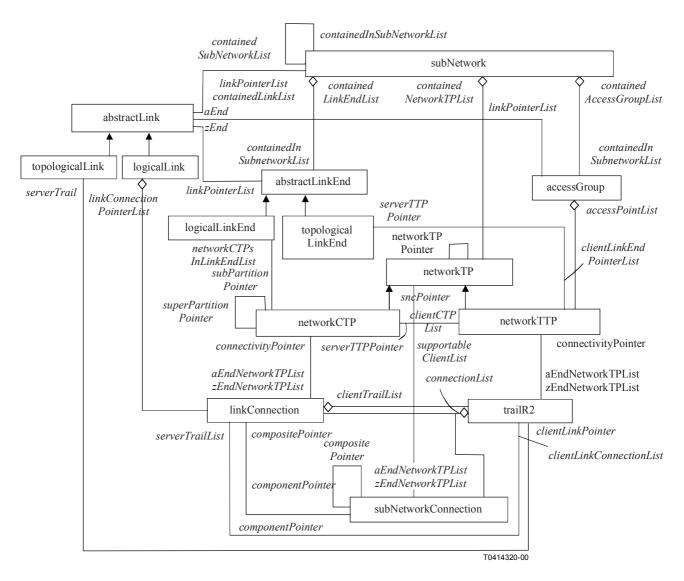
componentPointerPackage PRESENT IF

"the Subnetwork Connection is made up of a number of component Subnetwork Connections, and Link Connections, within the same layer (partitioned subnetworks)

<G.853.1, RELATIONSHIP: subnetworkConnectionisMadeOfTransportEntities>",

12) Clause 2.1 "Overview of the model"

In clause 2.1/M.3100 Amd.1 add the following revised Figure 2-1/M.3100-Inheritance:



13) Clause 2.4.47 "Signal Identification"

In clause 2.2.47/M.3100 Amd.1, Signal Identification, replace the following behaviour:

"This attribute defines the characteristic information of the layer (in the G.805 sense) to which the entity under consideration belongs. It is used to determine whether subnetwork connection/connectivity is possible. The signal Id may be a simple rate and format or may be a bundle of entities with the same characteristic information which form an aggregate signal.";;

with:

"This attribute defines the characteristic information of the layer (in the G.805 sense) to which the entity under consideration belongs. It is used to determine whether subnetwork connection/connectivity is possible. The signal Id may be a simple rate and format, a bundle of entities with the same characteristic information which form an aggregate signal, or a complex type containing groupings of different bundles. The complex type may be applicable to certain multi-media applications involving multiple parallel connections between endpoint locations";;

14) Clause 2.8.1 "Access Group"

In clause 2.8.1/M.3100 Amd.1, Access group, replace the following DELETE statement:

DELETE

ONLY-IF-NO-CONTAINED-OBJECTS networkTTPsExisting failureToRemoveAccessGroup;

with the following:

DELETE

DELETES-CONTAINED-OBJECTS networkTTPsExisting failureToRemoveAccessGroup;

15) New clause 2.2.x "Layer Network Domain R1"

Add the following new subclass layerNetworkDomainR1 managed object class definition in a new clause 2.2.x/M.3100 Amd.1 following clause 2.2.4 "Layer Network Domain":

layerNetworkDomainR1 MANAGED OBJECT CLASS DERIVED FROM layerNetworkDomain; CHARACTERIZED BY layerNetworkDomainPkgR1 PACKAGE BEHAVIOUR layerNetworkDomainBehaviourR1 BEHAVIOUR DEFINED AS

"The signalId can be set upon creation of an instance of the layerNetworkDomainR1 to support the following typical operations:

- 1) set the signalId value upon creation of the layer network domain
- 2) set the signalId attribute of a subnetwork (or abstract link, etc.) based on the value of the layer network domain instance referenced in the create request. ";;

ATTRIBUTES signalld CET SET BV (

signalId GET SET-BY-CREATE;;;

REGISTERED AS {m3100ObjectClass 69};

16) New clause 2.2.x "Abstract Link End R1"

Add the following new subclass abstractLinkEndR1 managed object class definition in a new clause 2.2.x/M.3100 Amd.1 following clause 2.2.2 "Abstract Link End":

abstractLinkEndR1 MANAGED OBJECT CLASS DERIVED FROM abstractLinkEnd; CHARACTERIZED BY abstractLinkEndPkgR1 PACKAGE ATTRIBUTES signalId GET;;; REGISTERED AS {m3100ObjectClass 70};

17) New clause 2.2.x "Logical Link End R1"

Add the following new subclass logicalLinkEndR1 managed object class definition in a new clause 2.2.x/M.3100 Amd.1 following clause 2.2.7 "Logical Link End":

logicalLinkEndR1 MANAGED OBJECT CLASS DERIVED FROM logicalLinkEnd; CHARACTERIZED BY logicalLinkEndPkgR1 PACKAGE ATTRIBUTES signalId GET;;; REGISTERED AS {m3100ObjectClass 71};

18) New clause 2.2.x "Topological Link End R1"

Add the following new subclass topologicalLinkEndR1 managed object class definition in a new clause 2.2.x/M.3100 Amd.1 following clause 2.2.19 "Topological Link End":

topologicalLinkEndR1 MANAGED OBJECT CLASS DERIVED FROM topologicalLinkEnd; CHARACTERIZED BY topologicalLinkEndPkgR1 PACKAGE ATTRIBUTES signalId GET;;; REGISTERED AS {m3100ObjectClass 72};

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