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INTERNATIONAL STANDARD

**OPC unified architecture –
Part 22: Base Network Model**



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CONTENTS

FOREWORD	4
1 Scope	6
2 Normative references	7
3 Terms, definitions and abbreviated terms	7
3.1 Terms and definitions.....	7
3.2 Abbreviated terms.....	7
4 Concepts	8
4.1 Type and Naming Conventions	8
4.2 Usage of OPC UA Interfaces.....	8
5 Base Network Model.....	8
5.1 Overview	8
5.2 OPC UA InterfaceTypes	10
5.2.1 IlletfBaseNetworkInterfaceType Interface	10
5.2.2 IlieeeBaseEthernetPortType Interface	11
5.2.3 IlieeeAutoNegotiationStatusType Interface	11
5.2.4 IBaseEthernetCapabilitiesType Interface	12
5.2.5 IVlanIdType Interface	12
5.2.6 ISrClassType Interface	13
5.2.7 IlieeeBaseTsnStreamType Interface	14
5.2.8 IlieeeBaseTsnTrafficSpecificationType Interface	14
5.2.9 IlieeeBaseTsnStatusStreamType Interface	15
5.2.10 IlieeeTsnInterfaceConfigurationType Interface	16
5.2.11 IlieeeTsnInterfaceConfigurationTalkerType Interface	16
5.2.12 IlieeeTsnInterfaceConfigurationListenerType Interface	17
5.2.13 IlieeeTsnMacAddressType Interface	17
5.2.14 IlieeeTsnVlanTagType Interface	18
5.2.15 IPriorityMappingEntryType Interface	18
5.3 DataTypes	19
5.3.1 Enumeration DataTypes	19
5.3.2 Structure DataTypes	24
5.4 Instance Entry Points	25
5.4.1 Resources Folder	26
5.4.2 Communication Folder	27
5.4.3 MappingTables Folder	27
5.4.4 NetworkInterfaces Folder	27
5.4.5 Streams Folder	28
5.4.6 TalkerStreams Folder	28
5.4.7 ListenerStreams Folder	28
5.5 ObjectTypes	29
5.5.1 IltfBaseNetworkInterfaceType	29
5.5.2 PriorityMappingTableType	31
5.6 ReferenceTypes.....	34
5.6.1 UsesPriorityMappingTable ReferenceType	34
5.6.2 HasLowerLayerInterface ReferenceType	35
Annex A (informative) Modelling Examples	36
A.1 Modelling Examples for Network Interfaces.....	36

A.1.1	Virtual Network Interfaces.....	36
A.1.2	Link Aggregation	37
A.2	Modelling Examples for PriorityMappingEntries and IetfBaseNetworkInterface.....	37
A.3	Usage of BNM in other UA Specifications	39
A.3.1	Usage of BNM for PubSub over TSN	39
A.3.2	Usage of BNM in PROFINET Companion Spec.....	39
Figure 1 – Scope of Base Network Model		6
Figure 2 – Overview of Base Network Model.....		9
Figure 3 – Instance Entry Points for Network Interfaces and Streams		26
Figure 4 – IetfBaseNetworkInterfaceType		29
Figure 5 – PriorityMappingTableType.....		31
Figure A.1 – Modelling Example for virtual network interfaces.....		36
Figure A.2 – Modelling example for link aggregation		37
Figure A.3 – Modelling Example for PriorityMappingTableType and IetfBaseNetworkInterface.....		38
Figure A.4 – Possible Integration of BNM into PubSub.....		39
Figure A.5 – Recommended Integration of BNM into Companion Spec exemplified by PROFINET.....		39
Table 1 – IIetfBaseNetworkInterfaceType definition		10
Table 2 – IIetfBaseNetworkInterfaceType Attribute values for child Nodes		10
Table 3 – IIeeeBaseEthernetPortType definition		11
Table 4 – IIeeeBaseEthernetPortType Attribute values for child Nodes		11
Table 5 – IIeeeAutoNegotiationStatusType definition		12
Table 6 – IBaseEthernetCapabilitiesType definition		12
Table 7 – IVlanIdType definition.....		13
Table 8 – ISrClassType definition		13
Table 9 – IIeeeBaseTsnStreamType definition		14
Table 10 – IIeeeBaseTsnTrafficSpecificationType definition.....		15
Table 11 – IIeeeBaseTsnStatusStreamType definition		15
Table 12 – IIeeeTsnInterfaceConfigurationType definition.....		16
Table 13 – IIeeeTsnInterfaceConfigurationTalkerType definition		16
Table 14 – IIeeeTsnInterfaceConfigurationListenerType definition		17
Table 15 – IIeeeTsnMacAddressType definition		17
Table 16 – IIeeeTsnVlanTagType definition		18
Table 17 – IPriorityMappingEntryType definition		18
Table 18 – Duplex Values		19
Table 19 – Duplex Definition		19
Table 20 – InterfaceAdminStatus Values.....		20
Table 21 – InterfaceAdminStatus Definition		20
Table 22 – InterfaceOperStatus Values.....		20
Table 23 – InterfaceOperStatus Definition.....		21
Table 24 – NegotiationStatus Values		21

Table 25 – NegotiationStatus Definition	21
Table 26 – TsnFailureCode values.....	22
Table 27 – TsnFailureCode Definition	22
Table 28 – TsnStreamState Values.....	23
Table 29 – TsnStreamState Definition.....	23
Table 30 – TsnTalkerStatus Values	23
Table 31 – TsnTalkerStatus Definition	24
Table 32 – TsnListenerStatus Values.....	24
Table 33 – TsnListenerStatus Definition.....	24
Table 34 – PriorityMappingEntryType structure	25
Table 35 – PriorityMappingEntryType Definition.....	25
Table 36 – Resources definition	26
Table 37 – Communication definition	27
Table 38 – MappingTables definition.....	27
Table 39 – NetworkInterfaces definition	28
Table 40 – Streams definition	28
Table 41 – TalkerStreams definition.....	28
Table 42 – ListenerStreams definition.....	29
Table 43 – IetfBaseNetworkInterfaceType definition.....	30
Table 44 – IetfBaseNetworkInterfaceType Attribute values for child Nodes	31
Table 45 – IetfBaseNetworkInterfaceType Additional References.....	31
Table 46 – PriorityMappingTableType definition.....	32
Table 47 – AddPriorityMappingEntry Method arguments	33
Table 48 – AddPriorityMappingEntry Method result codes.....	33
Table 49 – AddPriorityMappingEntry Method AddressSpace definition	33
Table 50 – DeletePriorityMappingEntry Method arguments	33
Table 51 – DeletePriorityMappingEntry Method result codes.....	34
Table 52 – DeletePriorityMappingEntry Method AddressSpace definition	34
Table 53 – UsesPriorityMappingTable definition.....	34
Table 54 – HasLowerLayerInterface definition	35

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**OPC unified architecture -
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The text of this International Standard is based on the following documents:

Draft	Report on voting
65E/1047/CDV	65E/1104/RVC

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

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Italics are also used to denote the name of a service input or output parameter or the name of a structure or element of a structure that are usually defined in tables.

The *italicized terms* and *names* are also often written in camel-case (the practice of writing compound words or phrases in which the elements are joined without spaces, with each element's initial letter capitalized within the compound). For example, the defined term is *AddressSpace* instead of Address Space. This makes it easier to understand that there is a single definition for *AddressSpace*, not separate definitions for Address and Space.

A list of all parts in the IEC 62541 series, published under the general title *OPC Unified Architecture*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

1 Scope

This part of IEC 62541 specifies an OPC UA *Information Model* for a basic set of network related components used in other *Information Models*.

The initial version of this document defines parameter sets for TSN Talkers and Listeners as well as network interfaces and ports as shown in Figure 1. A future version of this document is expected to have a broader scope of other network technologies than Ethernet only.

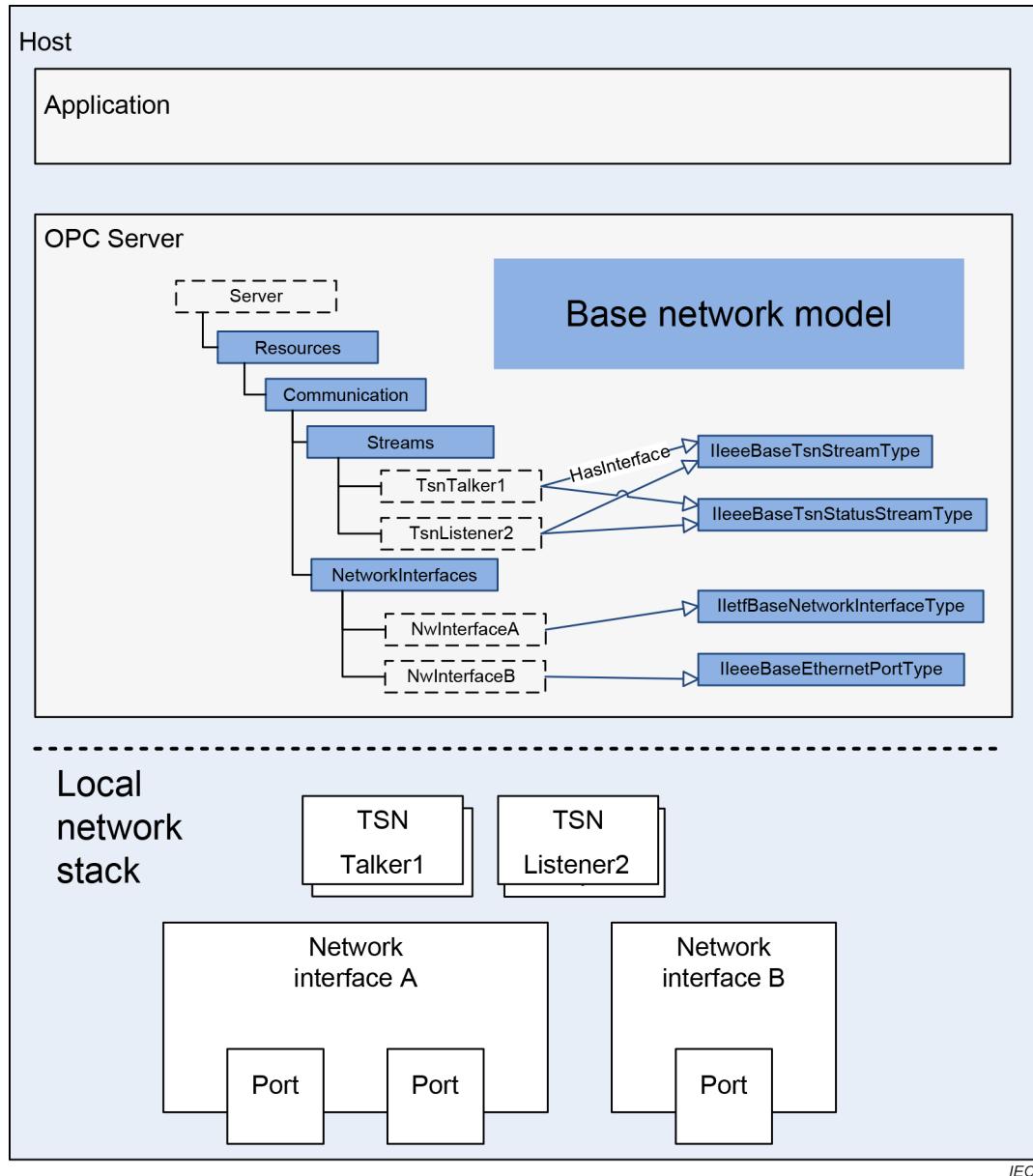


Figure 1 – Scope of Base Network Model

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 62541-1, *OPC Unified Architecture - Part 1: Overview and Concepts*

IEC 62541-5, *OPC Unified Architecture - Part 5: Information Model*

IEC 62541-8, *OPC Unified Architecture - Part 8: Data Access*

IEEE Std 802.3-2022, *IEEE Standard for Ethernet*

IEEE Std 802.1Q-2018, *IEEE Standard for Local and Metropolitan Area Networks Bridges and Bridged Networks*

IEEE Std 802.1Qcc-2018, *IEEE Standard for Local and Metropolitan Area Networks-Bridges and Bridged Networks - Amendment 31: Stream Reservation Protocol (SRP) Enhancements and Performance Improvements*

IETF RFC 2863, K. McCloghrie, "The Interfaces Group MIB", June 2000, available at <https://tools.ietf.org/html/rfc2863>