

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**OPC unified architecture –
Part 14: PubSub**

**Architecture unifiée OPC –
Partie 14: PubSub**



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IEC 62541-14

Edition 1.0 2020-07

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Part 14: PubSub**

**Architecture unifiée OPC –
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INTERNATIONAL
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ICS 25.040.40; 35.100.05

ISBN 978-2-8322-8577-0

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CONTENTS

| | |
|--|----|
| FOREWORD..... | 10 |
| 1 Scope..... | 12 |
| 2 Normative references | 12 |
| 3 Terms, definitions and abbreviated terms | 13 |
| 3.1 Terms and definitions..... | 13 |
| 3.2 Abbreviated terms..... | 14 |
| 4 Overview | 14 |
| 4.1 Fields of application..... | 14 |
| 4.2 Abstraction layers | 15 |
| 4.3 Decoupling by use of middleware..... | 15 |
| 4.4 Synergy of models | 16 |
| 5 PubSub Concepts..... | 16 |
| 5.1 General..... | 16 |
| 5.2 DataSet | 17 |
| 5.2.1 General | 17 |
| 5.2.2 DataSetClass | 18 |
| 5.2.3 DataSetMetaData | 18 |
| 5.3 Messages | 19 |
| 5.3.1 General | 19 |
| 5.3.2 DataSetMessage field..... | 20 |
| 5.3.3 DataSetMessage | 20 |
| 5.3.4 NetworkMessage | 21 |
| 5.3.5 Message security..... | 21 |
| 5.3.6 Transport security..... | 22 |
| 5.3.7 SecurityGroup | 22 |
| 5.4 Entities | 22 |
| 5.4.1 Publisher | 22 |
| 5.4.2 Subscriber | 25 |
| 5.4.3 Security Key Service | 26 |
| 5.4.4 Message Oriented Middleware..... | 29 |
| 6 PubSub communication parameters..... | 33 |
| 6.1 Overview..... | 33 |
| 6.2 Common Configuration Parameters..... | 34 |
| 6.2.1 PubSubState State Machine | 34 |
| 6.2.2 PublishedDataSet parameters | 36 |
| 6.2.3 DataSetWriter Parameters | 44 |
| 6.2.4 Shared PubSubGroup Parameters | 48 |
| 6.2.5 WriterGroup parameters | 50 |
| 6.2.6 PubSubConnection Parameters | 52 |
| 6.2.7 ReaderGroup parameters | 55 |
| 6.2.8 DataSetReader Parameters | 56 |
| 6.2.9 SubscribedDataSet Parameters | 60 |
| 6.2.10 Information flow and status handling..... | 63 |
| 6.2.11 PubSubConfigurationDataType..... | 65 |
| 6.3 Message mapping configuration parameters | 66 |
| 6.3.1 UADP message mapping | 66 |

| | | |
|---------------------|---|-----|
| 6.3.2 | JSON message mapping | 74 |
| 6.4 | Transport Protocol mapping configuration parameters | 77 |
| 6.4.1 | Datagram Transport Protocol..... | 77 |
| 6.4.2 | Broker Transport Protocol..... | 78 |
| 7 | PubSub mappings | 83 |
| 7.1 | General..... | 83 |
| 7.2 | Message mappings | 83 |
| 7.2.1 | General | 83 |
| 7.2.2 | UADP message mapping | 83 |
| 7.2.3 | JSON message mapping | 99 |
| 7.3 | Transport Protocol Mappings | 102 |
| 7.3.1 | General | 102 |
| 7.3.2 | OPC UA UDP | 102 |
| 7.3.3 | OPC UA Ethernet | 103 |
| 7.3.4 | AMQP..... | 104 |
| 7.3.5 | MQTT | 109 |
| 8 | PubSub security key service model | 111 |
| 8.1 | Overview..... | 111 |
| 8.2 | PublishSubscribe Object | 111 |
| 8.3 | PubSubKeyServiceType..... | 112 |
| 8.4 | GetSecurityKeys method..... | 112 |
| 8.5 | GetSecurityGroup method..... | 114 |
| 8.6 | SecurityGroupType | 115 |
| 8.7 | SecurityGroupFolderType | 116 |
| 8.8 | AddSecurityGroup Method | 116 |
| 8.9 | RemoveSecurityGroup Method..... | 117 |
| 9 | PubSub configuration model | 117 |
| 9.1 | Common configuration model..... | 117 |
| 9.1.1 | General | 117 |
| 9.1.2 | Configuration behaviours | 120 |
| 9.1.3 | Types for the PublishSubscribe Object | 120 |
| 9.1.4 | Published DataSet Model..... | 125 |
| 9.1.5 | Connection Model..... | 141 |
| 9.1.6 | Group Model..... | 145 |
| 9.1.7 | DataSetWriter Model | 153 |
| 9.1.8 | DataSetReader Model | 155 |
| 9.1.9 | Subscribed DataSet Model | 160 |
| 9.1.10 | PubSub Status Object..... | 163 |
| 9.1.11 | PubSub Diagnostics Objects..... | 164 |
| 9.1.12 | PubSub Status Events | 173 |
| 9.2 | Message Mapping Configuration Model..... | 175 |
| 9.2.1 | UADP Message Mapping | 175 |
| 9.2.2 | JSON Message Mapping | 177 |
| 9.3 | Transport Protocol Mapping Configuration Model..... | 178 |
| 9.3.1 | Datagram Transport Protocol Mapping..... | 178 |
| 9.3.2 | Broker Transport Protocol Mapping..... | 179 |
| Annex A (normative) | Common types | 182 |
| A.1 | DataType Schema Header structures | 182 |

| | | |
|-----------------------|--|-----|
| A.1.1 | DataTypeSchemaHeader | 182 |
| A.1.2 | DataTypeDescription | 183 |
| A.1.3 | StructureDescription | 183 |
| A.1.4 | EnumDescription | 184 |
| A.1.5 | SimpleTypeDescription | 184 |
| A.2 | UABinaryFileDataType | 184 |
| A.3 | NetworkAddress Model | 185 |
| A.3.1 | NetworkAddressType | 185 |
| A.3.2 | NetworkAddressUrlType | 186 |
| Annex B (informative) | Client Server vs. Publish Subscribe | 187 |
| B.1 | Overview | 187 |
| B.2 | Client Server Subscriptions | 187 |
| B.3 | Publish-Subscribe | 188 |
| B.4 | Synergy of models | 189 |
| | | |
| Figure 1 | – Publish Subscribe Model overview | 15 |
| Figure 2 | – Publisher and Subscriber entities | 17 |
| Figure 3 | – DataSet in the process of publishing | 18 |
| Figure 4 | – OPC UA PubSub message layers | 20 |
| Figure 5 | – Publisher details | 23 |
| Figure 6 | – Publisher message sending sequence | 24 |
| Figure 7 | – Subscriber details | 25 |
| Figure 8 | – Subscriber message reception sequence | 26 |
| Figure 9 | – SecurityGroup management sequence | 27 |
| Figure 10 | – Handshake used to pull keys from SKS | 28 |
| Figure 11 | – Handshake used to push keys to Publishers and Subscribers | 28 |
| Figure 12 | – Handshake with a Security Key Service | 29 |
| Figure 13 | – PubSub using network infrastructure | 30 |
| Figure 14 | – UDP Multicast overview | 30 |
| Figure 15 | – PubSub using broker | 31 |
| Figure 16 | – Broker overview | 32 |
| Figure 17 | – PubSub component overview | 33 |
| Figure 18 | – PubSub mapping specific parameters overview | 34 |
| Figure 19 | – PubSub component state dependencies | 35 |
| Figure 20 | – PubSubState state machine | 35 |
| Figure 21 | – PubSub Information Flow dependency to field representation | 45 |
| Figure 22 | – PubSub information flow | 64 |
| Figure 23 | – Start of the periodic publisher execution | 67 |
| Figure 24 | – Timing offsets in a PublishingInterval | 67 |
| Figure 25 | – DataSetOrdering and MaxNetworkMessageSize | 68 |
| Figure 26 | – PublishingOffset options for multiple <i>NetworkMessages</i> | 70 |
| Figure 27 | – UADP NetworkMessage | 84 |
| Figure 28 | – UADP DataSet payload | 90 |
| Figure 29 | – DataSetMessage header structure | 91 |
| Figure 30 | – Data Key Frame DataSetMessage data | 93 |

| | |
|--|-----|
| Figure 31 – Data Delta Frame DataSetMessage | 94 |
| Figure 32 – Event DataSetMessage | 95 |
| Figure 33 – KeepAlive message | 95 |
| Figure 34 – PublishSubscribe Object Types overview | 111 |
| Figure 35 – PubSub configuration model overview | 118 |
| Figure 36 – PubSub example Objects | 119 |
| Figure 37 – PubSub information flow | 119 |
| Figure 38 – PublishSubscribe Object Types overview | 121 |
| Figure 39 – Published DataSet overview | 125 |
| Figure 40 – PubSubConnectionType overview | 142 |
| Figure 41 – PubSubGroupType overview | 145 |
| Figure 42 – DataSet Writer Model Overview | 153 |
| Figure 43 – DataSet Reader Model overview | 155 |
| Figure 44 – PubSub Diagnostics overview | 165 |
| Figure 45 – PubSubDiagnosticsCounterType | 165 |
| Figure B.1 – Subscriptions in OPC UA Client Server Model | 188 |
| Figure B.2 – Publish Subscribe Model Overview | 189 |
| | |
| Table 1 – PubSubState values | 35 |
| Table 2 – PubSubState state machine | 36 |
| Table 3 – DataSetMetaData structure | 36 |
| Table 4 – DataSetMetaData definition | 37 |
| Table 5 – FieldMetaData structure | 37 |
| Table 6 – DataSetFieldFlags values | 39 |
| Table 7 – DataSetFieldFlags definition | 39 |
| Table 8 – ConfigurationVersionDataType structure | 40 |
| Table 9 – PublishedDataSetDataType structure | 41 |
| Table 10 – PublishedDataSetSourceDataType definition | 41 |
| Table 11 – PublishedVariableDataType structure | 42 |
| Table 12 – PublishedDataItemsDataType structure | 43 |
| Table 13 – PublishedEventsDataType structure | 43 |
| Table 14 – DataSetFieldContentMask values | 44 |
| Table 15 – DataSetFieldContentMask definition | 45 |
| Table 16 – DataSetMessage field representation options | 46 |
| Table 17 – DataSetWriterDataType structure | 47 |
| Table 18 – DataSetWriterTransportDataType definition | 47 |
| Table 19 – DataSetWriterMessageDataType structure | 48 |
| Table 20 – PubSubGroupDataType structure | 49 |
| Table 21 – PubSubGroupDataType definition | 49 |
| Table 22 – WriterGroupDataType structure | 51 |
| Table 23 – WriterGroupDataType definition | 51 |
| Table 24 – WriterGroupTransportDataType definition | 52 |
| Table 25 – WriterGroupMessageDataType structure | 52 |

| | |
|---|----|
| Table 26 – PubSubConnectionDataType structure | 53 |
| Table 27 – ConnectionTransportDataType definition | 54 |
| Table 28 – NetworkAddressDataType structure | 54 |
| Table 29 – NetworkAddressDataType definition | 54 |
| Table 30 – NetworkAddressUrlDataType structure | 54 |
| Table 31 – NetworkAddressUrlDataType definition..... | 55 |
| Table 32 – ReaderGroupDataType structure | 55 |
| Table 33 – ReaderGroupDataType definition..... | 55 |
| Table 34 – ReaderGroupTransportDataType definition..... | 56 |
| Table 35 – ReaderGroupMessageDataType structure | 56 |
| Table 36 – DataSetReaderDataType structure | 59 |
| Table 37 – DataSetReaderTransportDataType structure | 59 |
| Table 38 – DataSetReaderTransportDataType definition..... | 60 |
| Table 39 – DataSetReaderMessageDataType structure | 60 |
| Table 40 – DataSetReaderMessageDataType definition..... | 60 |
| Table 41 – SubscribedDataSetDataType structure | 60 |
| Table 42 – SubscribedDataSetDataType Definition | 61 |
| Table 43 – TargetVariablesDataType structure | 61 |
| Table 44 – FieldTargetDataType structure | 62 |
| Table 45 – OverrideValueHandling values | 63 |
| Table 46 – SubscribedDataSetMirrorDataType structure | 63 |
| Table 47 – Source to message input mapping..... | 64 |
| Table 48 – Message output to target mapping..... | 65 |
| Table 49 – PubSubConfigurationDataType structure | 65 |
| Table 50 – PubSubConfiguration file content | 66 |
| Table 51 – DataSetOrderingType values..... | 68 |
| Table 52 – UadpNetworkMessageContentMask values | 69 |
| Table 53 – UadpNetworkMessageContentMask definition | 69 |
| Table 54 – UadpWriterGroupMessageDataType structure | 71 |
| Table 55 – UadpDataSetMessageContentMask values | 71 |
| Table 56 – UadpDataSetMessageContentMask definition | 72 |
| Table 57 – UadpDataSetWriterMessageDataType structure | 73 |
| Table 58 – UadpDataSetReaderMessageDataType structure | 74 |
| Table 59 – JsonNetworkMessageContentMask values | 75 |
| Table 60 – JsonNetworkMessageContentMask definition | 75 |
| Table 61 – JsonWriterGroupMessageDataType structure | 75 |
| Table 62 – JsonDataSetMessageContentMask values | 76 |
| Table 63 – JsonDataSetMessageContentMask definition | 76 |
| Table 64 – JsonDataSetWriterMessageDataType structure | 76 |
| Table 65 – JsonDataSetReaderMessageDataType structure | 77 |
| Table 66 – DatagramConnectionTransportDataType structure | 77 |
| Table 67 – DatagramWriterGroupTransportDataType structure | 78 |
| Table 68 – BrokerConnectionTransportDataType structure | 79 |

| | |
|--|-----|
| Table 69 – BrokerTransportQualityOfService values | 80 |
| Table 70 – BrokerWriterGroupTransportDataType structure | 80 |
| Table 71 – BrokerDataSetWriterTransportDataType structure | 82 |
| Table 72 – BrokerDataSetReaderTransportDataType structure | 83 |
| Table 73 – UADP NetworkMessage | 84 |
| Table 74 – Layout of the key data for UADP message security | 87 |
| Table 75 – Layout of the MessageNonce for AES-CTR | 88 |
| Table 76 – Layout of the counter block for UADP message security | 88 |
| Table 77 – Chunked NetworkMessage payload header | 89 |
| Table 78 – Chunked NetworkMessage payload fields | 89 |
| Table 79 – UADP DataSet payload header | 90 |
| Table 80 – UADP DataSet payload | 91 |
| Table 81 – DataSetMessage header structure | 92 |
| Table 82 – Data Key Frame DataSetMessage structure | 93 |
| Table 83 – Data Delta Frame DataSetMessage structure | 94 |
| Table 84 – Event DataSetMessage structure | 95 |
| Table 85 – Discovery request header structure | 97 |
| Table 86 – Publisher information request message structure | 97 |
| Table 87 – Discovery response header structure | 98 |
| Table 88 – Publisher Endpoints message structure | 98 |
| Table 89 – DataSetMetaData message structure | 98 |
| Table 90 – DataSetWriter configuration message structure | 99 |
| Table 91 – JSON NetworkMessage definition | 99 |
| Table 92 – JSON DataSetMessage definition | 101 |
| Table 93 – JSON DataSetMetaData definition | 102 |
| Table 94 – UADP message transported over UDP | 103 |
| Table 95 – UADP message transported over Ethernet | 104 |
| Table 96 – AMQP standard header fields | 106 |
| Table 97 – OPC UA AMQP standard header QualifiedName Name mappings | 107 |
| Table 98 – OPC UA AMQP header field conversion rules | 108 |
| Table 99 – PublishSubscribe Object definition | 112 |
| Table 100 – PubSubKeyType definition | 112 |
| Table 101 – SecurityGroupType definition | 115 |
| Table 102 – SecurityGroupFolderType definition | 116 |
| Table 103 – PublishSubscribeType definition | 122 |
| Table 104 – HasPubSubConnection ReferenceType | 125 |
| Table 105 – PublishedDataSetType definition | 126 |
| Table 106 – ExtensionFieldsType definition | 127 |
| Table 107 – Well-Known Extension Field Names | 128 |
| Table 108 – DataSetToWriter ReferenceType | 129 |
| Table 109 – PublishedDataItemsType definition | 130 |
| Table 110 – PublishedEventsType definition | 133 |
| Table 111 – DataSetFolderType definition | 134 |

| | |
|---|-----|
| Table 112 – PubSubConnectionType definition | 142 |
| Table 113 – ConnectionTransportType definition | 145 |
| Table 114 – PubSubGroupType definition | 146 |
| Table 115 – WriterGroupType definition | 147 |
| Table 116 – HasDataSetWriter ReferenceType | 149 |
| Table 117 – WriterGroupTransportType definition | 149 |
| Table 118 – WriterGroupMessageType definition | 150 |
| Table 119 – ReaderGroupType definition | 150 |
| Table 120 – HasDataSetReader ReferenceType | 152 |
| Table 121 – ReaderGroupTransportType definition | 152 |
| Table 122 – ReaderGroupMessageType Definition | 152 |
| Table 123 – DataSetWriterType definition | 153 |
| Table 124 – DataSetWriterTransportType definition | 154 |
| Table 125 – DataSetWriterMessageType definition | 154 |
| Table 126 – DataSetReaderType definition | 156 |
| Table 127 – DataSetReaderTransportType definition | 157 |
| Table 128 – DataSetReaderMessageType definition | 158 |
| Table 129 – SubscribedDataSetType definition | 160 |
| Table 130 – TargetVariablesType definition | 160 |
| Table 131 – SubscribedDataSetMirrorType definition | 162 |
| Table 132 – PubSubStatusType definition | 163 |
| Table 133 – Status Object definition | 164 |
| Table 134 – PubSubDiagnosticsType | 166 |
| Table 135 – Counters for PubSubDiagnosticsType | 166 |
| Table 136 – DiagnosticsLevel Values | 167 |
| Table 137 – PubSubDiagnosticsCounterType | 168 |
| Table 138 – PubSubDiagnosticsCounterClassification Values | 168 |
| Table 139 – PubSubDiagnosticsRootType | 169 |
| Table 140 – LiveValues for PubSubDiagnosticsRootType | 169 |
| Table 141 – PubSubDiagnosticsConnectionType | 169 |
| Table 142 – LiveValues for PubSubDiagnosticsConnectionType | 170 |
| Table 143 – PubSubDiagnosticsWriterGroupType | 170 |
| Table 144 – Counters for PubSubDiagnosticsWriterGroupType | 170 |
| Table 145 – LiveValues for PubSubDiagnosticsWriterGroupType | 170 |
| Table 146 – PubSubDiagnosticsReaderGroupType | 171 |
| Table 147 – Counters for PubSubDiagnosticsReaderGroupType | 171 |
| Table 148 – LiveValues for PubSubDiagnosticsReaderGroupType | 171 |
| Table 149 – PubSubDiagnosticsDataSetWriterType | 172 |
| Table 150 – Counters for PubSubDiagnosticsDataSetWriterType | 172 |
| Table 151 – LiveValues for PubSubDiagnosticsDataSetWriterType | 172 |
| Table 152 – PubSubDiagnosticsDataSetReaderType | 172 |
| Table 153 – Counters for PubSubDiagnosticsDataSetReaderType | 173 |
| Table 154 – LiveValues for PubSubDiagnosticsDataSetReaderType | 173 |

| | |
|---|-----|
| Table 155 – PubSubStatusEventType definition | 173 |
| Table 156 – PubSubTransportLimitsExceedEventType definition | 174 |
| Table 157 – PubSubCommunicationFailureEventType definition | 174 |
| Table 158 – UadpWriterGroupMessageType definition | 175 |
| Table 159 – UadpDataSetWriterMessageType definition | 176 |
| Table 160 – UadpDataSetReaderMessageType definition | 176 |
| Table 161 – JsonWriterGroupMessageType Definition | 177 |
| Table 162 – JsonDataSetWriterMessageType definition | 177 |
| Table 163 – JsonDataSetReaderMessageType definition | 178 |
| Table 164 – DatagramConnectionTransportType definition | 178 |
| Table 165 – DatagramWriterGroupTransportType definition | 178 |
| Table 166 – BrokerConnectionTransportType definition | 179 |
| Table 167 – BrokerWriterGroupTransportType definition | 179 |
| Table 168 – BrokerDataSetWriterTransportType definition | 180 |
| Table 169 – Broker Writer well-known extension field names | 180 |
| Table 170 – BrokerDataSetReaderTransportType definition | 181 |
| Table A.1 – DataTypeSchemaHeader structure | 182 |
| Table A.2 – DataTypeSchemaHeader definition | 182 |
| Table A.3 – DataTypeDescription structure | 183 |
| Table A.4 – DataTypeDescription definition | 183 |
| Table A.5 – StructureDescription structure | 183 |
| Table A.6 – StructureDescription definition | 183 |
| Table A.7 – EnumDescription Structure | 184 |
| Table A.8 – EnumDescription definition | 184 |
| Table A.9 – SimpleTypeDescription structure | 184 |
| Table A.10 – UABinaryFileDataType structure | 185 |
| Table A.11 – UABinaryFileDataType definition | 185 |
| Table A.12 – NetworkAddressType definition | 185 |
| Table A.13 – NetworkAddressUriType definition | 186 |

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OPC UNIFIED ARCHITECTURE –

Part 14: PubSub

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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.

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OPC UNIFIED ARCHITECTURE –

Part 14: PubSub

1 Scope

This part of IEC 62541 defines the OPC Unified Architecture (OPC UA) *PubSub* communication model. It defines an OPC UA publish subscribe pattern which complements the client server pattern defined by the *Services* in IEC 62541-4. IEC TR 62541-1 gives an overview of the two models and their distinct uses.

PubSub allows the distribution of data and events from an OPC UA information source to interested observers inside a device network as well as in IT and analytics cloud systems.

This document consists of

- a general introduction of the *PubSub* concepts,
- a definition of the *PubSub* configuration parameters,
- mapping of *PubSub* concepts and configuration parameters to messages and transport protocols, and
- a PubSub configuration model.

Not all OPC UA *Applications* will need to implement all defined message and transport protocol mappings. IEC 62541-7 defines the *Profile* that dictates which mappings need to be implemented in order to be compliant with a particular *Profile*.

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

IEC TR 62541-2, *OPC Unified Architecture – Part 2: Security Model*

IEC 62541-3, *OPC Unified Architecture – Part 3: Address Space Model*

IEC 62541-4, *OPC Unified Architecture – Part 4: Services*

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

IEC 62541-6, *OPC Unified Architecture – Part 6: Mappings*

IEC 62541-7, *OPC Unified Architecture – Part 7: Profiles*

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

IEC 62541-12, *OPC Unified Architecture – Part 12: Discovery and Global Services*