

---

**Odperta izmenjava podatkov v avtomatizaciji stavb, regulaciji in upravljanju stavb -  
Protokol regulacijske mreže - 10. del: Specifikacija spletnih storitev za protokol  
regulacijske mreže**

Open Data Communication in Building Automation, Controls and Building Management -  
Control Network Protocol - Part 10: Web Services for Control Networking Protocol  
Specification

Firmenneutrale Datenkommunikation für die Gebäudeautomation und  
Gebäudemanagement - Gebäude-Netzwerk-Protokoll - Teil 10: Spezifikation der  
Webdienste für das Kontrollnetzwerkprotokoll

Communication de données ouvertes dans le domaine de l'immatique, du contrôle et de  
la gestion des bâtiments - Protocole de réseau de contrôle - Partie 10 : Services Web  
pour la spécification du protocole de réseau de contrôle

<https://standards.iteh.ai/catalog/standards/sist/b24c0327-b74a-4ce8-9de5-4d6cba2666a1/sist-en-14908-10-2025>

**Ta slovenski standard je istoveten z: EN 14908-10:2025**

---

**ICS:**

35.240.67	Uporabniške rešitve IT v gradbeništvu	IT applications in building and construction industry
97.120	Avtomatske krmilne naprave za dom	Automatic controls for household use

**SIST EN 14908-10:2025****en,fr,de**



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 14908-10**

April 2025

ICS 35.240.67; 91.140.01; 97.120

English Version

**Open Data Communication in Building Automation,  
Controls and Building Management - Control Network  
Protocol - Part 10: Web Services for Control Networking  
Protocol Specification**

Communication de données ouverte dans le domaine  
de l'automatisation, du contrôle et de la gestion des  
bâtiments - Protocole de contrôle réseau - Partie 10 :  
Services Web pour la spécification du protocole de  
contrôle réseau

Firmenneutrale Datenkommunikation für die  
Gebäudeautomation und Gebäudemanagement -  
Gebäude-Netzwerk-Protokoll - Teil 10: Spezifikation  
der Webdienste für das Kontrollnetzwerkprotokoll

This European Standard was approved by CEN on 17 February 2025.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

## Contents

Page

European foreword .....	9
Introduction .....	10
1 Scope.....	12
2 Normative references.....	12
3 Terms and definitions .....	12
4 IAP API FUNDAMENTALS.....	13
4.1 IAP API Overview .....	13
4.2 IAP/MQ Fundamentals.....	14
4.2.1 IAP/MQ Overview .....	14
4.2.2 MQTT in IAP .....	14
4.2.3 Supported MQTT Version .....	14
4.2.4 IAP/MQ Topics .....	15
4.2.5 Persistent Clients vs Transient Clients .....	15
4.2.6 Client Expiration .....	15
4.2.7 Message Payload .....	15
4.2.8 CMS Connectivity.....	16
4.2.9 An IAP Site .....	16
4.3 Partial Object Assignment .....	16
4.3.1 Definition .....	16
4.3.2 Edge Servers and Partial Object Assignment.....	17
4.3.3 Timestamps in IAP.....	18
4.3.4 Most Recently Used (MRU) Timestamp .....	18
4.4 IAP/MQ Topic Syntax.....	19
4.4.1 Syntax elements.....	19
4.4.2 Device Syntax.....	23
4.4.3 Wildcards.....	25
4.5 IAP/REST Fundamentals .....	25
4.5.1 REST Overview.....	25
4.5.2 REST in IAP .....	26
4.5.3 Making IAP/REST Calls .....	26
4.6 IAP/REST Syntax .....	26
4.7 Queries and Parameters.....	27
4.8 Path Parameters.....	29
4.9 Query Parameters.....	30
4.10 IAP/WS Fundamentals.....	31
4.11 Data Log WebSocket Queries and Parameters.....	32
4.11.1 Data Log WebSocket Overview .....	32
4.11.2 Key.....	32
4.11.3 Operator .....	32
4.11.4 Value .....	32
4.11.5 Regular Expression Encoding.....	32
5 IAP/MQ API .....	33
5.1 Overview .....	33
5.2 About .....	33
5.2.1 Definition .....	33

5.2.2	Example.....	34
5.2.3	Properties.....	35
5.3	Alarm.....	39
5.3.1	Definition.....	39
5.3.2	Example.....	39
5.3.3	Alarm Configuration.....	41
5.3.4	Alarm Status .....	41
5.3.5	Examples.....	41
5.3.6	Alarm Properties .....	41
5.3.7	Alarm Actions.....	43
5.3.8	Alarm Conditions .....	44
5.3.9	Manage Alarms .....	47
5.4	Connections .....	47
5.4.1	Definition.....	47
5.4.2	Connection Implementation.....	47
5.4.3	Connection with Datapoint Presets .....	48
5.4.4	Connection Objects.....	49
5.4.5	Connection Do Actions.....	54
5.4.6	Connection Types .....	57
5.4.7	Type Translation.....	58
5.5	Data Type Definitions.....	62
5.5.1	Definition.....	62
5.5.2	Data Type References.....	62
5.5.3	About IAP Data Types.....	63
5.5.4	Data Type General Information.....	63
5.5.5	Data Type Presentation and Formatting.....	65
5.6	Device.....	66
5.6.1	Definition.....	66
5.6.2	Device Objects.....	66
5.6.3	Device Configuration .....	67
5.6.4	Device Do Action .....	68
5.6.5	Device Interface .....	78
5.6.6	Device Status .....	79
5.6.7	Dynamic Interfaces .....	81
5.6.8	Implementation Detail Object.....	83
5.7	Discovery .....	85
5.8	Discovery and Provisioning Details .....	87
5.8.1	Device Discovery.....	87
5.8.2	Segment Discovery .....	91
5.8.3	Segment Provisioning .....	91
5.8.4	Segment Discovery Message .....	93
5.9	Events.....	95
5.9.1	Definition.....	95
5.9.2	Data Events .....	97
5.9.3	Join Events.....	97
5.9.4	Tracing.....	98
5.9.5	Event Object Properties .....	98
5.9.6	Created Event.....	101
5.9.7	Deleted Event .....	103
5.9.8	Updated Event.....	104
5.10	Group.....	105
5.10.1	Definition.....	105
5.10.2	Group Characteristics .....	106

## EN 14908-10:2025 (E)

5.10.3 Group Examples.....	106
5.10.4 IAP Groups.....	108
5.10.5 self.add.....	110
5.10.6 self.create.....	111
5.10.7 self.delete.....	112
5.10.8 self.provision.....	112
5.10.9 self.remove.....	113
5.11 Handle Allocation .....	114
5.11.1 Definition .....	114
5.11.2 Handle Allocation Service .....	115
5.11.3 Handle Request.....	115
5.11.4 Handle Response.....	116
5.11.5 Example.....	116
5.12 Interface Blocks.....	116
5.12.1 Definition .....	116
5.12.2 Interface Topics.....	117
5.12.3 Block Object Properties.....	117
5.12.4 Datapoint Objects .....	119
5.12.5 Datapoint Presets .....	125
5.12.6 Datapoint Localization.....	133
5.12.7 Monitor Preference Object .....	137
5.12.8 Working with Datapoint Values .....	141
5.12.9 Working with Unions.....	145
5.13 License Services.....	146
5.13.1 License Service Overview.....	146
5.13.2 Actions .....	146
5.13.3 Capacity .....	153
5.13.4 Cloud.....	154
5.13.5 Configuration.....	156
5.13.6 License Management .....	157
5.13.7 Status.....	159
5.14 Load Do Action .....	161
5.14.1 Definition .....	161
5.14.2 Outer Image File .....	161
5.14.3 Load Procedure .....	162
5.14.4 The Load Object.....	163
5.14.5 Inner Image File Example .....	163
5.14.6 Load Action and Manifest Properties .....	164
5.15 On-Demand Monitoring.....	169
5.15.1 Definition .....	169
5.15.2 On-Demand Datapoint Monitoring Request.....	170
5.15.3 On-Demand Datapoint Monitoring Response.....	171
5.15.4 On-Demand Monitoring Service Collaboration.....	171
5.15.5 Item Poll Request.....	172
5.15.6 Item Poll Response.....	172
5.16 Query .....	173
5.16.1 Definition .....	173
5.16.2 Query Request Properties .....	173
5.16.3 Query Response.....	175
5.16.4 Filtering.....	176
5.17 Schedule Services.....	177
5.17.1 Schedule Services Overview.....	177
5.17.2 Schedule Algorithm.....	178

5.17.3	Schedule Object.....	179
5.17.4	Calendar Object.....	182
5.17.5	Calendar Status Object.....	183
5.17.6	Dates in Schedules and Calendars.....	185
5.17.7	Specifying Dates.....	185
5.17.8	Weekly Schedule.....	189
5.17.9	Exception Schedule.....	190
5.18	Segment Configuration.....	192
5.18.1	Definition.....	192
5.18.2	Segment Configuration Properties.....	193
5.18.3	Location Object.....	197
5.19	Segment Do Actions.....	199
5.19.1	Definition.....	199
5.19.2	Action Objects.....	199
5.20	Segment Status.....	206
5.20.1	Definition.....	206
5.20.2	Example.....	206
5.20.3	Properties.....	206
6	IAP/REST API.....	207
6.1	IAP/REST Overview.....	207
6.2	Access.....	207
6.2.1	URI Definition.....	207
6.2.2	Query Parameters.....	208
6.3	Alarms.....	208
6.3.1	URI Definition.....	208
6.3.2	Query Parameters.....	222
6.4	Authentication (Login/Logout).....	222
6.4.1	URI Definition.....	222
6.4.2	Query Parameters.....	224
6.4.3	Example.....	224
6.5	Capabilities.....	225
6.5.1	URI Definition.....	225
6.5.2	Query Parameters.....	227
6.6	Connection.....	228
6.6.1	URI Definition.....	228
6.6.2	Parameters.....	228
6.6.3	Query Parameters.....	228
6.6.4	Examples.....	228
6.7	Context.....	228
6.7.1	Context Overview.....	228
6.7.2	Context - Contextual Entity Relationship.....	229
6.7.3	Device Assignment.....	229
6.7.4	URI Definition.....	229
6.8	Customers.....	236
6.8.1	URI Definition.....	236
6.8.2	Query Parameters.....	239
6.8.3	Examples.....	239
6.9	Datapoint Categories.....	240
6.9.1	URI Definition.....	240
6.9.2	Queries.....	241
6.10	Datapoint Default Values.....	243
6.10.1	URI Definition.....	243