

DLI EPCR5 Object Model Reference

Generated by Doxygen

20180420T190047Z

Contents

1	DLI Controller API	1
2	Relay object	3
2.1	Name	4
2.2	Online status	5
2.3	Model	5
2.4	Relay version number	6
2.5	Outlets	6
2.5.1	Outlet	7
2.6	Outlet: Name	8
2.7	Outlet: Configured state	9
2.8	Outlet: Transient state	10
2.9	Outlet: Physical state	11
2.10	Outlet: Lock state	12
2.11	Outlet: Critical	13
2.12	Outlet: Outlet cycle delay, if any	13
2.12.1	Outlet cycle delay	14
2.13	Outlet: Cycle	14
2.13.1	Action performed	15
2.14	Outlet ON sequence delay	15
2.15	Minimal ON sequence delay	16
2.16	Default outlet cycle delay	16
2.17	Brown-out re-latch delay	16
2.18	Recovery mode	17
2.19	Buses	18
2.19.1	Bus	18
2.20	Bus: Outlet list	20
2.20.1	Outlet index	21
2.21	Bus: Voltage-affected outlets	21

2.21.1	Outlet list index	22
2.22	Bus: Minimum voltage, if any	23
2.22.1	Minimum voltage	23
2.23	Bus: Maximum voltage, if any	24
2.23.1	Maximum voltage	24
2.24	Bus: Current-affected outlets	25
2.24.1	Outlet list index	25
2.25	Bus: Maximum current, if any	26
2.25.1	Maximum current	27
2.26	Pins	27
2.26.1	GPIO pin	28
2.27	GPIO pin: Name	29
2.28	GPIO pin: Mode driver	30
2.28.1	Net name	30
2.28.2	Invalid net placeholder	31
2.29	GPIO pin: Mode driver locked	31
2.30	GPIO pin: Level driver	32
2.30.1	Net name	33
2.30.2	Invalid net placeholder	33
2.31	GPIO pin: Level driver locked	33
2.32	Nets	34
2.32.1	Net	35
2.33	Net: Name	36
2.34	Net: Expression, if any	37
2.34.1	Expression	37
2.35	Net: Tracking	38
2.36	Net: Value	38
2.37	Enable measurement-driven outlet control	39
2.38	Minimum relay voltage, if any	40
2.38.1	Minimum relay voltage	40

2.39 Measurement-driven relatch timeout, if any	41
2.39.1 Measurement-driven relatch timeout	41
2.40 Keypad state	42
2.41 LCD all-caps filter	42
2.42 Beep sequence	43
2.43 Backlight sequence	43
2.44 LCD column count	44
2.45 LCD row count	44
2.46 User LCD lines	45
2.47 User LCD lines: User LCD line, if any	46
2.47.1 User LCD line	46
2.48 User message force display timeout, if any	47
2.48.1 User message force display timeout	47
2.49 User message display timeout, if any	48
2.49.1 User message display timeout	48
2.50 Notifications	48
2.50.1 Events	49
2.51 Message template: Message template element	50
2.51.1 String	51
2.51.2 Parameter	51
2.52 Event parameter: Fixed value	51
2.52.1 String	51
2.52.2 Number	52
2.53 Event parameter: Fixed value flag	52
2.54 Event parameter: Identifier	52
2.55 Events: Event	53
2.55.1 Message template	54
2.55.2 Event parameters	54
2.55.3 Severity	57
2.56 Notifications: Parameter kinds	58
2.56.1 Lock state	58
2.56.2 Outlet	59
2.56.3 Physical state	59
2.56.4 Configured state	60
2.56.5 Transient state	60

3 Authentication server object	61
3.1 Users list	62
3.1.1 User account	63
3.2 User account: Username	64
3.3 User account: Password	65
3.4 User account: User allowed	66
3.5 User account: Administrative user	66
3.6 User account: Outlet access levels	67
3.6.1 Outlet access	68
3.7 Cookie timeout	69
3.8 Notifications	69
3.8.1 Events	70
3.9 Message template: Message template element	71
3.9.1 String	72
3.9.2 Parameter	72
3.10 Event parameter: Fixed value	72
3.10.1 String	72
3.10.2 Number	73
3.11 Event parameter: Fixed value flag	73
3.12 Event parameter: Identifier	73
3.13 Events: Event	74
3.13.1 Message template	74
3.13.2 Event parameters	75
3.13.3 Severity	77
3.14 Notifications: Parameter kinds	77
3.14.1 Authentication allowed	77
3.14.2 IP address	78
3.14.3 Username	78
3.14.4 Method	79
3.14.5 Reason	79
3.14.6 User state	79

4	Configuration server object	80
4.1	Links list	83
4.2	Links list: Link	84
4.2.1	URI	85
4.2.2	Description	85
4.3	Plots list	86
4.3.1	Plot	87
4.4	Plot: Title	89
4.5	Plot: Display	89
4.6	Plot: Width	90
4.7	Plot: Height	91
4.8	Plot: X1 axis settings	91
4.8.1	Minimum, if any	92
4.8.2	Maximum, if any	93
4.8.3	Soft minimum, if any	94
4.8.4	Soft maximum, if any	95
4.8.5	Major tick interval, if any	96
4.8.6	Minor ticks per major tick, if any	96
4.9	Plot: X2 axis settings	97
4.9.1	Minimum, if any	98
4.9.2	Maximum, if any	99
4.9.3	Soft minimum, if any	100
4.9.4	Soft maximum, if any	101
4.9.5	Major tick interval, if any	102
4.9.6	Minor ticks per major tick, if any	102
4.10	Plot: Y1 axis settings	103
4.10.1	Minimum, if any	104
4.10.2	Maximum, if any	105
4.10.3	Soft minimum, if any	106
4.10.4	Soft maximum, if any	107

4.10.5	Major tick interval, if any	108
4.10.6	Minor ticks per major tick, if any	108
4.11	Plot: Y2 axis settings	109
4.11.1	Minimum, if any	110
4.11.2	Maximum, if any	111
4.11.3	Soft minimum, if any	112
4.11.4	Soft maximum, if any	113
4.11.5	Major tick interval, if any	114
4.11.6	Minor ticks per major tick, if any	114
4.12	Plot line configuration: Style	115
4.12.1	Line style	116
4.12.2	Line type	117
4.12.3	Line color	117
4.12.4	Line width	118
4.12.5	Marker size	119
4.12.6	Base axes	119
4.12.7	Marker type	120
4.13	Plot: Plot lines	120
4.13.1	Plot line configuration	121
4.14	Meters list	124
4.14.1	Meter configuration	125
4.15	Meter configuration: Title	127
4.16	Meter configuration: Display	128
4.17	Meter configuration: Data source	128
4.18	Meter configuration: Width	129
4.19	Meter configuration: Height	129
4.20	Meter configuration: Display scale	130
4.21	Meter configuration: Decimals	131
4.22	Meter configuration: Arrow color	131
4.23	Meter configuration: Minimum value	132

4.24 Meter configuration: Meter sectors	132
4.24.1 Sector configuration	134
4.25 Primary unit contact	136
4.26 Related contacts	137
4.26.1 Contact	138
4.27 Contact: Name	139
4.28 Contact: Email, if any	140
4.28.1 Email	141
4.29 Contact: Phone number, if any	141
4.29.1 Phone number	141
4.30 Contact: Fax number, if any	142
4.30.1 Fax number	142
4.31 Unit location	143
4.32 Model OID	143
4.33 Version number	144
4.34 Hardware ID	144
4.35 Serial number	144
4.36 Outlet label	145
4.37 Brand company name	145
4.38 Brand name	145
4.39 Brand URL	146
4.40 Brand manual URL	146
4.41 Brand FAQ URL	147
4.42 Brand product information URL	147
4.43 Support email	147
4.44 Registration URL	148
4.45 Support URL	148
4.46 Update URL	149
4.47 Custom brand company name, if any	149
4.47.1 Custom brand company name	150

4.48 Custom brand name, if any	150
4.48.1 Custom brand name	151
4.49 Custom brand URL, if any	151
4.49.1 Custom brand URL	151
4.50 Custom brand logo URL, if any	152
4.50.1 Custom brand logo URL	152
4.51 Custom brand logo width, if any	153
4.51.1 Custom brand logo width	153
4.52 Custom brand logo height, if any	153
4.52.1 Custom brand logo height	154
4.53 Custom support email, if any	154
4.53.1 Custom support email	155
4.54 Custom registration URL, if any	155
4.54.1 Custom registration URL	156
4.55 Custom support URL, if any	156
4.55.1 Custom support URL	157
4.56 Custom update URL, if any	157
4.56.1 Custom update URL	157
4.57 Custom help URL, if any	158
4.57.1 Custom help URL	158
4.58 Registration status	159
4.59 Enable page refresh	159
4.60 Page refresh delay	160
4.61 Preferred image format	160
4.62 Unit hostname	161
4.63 Time zone	161
4.64 HTTP ports	162
4.65 HTTP ports: Port binding	163
4.65.1 Address	164
4.65.2 Port	165

4.66 HTTPS ports	165
4.67 HTTPS ports: Port binding	167
4.67.1 Address	168
4.67.2 Port	168
4.68 HTTPS certificate settings	169
4.68.1 Bits	171
4.68.2 Domain names override, if any	171
4.68.3 Addresses override, if any	172
4.68.4 Automatic renewal	173
4.68.5 Certificate renewal method	174
4.68.6 HTTPS certificate signing request	174
4.68.7 HTTPS certificate chain	175
4.68.8 HTTPS certificate key	176
4.68.9 Renew certificate	176
4.68.10 Generate key	177
4.68.11 Renewal methods	177
4.68.12 Distinguished name	178
4.68.13 String mask	179
4.69 Domain names override, if any: Domain names override	180
4.69.1 Hostname	180
4.70 Addresses override, if any: Addresses override	181
4.70.1 IPv4 address	181
4.71 HTTPS certificate settings: Data	182
4.71.1 Data item	182
4.72 Supported data items: Data item properties	183
4.72.1 Name	184
4.72.2 Regular expression	185
4.72.3 Secret	185
4.73 Renewal methods: Renewal method	185
4.73.1 Supported data items	186

4.73.2 Name	187
4.74 Distinguished name: Values	188
4.74.1 Value	188
4.75 HTTPS certificate settings: Known DN OIDs	189
4.75.1 OID	190
4.76 SSH enabled	190
4.77 SSH port number	191
4.78 SSH authorized keys	191
4.79 SSH authorized keys: SSH authorized key	193
4.79.1 Data	193
4.79.2 Options	194
4.79.3 Comment	195
4.80 NTP server enabled	195
4.81 NTP peers	196
4.82 NTP peers: NTP peer	197
4.82.1 Hostname	198
4.82.2 IPv4 address	198
4.83 Syslog threshold severity	199
4.84 Syslog server address, if any	200
4.84.1 Hostname	201
4.84.2 IPv4 address	201
4.85 Allow JSONRPC	201
4.86 Allow REST-like API	202
4.87 Allowed REST-like API client origins	202
4.87.1 Allowed REST-like API client origin	203
4.88 Relax non-HTML method CSRF checks	204
4.89 Relax non-HTML content type CSRF checks	205
4.90 Allow plaintext logins	205
4.91 Relay name visibility	206
4.92 Hide user passwords	207

4.93 Hide WiFi key	207
4.94 Security lockout duration	208
4.95 Protect firmware	208
4.96 Protect admin login	209
4.97 Protect network settings	210
4.98 Protect private settings	210
4.99 Protect from restore	211
4.100 Protect from maintenance	212
4.101 Protect notification settings	213
4.102 Beep on upgrade	213
4.103 Blink on upgrade	214
4.104 Known quantities	214
4.104.1 Quantity	215
4.105 Quantity: Name	217
4.106 Quantity: Preferred unit, if any	217
4.106.1 Preferred unit	218
4.107 Quantity: Known units	218
4.107.1 Unit	220
4.108 Known timezones	223
4.108.1 Timezone	223
4.109 Known protection bits	224
4.109.1 Protection bit	225
4.110 Protection bit: Name	225
4.111 Protection bit: Protection status	226
4.111.1 Ineffective	226
4.112 Relay ports	226
4.112.1 Relay port	227

5	Network configuration data	227
5.1	Wired network data	228
5.1.1	MAC address	230
5.1.2	Online	230
5.1.3	IP address assignment protocol	231
5.1.4	IP address	231
5.1.5	Network mask	232
5.1.6	DNS server	233
5.2	Wired network data: Default gateway IP address, if any	233
5.2.1	Default gateway IP address	234
5.3	Wired network data: DNS servers	235
5.3.1	DNS server	235
5.4	Wireless network data	236
5.4.1	Enable wireless module	237
5.4.2	Online	238
5.4.3	MAC address	238
5.4.4	IP address assignment protocol	239
5.4.5	IP address	239
5.4.6	Network mask	240
5.4.7	DNS server	241
5.4.8	Mode	241
5.4.9	SSID	242
5.4.10	Wireless channel	242
5.4.11	Encryption	243
5.4.12	Key	244
5.4.13	Wireless Accessory Configuration supported	244
5.4.14	Wireless Accessory Configuration enabled	245
5.5	Wireless network data: Default gateway IP address, if any	246
5.5.1	Default gateway IP address	246
5.6	Wireless network data: DNS servers	247

5.6.1	DNS server	247
5.7	Wireless network data: Known modes	248
5.7.1	Mode	248
5.8	Wireless network data: Known channels	249
5.8.1	Channel	249
5.9	Wireless network data: Known encryptions	250
5.9.1	Encryption	250
5.10	Same subnet restriction	251
5.11	Known protocols	251
5.11.1	Protocol	252
5.12	Interface priority order	252
5.12.1	Interface order element	253
5.13	Notifications	253
5.13.1	Events	254
5.14	Message template: Message template element	255
5.14.1	String	256
5.14.2	Parameter	256
5.15	Event parameter: Fixed value	256
5.15.1	String	256
5.15.2	Number	257
5.16	Event parameter: Fixed value flag	257
5.17	Event parameter: Identifier	257
5.18	Events: Event	258
5.18.1	Message template	258
5.18.2	Event parameters	259
5.18.3	Severity	261
5.19	Notifications: Parameter kinds	261
5.19.1	Device name	262
5.19.2	Device index	262
5.19.3	Status	262

6	Event notification server object	263
6.1	Sinks	264
6.1.1	Sink	266
6.2	Sink: Data	267
6.2.1	Data item	268
6.3	Sink: Name	269
6.4	Sink: Test	270
6.5	Sink: Type	270
6.6	Rules	271
6.7	Rules: Rule	273
6.7.1	Rule condition	274
6.7.2	Rule action	274
6.8	Sink types	275
6.8.1	Sink type	275
6.9	Sink type: Supported data items	277
6.9.1	Data item properties	277
6.10	Sink type: Name	279
6.11	Sink data item groups	280
6.12	Sink data item groups: Sink data item group	281
6.12.1	Immutable	282
6.12.2	Name	283
6.12.3	Secret	283
6.12.4	Unreadable	284

7 Autoping server object	284
7.1 Enabled	285
7.2 Items	286
7.2.1 Autoping item data	287
7.3 Autoping item data: Enabled status	289
7.4 Autoping item data: Address list	290
7.4.1 Address	290
7.5 Autoping item data: Controlled outlets	291
7.5.1 Outlet index	292
7.6 Autoping item data: Script command, if any	292
7.6.1 Script command	293
7.6.2 Invalid action placeholder	294
7.7 Autoping item data: Request item state change	294
7.7.1 Desired item state	294
7.8 Target states: Target state	295
7.8.1 Address	295
7.8.2 State	296
7.8.3 Success count	296
7.8.4 Failure count	297
7.8.5 Queue size	297
7.9 Autoping item data: Autoping item status	298
7.9.1 Target states	299
7.9.2 Reboot count	301
7.10 Autoping item data: Pings remaining to enable, if any	301
7.10.1 Pings remaining to enable	302
7.11 Autoping item data: Recently failed	302
7.12 Autoping item data: In resumption trial	303
7.13 Ping interval	303
7.14 Ping timeout	304
7.15 Post-reboot delay	304

7.16	Default maximum total reboot count, if any	305
7.16.1	Maximum total reboot count	306
7.17	Pings before enabling	306
7.18	Resume without retrial	306
7.19	Handle failures immediately	307
7.20	Reset statistics	308
7.21	Notifications	308
7.21.1	Events	309
7.21.2	Parameter kinds	310
7.22	Message template: Message template element	311
7.22.1	String	312
7.22.2	Parameter	312
7.23	Event parameter: Fixed value	312
7.23.1	String	312
7.23.2	Number	313
7.24	Event parameter: Fixed value flag	313
7.25	Event parameter: Identifier	313
7.26	Events: Event	313
7.26.1	Message template	315
7.26.2	Event parameters	315
7.26.3	Severity	317
7.27	Parameter kinds: Address	317
7.28	Parameter kinds: Item addresses	318
7.29	Parameter kinds: Consecutive failure count	318
7.30	Parameter kinds: Maximum consecutive failure count, if any	319
7.30.1	Maximum consecutive failure count	319
7.31	Parameter kinds: Maximum total failure count, if any	320
7.31.1	Maximum total failure count	320
7.32	Parameter kinds: Item name	321
7.33	Parameter kinds: Pings before enabling	321
7.34	Parameter kinds: Item script name	322
7.35	Parameter kinds: Item state	322
7.36	Parameter kinds: Total failure count	323
7.37	Parameter kinds: Ping time	323
7.38	Parameter kinds: Ping timeout	323
7.39	Parameter kinds: Ping state	324
7.40	Default maximum consecutive reboot count, if any	324
7.40.1	Maximum consecutive reboot count	325

8 Scripting server object	326
8.1 User script source	327
8.2 User functions	327
8.2.1 User script function signature	328
8.3 Script to start at boot, if any	328
8.3.1 Script to start at boot	329
8.4 Thread map	329
8.5 Thread map: Scripting thread	330
8.5.1 Label	331
8.6 Start a script thread	331
8.6.1 Code source	332
8.6.2 Resulting thread ID	332
8.7 Code source: User function, if any	333
8.7.1 User function	333
8.8 Code source: User code, if any	333
8.8.1 User code	333
8.9 Code source: Displayed source code, if any	333
8.9.1 Displayed source code	334
8.10 Stop a script thread	334
8.11 Stop a script thread: Thread(s) to stop	334
8.11.1 Thread ID	335
8.12 Script tracing	335
8.13 Script step delay	335
8.14 Script step time limit	336
8.15 Notifications	336
8.15.1 Events	337
8.15.2 Parameter kinds	338
8.16 Message template: Message template element	339
8.16.1 String	339
8.16.2 Parameter	339

8.17 Event parameter: Fixed value	340
8.17.1 String	340
8.17.2 Number	340
8.18 Event parameter: Fixed value flag	340
8.19 Event parameter: Identifier	341
8.20 Events: Event	341
8.20.1 Message template	342
8.20.2 Event parameters	343
8.20.3 Severity	345
8.21 Parameter kinds: Thread error	345
8.22 Parameter kinds: Thread ID	346
8.23 Parameter kinds: Thread name	346
8.24 Parameter kinds: Thread origin, if any	347
8.24.1 Thread origin	347
8.25 Parameter kinds: Thread start reason, if any	347
8.25.1 Thread start reason	348
8.26 Parameter kinds: Thread state	348
8.27 Parameter kinds: Thread stop reason	349
8.28 Script snippets	349
8.29 Script snippets: Script snippet	350
8.29.1 Snippet source	351
8.30 User function UI order	352
8.30.1 User script function name for index	352

9	SNMP server object	352
9.1	Allow SNMP	354
9.2	Engine ID	354
9.3	OID subtrees	355
9.4	OID subtrees: OID subtree	356
9.4.1	Title	357
9.4.2	Root mask	358
9.4.3	Read security level	358
9.4.4	Write security level	359
9.5	Users	360
9.5.1	User	361
9.6	User: User allowed	363
9.7	User: Authentication method	364
9.8	User: Authentication password configured	365
9.9	User: Authentication password	366
9.10	User: Privacy method	367
9.11	User: Privacy password configured	367
9.12	User: Privacy password	368
9.13	User: Subtree access levels	369
9.13.1	Subtree access	369
9.14	Community mappings	370
9.15	Community mappings: Community mapping	371
9.15.1	Community	372
9.15.2	User	373
9.15.3	IP address	374
9.15.4	Network mask	374
9.16	Known authentication methods	375
9.16.1	Authentication method	376
9.17	Known privacy methods	376
9.17.1	Privacy method	377

10 UPNP server object	377
10.1 Enabled	378
10.2 Outlet UPNP configuration settings	379
10.2.1 Outlet UPNP configuration	380
10.3 Outlet UPNP configuration: Alternate name, if any	381
10.3.1 Alternate name	382
10.4 Outlet UPNP configuration: Exposed	382
10.5 Outlet UPNP configuration: Identifier	383
10.6 Outlet UPNP configuration: Profile	383
10.7 UPNP device profiles	384
10.7.1 UPNP device profile	386
10.8 Arguments: Argument	388
10.8.1 Output/return value flag	389
10.8.2 Argument name	390
10.8.3 Related state variable identifier, if any	391
10.8.4 Argument type	392
10.9 UPNP device profile: Action map	392
10.9.1 Action	393
10.10 UPNP device profile: Device type	396
10.11 UPNP device profile: Device version	397
10.12 UPNP device profile: Device namespace	398
10.13 UPNP device profile: Manufacturer	398
10.14 UPNP device profile: Model	399
10.15 UPNP device profile: Model number	399
10.16 UPNP device profile: Namespace identifier	400
10.17 UPNP device profile: Service control URL	401
10.18 UPNP device profile: Service event subscription URL	401
10.19 UPNP device profile: Service ID	402
10.20 UPNP device profile: Service SCPD URL	402
10.21 UPNP device profile: Service type	403

10.22UPnP device profile: Service version	404
10.23UPnP device profile: Service namespace	404
10.24UPnP device profile: State variables	405
10.24.1 State variable binding	406
10.25UPnP device profile: Variable types	410
10.25.1 Variable type	411
10.26UPnP device profile: UUID prefix	413
10.27Notifications	414
10.27.1 Events	415
10.27.2 Parameter kinds	415
10.28Message template: Message template element	416
10.28.1 String	416
10.28.2 Parameter	416
10.29Event parameter: Fixed value	416
10.29.1 String	417
10.29.2 Number	417
10.30Event parameter: Fixed value flag	417
10.31Event parameter: Identifier	418
10.32Events: Event	418
10.32.1 Message template	419
10.32.2 Event parameters	420
10.32.3 Severity	422

11 MQTT client object	422
11.1 Enabled	424
11.2 Outlet MQTT configuration settings	425
11.2.1 Outlet MQTT configuration	427
11.3 Outlet MQTT configuration: Allow read	428
11.4 Outlet MQTT configuration: Allow write	428
11.5 Outlet MQTT configuration: State subscription and report QoS	429
11.6 Outlet MQTT configuration: Topic subtree, if any	430
11.6.1 Topic subtree	431
11.7 MQTT broker address	431
11.7.1 Hostname	432
11.7.2 IPv4 address	432
11.8 Use SSL	432
11.9 Username	433
11.10 Password	433
11.11 Topic root	434
11.12 Last Will and Testament topic	434
11.13 Last Will and Testament payload	435
11.14 Last Will and Testament QoS	436
11.15 Notifications	436
11.15.1 Events	437
11.16 Message template: Message template element	438
11.16.1 String	439
11.16.2 Parameter	439
11.17 Event parameter: Fixed value	439
11.17.1 String	439
11.17.2 Number	440
11.18 Event parameter: Fixed value flag	440
11.19 Event parameter: Identifier	440
11.20 Events: Event	441
11.20.1 Message template	442
11.20.2 Event parameters	442
11.20.3 Severity	444
11.21 Notifications: Parameter kinds	445
11.21.1 Connection status	445
11.22 MQTT broker port, if any	445
11.22.1 MQTT broker port	446

12 Meter server object	446
12.1 Measured values	448
12.1.1 Measured value	449
12.2 Measured value: Value name	451
12.3 Measured value: Value, if any	451
12.3.1 Value	452
12.4 Measured value: Expression, if any	452
12.4.1 Expression	453
12.5 Measured value: Custom flag	453
12.6 Measured value: Calibration flag	454
12.7 Measured value: Calibration support flag	455
12.8 Measured value: Quantity	455
12.9 Measured value: Bus index, if any	456
12.9.1 Bus index	456
12.10 Measured value: Internal	457
12.11 Measured value: Log history	457
12.12 Measured value: History log parameters	458
12.12.1 History log	459
12.13 Value history: Data point, if any	461
12.13.1 Data point	462
12.14 Measured value: Get value history	462
12.14.1 Data start time	462
12.14.2 Data end time	462
12.14.3 Data time step	463
12.14.4 Value history record	463
12.15 Measured value: Clear value history	464
12.16 Measured value: Data absence alarm level, if any	464
12.16.1 Data absence alarm level	465
12.17 Measured value: Data absence alarm period, if any	465
12.17.1 Data absence alarm period	466

12.18 Measured value: Lowest interval alarm level, if any	466
12.18.1 Lowest interval alarm level	467
12.19 Measured value: Lowest interval alarm period, if any	467
12.19.1 Lowest interval alarm period	468
12.20 Interval configuration: Alarm level, if any	468
12.20.1 Alarm level	469
12.21 Interval configuration: Alarm period, if any	469
12.21.1 Alarm period	470
12.22 Measured value: Value interval properties	470
12.22.1 Interval configuration	472
12.23 Measured value: Commit calibration	474
12.24 Measured value: History subsample count	475
12.25 Measured value: History time step	476
12.26 Measured value: Insert calibration point	476
12.26.1 Kind	477
12.26.2 Value	477
12.26.3 Weight	477
12.26.4 Derivative	477
12.26.5 Derivative weight	478
12.27 Bus list	478
12.28 Bus list: Bus attributes	479
12.28.1 Name	480
12.28.2 Power status	480
12.28.3 Power factor	481
12.29 Power status	481
12.30 Emergency shutoff status	482
12.31 Notifications	482
12.31.1 Events	483
12.31.2 Parameter kinds	484
12.32 Message template: Message template element	485

12.32.1 String	485
12.32.2 Parameter	486
12.33Event parameter: Fixed value	486
12.33.1 String	486
12.33.2 Number	486
12.34Event parameter: Fixed value flag	486
12.35Event parameter: Identifier	487
12.36Events: Event	487
12.36.1 Message template	489
12.36.2 Event parameters	489
12.36.3 Severity	491
12.37Parameter kinds: Bus index	492
12.38Parameter kinds: Bus name	492
12.39Parameter kinds: Bus power status	492
12.40Parameter kinds: Emergency shutoff status	493
12.41Parameter kinds: Power status	493
12.42Parameter kinds: Value alarm duration	494
12.43Parameter kinds: Value alarm level	494
12.44Parameter kinds: Value alarm repeat count, if any	495
12.44.1 Value alarm repeat count	495
12.45Parameter kinds: Value identifier	496
12.46Parameter kinds: Value name	496

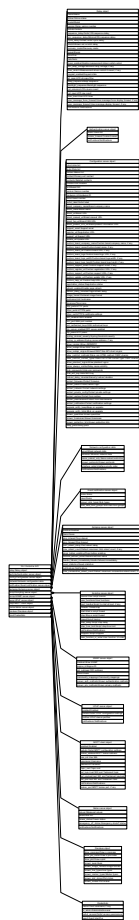
13 Renderer object	496
13.1 Draw a message	498
13.1.1 Format	498
13.1.2 Width	498
13.1.3 Height	499
13.1.4 Message	499
13.1.5 Content type	499
13.1.6 Image data	499
13.2 Draw a pie meter	500
13.2.1 Format	501
13.2.2 Width	501
13.2.3 Height	501
13.2.4 Properties	502
13.2.5 Value	502
13.2.6 Content type	503
13.2.7 Image data	503
13.3 Properties: Arrow color	503
13.4 Properties: Decimals	503
13.5 Properties: Minimum value	503
13.6 Properties: Display scale	504
13.7 Properties: Meter sectors	504
13.7.1 Sector parameters	504
13.8 Draw a pie meter: Value quantity and unit	505
13.8.1 Value quantity	505
13.8.2 Value unit	506
13.9 Draw a plot	506
13.9.1 Format	507
13.9.2 Width	507
13.9.3 Height	508
13.9.4 Properties	508

13.9.5 Lines	509
13.9.6 Content type	509
13.9.7 Image data	510
13.10 Properties: Custom time format, if any	510
13.10.1 Custom time format	510
13.11 Properties: X1 axis settings	510
13.11.1 Minimum, if any	511
13.11.2 Maximum, if any	511
13.11.3 Soft minimum, if any	512
13.11.4 Soft maximum, if any	512
13.11.5 Major tick interval, if any	512
13.11.6 Minor ticks per major tick, if any	513
13.12 Properties: X2 axis settings	513
13.12.1 Minimum, if any	514
13.12.2 Maximum, if any	514
13.12.3 Soft minimum, if any	515
13.12.4 Soft maximum, if any	515
13.12.5 Major tick interval, if any	516
13.12.6 Minor ticks per major tick, if any	516
13.13 Properties: Y1 axis settings	517
13.13.1 Minimum, if any	517
13.13.2 Maximum, if any	517
13.13.3 Soft minimum, if any	518
13.13.4 Soft maximum, if any	518
13.13.5 Major tick interval, if any	519
13.13.6 Minor ticks per major tick, if any	519
13.14 Properties: Y2 axis settings	520
13.14.1 Minimum, if any	520
13.14.2 Maximum, if any	521
13.14.3 Soft minimum, if any	521

13.14.4 Soft maximum, if any	521
13.14.5 Major tick interval, if any	522
13.14.6 Minor ticks per major tick, if any	522
13.15Plot point: X	523
13.16Plot point: Y, if any	523
13.16.1 Y	523
13.17Plotted quantities and units: X axis quantity and unit	524
13.17.1 X axis quantity	524
13.17.2 X axis unit	524
13.18Plotted quantities and units: Y axis quantity and unit	524
13.18.1 Y axis quantity	525
13.18.2 Y axis unit	525
13.19Lines: Line	525
13.19.1 Title	526
13.19.2 Plot data	526
13.19.3 Style	527
13.19.4 Plotted quantities and units	530
13.20Axes	531
13.20.1 Name	532
13.21Image formats	532
13.21.1 Name	533
13.22Line types	533
13.22.1 Name	534
13.23Marker types	534
13.23.1 Name	534
13.24Plot styles	535
13.24.1 Name	535
13.25Plot scales	536
13.25.1 Name	537
14 Credentials	537
14.1 Client username, if any	538
14.1.1 Client username	539
14.2 Administrative user	539
14.3 Outlet access permissions	539
14.4 Outlet access permissions: Outlet access levels	540
14.4.1 Outlet access	541
14.5 Agent identifier	541
14.6 Client IP address, if any	541
14.6.1 Client IP address	542

1 DLI Controller API

object	
The set of objects that comprise the controller's API	



This object contains the following items:

relay	Relay object
auth	Authentication server object
config	Configuration server object
network	Network configuration data
notification	Event notification server object
autoping	Autoping server object
script	Scripting server object
snmp	SNMP server object
upnp	UPnP server object
mqtt	MQTT client object
meter	Meter server object
renderer	Renderer object
cred	Credentials

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/"
```

⇒

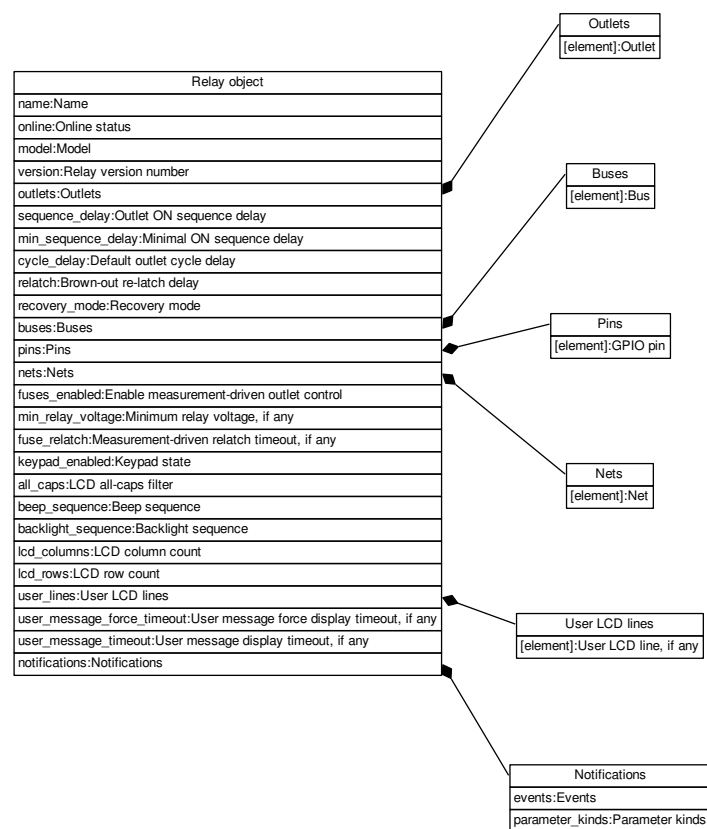
...

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "... "https://192.168.0.100/restapi/"
```

2 Relay object

object	relay/
Object representing relay state and configuration	



Retrieving the value is denied if not [administrative user](#)

This object contains the following items:

name	Name
online	Online status
model	Model
version	Relay version number
outlets	Outlets

sequence_delay	Outlet ON sequence delay
min_sequence_delay	Minimal ON sequence delay
cycle_delay	Default outlet cycle delay
relatch	Brown-out re-latch delay
recovery_mode	Recovery mode
buses	Buses
pins	Pins
nets	Nets
fuses_enabled	Enable measurement-driven outlet control
min_relay_voltage	Minimum relay voltage, if any
fuse_relatch	Measurement-driven relatch timeout, if any
keypad_enabled	Keypad state
all_caps	LCD all-caps filter
beep_sequence	Beep sequence
backlight_sequence	Backlight sequence
lcd_columns	LCD column count
lcd_rows	LCD row count
user_lines	User LCD lines
user_message_force_timeout	User message force display timeout, if any
user_message_timeout	User message display timeout, if any
notifications	Notifications

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/"
```

⇒

...

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "... " "https://192.168.0.100/restapi/ ↵
↵ relay/"
```

2.1 Name

string	relay/name/
User-visible relay name	

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/name/"
```


⇒

`"Sample value"`

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/relay/name/"
```

2.2 Online status

sum (variant)	relay/online/
Relay module online status	

Retrieving the value is denied if not [administrative user](#)

This sum does not support direct modification if [agent identifier](#) is not equal to relay.

This sum can assume the following values:

constant true	Online	The relay module is online and fully operational, outlets can be switched on unless emergency shutoff is activated
constant "degraded"	Degraded	The relay module is online but outlets cannot be switched on due to low-power conditions
constant false	Offline	The relay module is offline, outlets cannot be switched on

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/online/"
```

⇒ (possible variant)

`false`

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/relay/online/"
```

2.3 Model

string	relay/model/
Relay model name	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

This string represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/model/"
```

⇒

"Sample value"

2.4 Relay version number

string	relay/version/
Relay core firmware version number	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification if [agent identifier](#) is not equal to relay.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/version/"
```

⇒

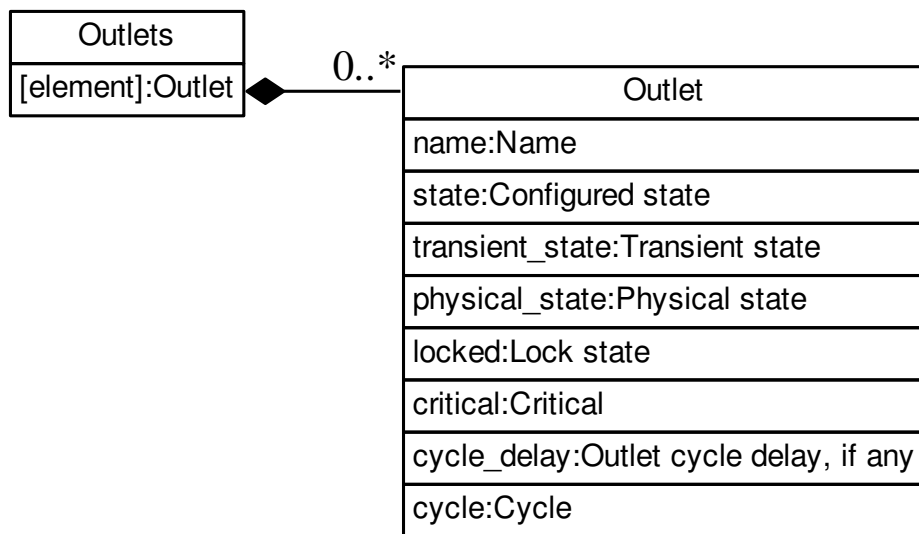
"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/relay/version/"
```

2.5 Outlets

array	relay/outlets/
Outlets controlled by the relay	



Retrieving the value is denied if not [administrative user](#)

This array does not support direct modification.

This array represents a value in persistent storage.

This array contains [Outlet](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/outlets/"
```

⇒

...

Creating elements in this collection is not supported.

2.5.1 Outlet

object	relay/outlets/N/
Object representing outlet state and configuration	

This object contains the following items:

name	Name
state	Configured state
transient_state	Transient state
physical_state	Physical state
locked	Lock state
critical	Critical
cycle_delay	Outlet cycle delay, if any
cycle	Cycle

Sample read command (note that :outlet is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/outlets/:outlet/"
```

⇒

```
{
  "state":false,
  "physical_state":false,
  "cycle_delay":null,
  "locked":true,
  "transient_state":true,
  "critical":true,
  "name":"Sample value of name"
}
```

Sample write command (note that :outlet is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary "{ \"state\":false, \"physical_state\":true, \"cycle_delay\":3, \" ↵
↵ locked\":true, \"transient_state\":true, \"critical\":true, \"name\": \"Sample ↵
↵ value of name\" }" \
"https://192.168.0.100/restapi/relay/outlets/:outlet/"
```

See also [Outlet: Name](#)

See also [Outlet: Configured state](#)

See also [Outlet: Transient state](#)

See also [Outlet: Physical state](#)

See also [Outlet: Lock state](#)

See also [Outlet: Critical](#)

See also [Outlet: Outlet cycle delay, if any](#)

See also [Outlet: Cycle](#)

2.6 Outlet: Name

string	relay/outlets/N/name/
User-visible outlet name	

Retrieving the value is denied if any of the following is true:

- [outlet access permissions](#) is equal to false
- all of the following is true:
 - [outlet access permissions](#) is not equal to true
 - not [outlet access permissions](#)[index of outlet]

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Sample read command (note that :outlet is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/outlets/:outlet/name/"
```

⇒

"Sample value"

Sample write command (note that :outlet is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/relay/outlets/:outlet/name/"
```

2.7 Outlet: Configured state

sum (boolean)	relay/outlets/N/state/
Saved configured state of the outlet. Cannot be changed if the outlet is locked	

Retrieving the value is denied if any of the following is true:

- [outlet access permissions](#) is equal to false
- all of the following is true:
 - [outlet access permissions](#) is not equal to true
 - not [outlet access permissions](#)[index of outlet]

Changing the value is denied if any of the following is true:

- any of the following is true:
 - [outlet access permissions](#) is equal to false

- all of the following is true:
 - * `outlet access permissions` is not equal to true
 - * not `outlet access permissions`[index of outlet]
- `lock state`

This sum represents a value in persistent storage.

Changes to this sum may have an effect besides setting value.

This sum can assume the following values:

constant true	On	The outlet is powered
constant false	Off	The outlet is not powered

Sample read command (note that `:outlet` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/outlets/:outlet/state/"
```

⇒ (possible variant)

```
false
```

Sample (possible variant) write command (note that `:outlet` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ relay/outlets/:outlet/state/"
```

2.8 Outlet: Transient state

sum (boolean)	relay/outlets/N/transient_state/
Current expected state of the outlet. Cannot be changed if the outlet is locked	

Retrieving the value is denied if any of the following is true:

- `outlet access permissions` is equal to false
- all of the following is true:
 - `outlet access permissions` is not equal to true
 - not `outlet access permissions`[index of outlet]

Changing the value is denied if any of the following is true:

- any of the following is true:
 - `outlet access permissions` is equal to false
 - all of the following is true:

- `outlet access permissions` is not equal to true
- not `outlet access permissions`[index of outlet]
- `lock state`

This sum can change as if by itself or indirectly because of other actions.

This sum can assume the following values:

constant true	On	The outlet is powered
constant false	Off	The outlet is not powered

Sample read command (note that `:outlet` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/outlets/:outlet/transient_state/"
```

⇒ (possible variant)

false

Sample (possible variant) write command (note that `:outlet` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ relay/outlets/:outlet/transient_state/"
```

2.9 Outlet: Physical state

sum (boolean)	<code>relay/outlets/N/physical_state/</code>
Current actual state of the outlet	

Retrieving the value is denied if any of the following is true:

- `outlet access permissions` is equal to false
- all of the following is true:
 - `outlet access permissions` is not equal to true
 - not `outlet access permissions`[index of outlet]

Changing the value is denied if `agent identifier` is not equal to relay

This sum does not support direct modification if `agent identifier` is not equal to relay.

This sum can assume the following values:

constant true	On	The outlet is powered
constant false	Off	The outlet is not powered

Sample read command (note that :outlet is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/outlets/:outlet/physical_state/"
```

⇒ (possible variant)

```
true
```

Sample (possible variant) write command (note that :outlet is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ relay/outlets/:outlet/physical_state/"
```

2.10 Outlet: Lock state

sum (boolean)	relay/outlets/N/locked/
Indicates whether the outlet state is locked from keypad	

Retrieving the value is denied if any of the following is true:

- [outlet access permissions](#) is equal to false
- all of the following is true:
 - [outlet access permissions](#) is not equal to true
 - not [outlet access permissions](#)[index of outlet]

Changing the value is denied if [agent identifier](#) is not equal to relay

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Locked	The outlet state cannot be changed
constant false	Unlocked	The outlet state can be changed

Sample read command (note that :outlet is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/outlets/:outlet/locked/"
```

⇒ (possible variant)

```
true
```

Sample (possible variant) write command (note that :outlet is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ relay/outlets/:outlet/locked/"
```


2.11 Outlet: Critical

sum (boolean)	relay/outlets/N/critical/
Flag indicating whether the outlet is critical, and turning it off should ask for confirmation	

Retrieving the value is denied if any of the following is true:

- [outlet access permissions](#) is equal to false
- all of the following is true:
 - [outlet access permissions](#) is not equal to true
 - not [outlet access permissions](#)[index of outlet]

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Critical	Confirmation requested to change the outlet state
constant false	Noncritical	No confirmation is needed to change the outlet state

Sample read command (note that :outlet is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/outlets/:outlet/critical/"
```

⇒ (possible variant)

```
true
```

Sample (possible variant) write command (note that :outlet is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ relay/outlets/:outlet/critical/"
```

2.12 Outlet: Outlet cycle delay, if any

sum (optional number)	relay/outlets/N/cycle_delay/
Outlet cycle delay, in seconds, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Use default cycle delay	Use unit default cycle delay	
number	Outlet cycle delay	Outlet cycle delay, in seconds	the value is greater than 0

Sample read command (note that :outlet is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/outlets/:outlet/cycle_delay/"
```

⇒ (possible variant)

10

Sample (possible variant) write command (note that :outlet is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "7" "https://192.168.0.100/restapi/relay/ ↵
↵ outlets/:outlet/cycle_delay/"
```

2.12.1 Outlet cycle delay

(possibly) number	relay/outlets/N/cycle_delay/
Outlet cycle delay, in seconds	

The value is subject to the following constraints: the value is greater than 0

Sample write command (note that :outlet is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "4" "https://192.168.0.100/restapi/relay/ ↵
↵ outlets/:outlet/cycle_delay/"
```

2.13 Outlet: Cycle

call	relay/outlets/N/cycle/
Turns the outlet off, then on again after the cycle delay passes. Has no effect when the outlet is already off. Signals an error if the outlet is locked. Does not turn the outlet back on if it becomes locked	

Performing the function call is denied if any of the following is true:

- any of the following is true:
 - outlet access permissions is equal to false
 - all of the following is true:
 - * outlet access permissions is not equal to true
 - * not outlet access permissions[index of outlet]
- lock state

The call has no arguments (supply empty tuple).

The call returns the following results:

1. Started or No action taken

Sample invocation (note that :outlet is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X POST -H "Accept: application/json" "https://192.168.0.100/restapi/relay/outlets/:outlet/cycle/"
```

⇒

null

2.13.1 Action performed

sum (boolean)	relay/outlets/N/cycle/results: 1/
Flag indicating whether the call affected the outlet state	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant true	Started	The outlet was on and the cycle has started
constant false	No action taken	The outlet was off or already in a cycle, so the call had no effect

2.14 Outlet ON sequence delay

number	relay/sequence_delay/
Time after switching an outlet on during which switching outlets on is delayed to prevent simultaneous inrush currents on power-on	

The value is subject to the following constraints: [the value](#) is greater or equal to [minimal on sequence delay](#)

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/restapi/relay/sequence_delay/"
```

⇒

6

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: application/json" --data-binary "1" "https://192.168.0.100/restapi/relay/sequence_delay/"
```

2.15 Minimal ON sequence delay

number	relay/min_sequence_delay/
The minimal time after switching an outlet on during which switching outlets on is delayed	

The value is subject to the following constraints: [the value](#) is greater or equal to 0

This number does not support direct modification.

This number represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/min_sequence_delay/"
```

⇒

5

2.16 Default outlet cycle delay

number	relay/cycle_delay/
Time between switching an outlet off and turning it back on during cycling, which allows the controlled device to really power down	

The value is subject to the following constraints: [the value](#) is greater than 0

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/cycle_delay/"
```

⇒

10

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "10" "https://192.168.0.100/restapi/relay ↵
↵ /cycle_delay/"
```

2.17 Brown-out re-latch delay

number	relay/relatch/
Time to wait before relatching relays on brown-out	

The value is subject to the following constraints: [the value](#) is greater than 0

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/relatch/"
```

⇒

8

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "3" "https://192.168.0.100/restapi/relay/ ↵
↵ relatch/"
```

2.18 Recovery mode

sum (enumerated number)	relay/recovery_mode/
Outlet power-off recovery state policy	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant 0	All outlets off	All outlets remain powered off at power-up
constant 1	All outlets on	All outlets are switched on in sequence during power-up
constant 2	Pre-powerloss state	Outlets are returned to configured pre-powerloss state during power-up

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/recovery_mode/"
```

⇒ (possible variant)

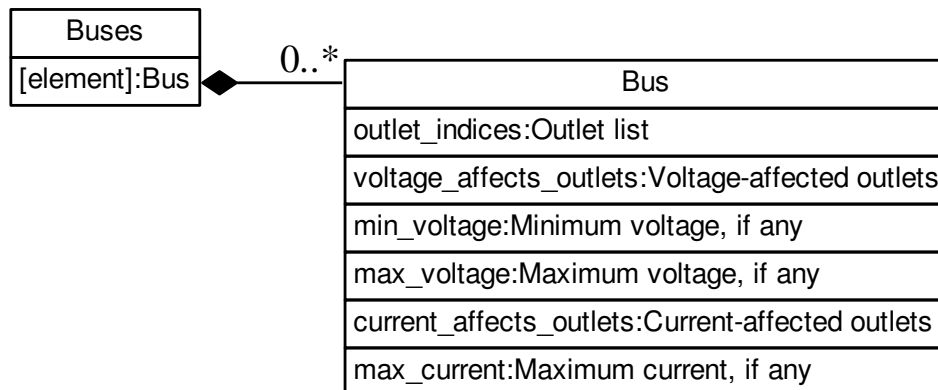
7

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "7" "https://192.168.0.100/restapi/relay/ ↵
↵ recovery_mode/"
```

2.19 Buses

array	relay/buses/
Buses powering the relay	



This array does not support direct modification.

This array represents a value in persistent storage.

This array contains [Bus](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/buses/"
```

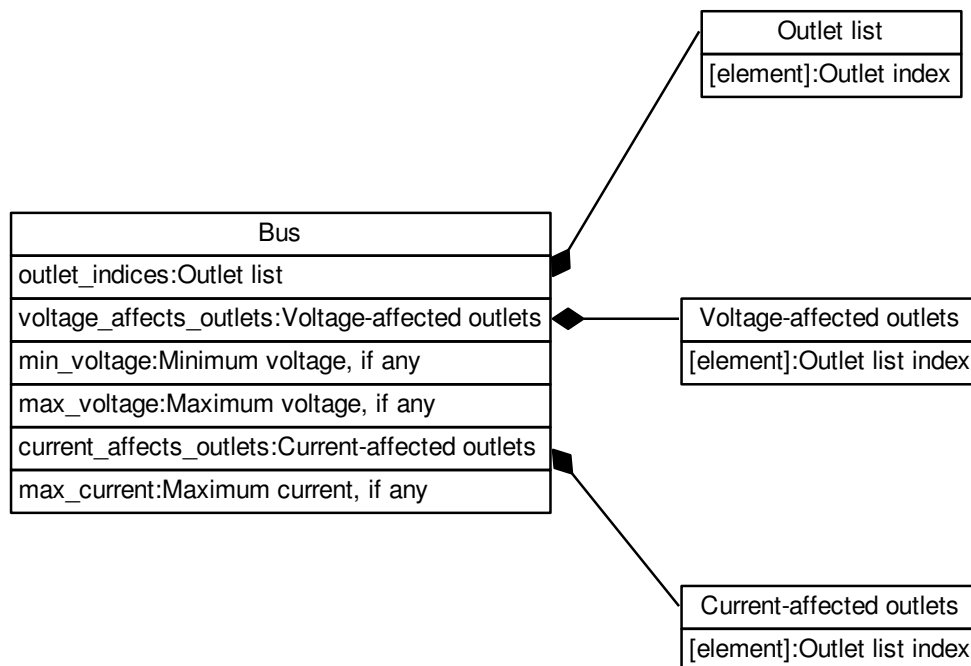
⇒

...

Creating elements in this collection is not supported.

2.19.1 Bus

object	relay/buses/N/
Object representing bus state and configuration	



This object contains the following items:

outlet_indices	Outlet list
voltage_affects_outlets	Voltage-affected outlets
min_voltage	Minimum voltage, if any
max_voltage	Maximum voltage, if any
current_affects_outlets	Current-affected outlets
max_current	Maximum current, if any

Sample read command (note that :bus is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/buses/:bus/"
```

⇒

```
{
  "outlet_indices":[
    2,
    8,
    2,
    8,
    1,
    10,
    1,
    6
  ],
  "voltage_affects_outlets":[
```

```

3,
8
],
"min_voltage":7,
"current_affects_outlets":[
1,
2,
6,
1,
1,
3,
5,
9
],
"max_voltage":7,
"max_current":8
}

```

Sample write command (note that :bus is a URL template argument and needs to be replaced before trying):

```

curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"outlet_indices\":[2],\"voltage_affects_outlets\"↔
↔ \":[3,9,2,10,1,9,1,1,10,6],\"min_voltage\":null,\"current_affects_outlets\"↔
↔ \":[10,9,4,6],\"max_voltage\":null,\"max_current\":5}\"\
"https://192.168.0.100/restapi/relay/buses/:bus/"

```

See also [Bus: Outlet list](#)

See also [Bus: Voltage-affected outlets](#)

See also [Bus: Minimum voltage, if any](#)

See also [Bus: Maximum voltage, if any](#)

See also [Bus: Current-affected outlets](#)

See also [Bus: Maximum current, if any](#)

2.20 Bus: Outlet list

array	relay/buses/N/outlet_indices/
List of outlets connected to the bus	

This array does not support direct modification.

This array contains [Outlet index](#) elements.

Sample read command (note that :bus is a URL template argument and needs to be replaced before trying):

```

curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/↔
↔ restapi/relay/buses/:bus/outlet_indices/"

```


⇒

```
[
  9,
  9,
  4,
  3,
  9
]
```

Creating elements in this collection is not supported.

2.20.1 Outlet index

number	relay/buses/N/outlet_indices/N/
Index of outlet connected to the bus	

The value is subject to the following constraints: all of the following is true:

- [outlets\[the value\]](#)
- [outlet list](#) are distinct

This number does not support direct modification.

This number represents a value in persistent storage.

Sample read command (note that :bus and :outlet_index are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/buses/:bus/outlet_indices/:outlet_index/"
```

⇒

2

2.21 Bus: Voltage-affected outlets

array	relay/buses/N/voltage_affects_outlets/
List of outlets affected by over/undervoltage	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This array represents a value in persistent storage.

This array represents an unordered set (order of its elements doesn't matter, and each value should not be supplied more than once).

This array contains [Outlet list index](#) elements.

Sample read command (note that :bus is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/buses/:bus/voltage_affects_outlets/"
```

⇒

```
[
  6,
  7,
  9,
  5,
  10,
  4,
  9,
  7,
  10,
  5
]
```

Sample write command (note that :bus is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: ↵
↵ : application/json" --data-binary "[10,10,2]" "https://192.168.0.100/ ↵
↵ restapi/relay/buses/:bus/voltage_affects_outlets/"
```

Sample outlet list index creation command (note that :bus is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Content-type: application/json" -H "Accept: ↵
↵ application/json" --data-binary "9" "https://192.168.0.100/restapi/relay/ ↵
↵ buses/:bus/voltage_affects_outlets/"
```

2.21.1 Outlet list index

number	relay/buses/N/voltage_affects_outlets/N/
Index of outlet in the bus outlet list	

The value is subject to the following constraints: all of the following is true:

- [outlet list\[the value\]](#)
- [voltage-affected outlets](#) are distinct

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

Sample read command (note that :bus and :outlet_list_index are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/buses/:bus/voltage_affects_outlets/:outlet_list_index/"
```

⇒

4

Sample write command (note that :bus and :outlet_list_index are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: ↵
↵ : application/json" --data-binary "7" "https://192.168.0.100/restapi/relay/ ↵
↵ buses/:bus/voltage_affects_outlets/:outlet_list_index/"
```

Sample deletion command (note that :bus and :outlet_list_index are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/relay/buses/:bus/voltage_affects_outlets/: ↵
↵ outlet_list_index/"
```

2.22 Bus: Minimum voltage, if any

sum (optional number)	relay/buses/N/min_voltage/
The minimum voltage, below which the affected bus outlets are switched off, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	No minimum voltage	Undervoltage doesn't affect any outlets	
number	Minimum voltage	The minimum voltage, below which the affected bus outlets are switched off	the value is greater or equal to 0

Sample read command (note that :bus is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/buses/:bus/min_voltage/"
```

⇒ (possible variant)

null

Sample (possible variant) write command (note that :bus is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: ↵
↵ : application/json" --data-binary "3" "https://192.168.0.100/restapi/relay/ ↵
↵ buses/:bus/min_voltage/"
```

2.22.1 Minimum voltage

(possibly) number	relay/buses/N/min_voltage/
The minimum voltage, below which the affected bus outlets are switched off	

The value is subject to the following constraints: [the value](#) is greater or equal to 0

Sample write command (note that :bus is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "7" "https://192.168.0.100/restapi/relay/ ↵
↵ buses/:bus/min_voltage/"
```

2.23 Bus: Maximum voltage, if any

sum (optional number)	relay/buses/N/max_voltage/
The maximum voltage, above which the affected bus outlets are switched off, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	No maximum voltage	Overvoltage doesn't affect any outlets	
number	Maximum voltage	The maximum voltage, above which the affected bus outlets are switched off	the value is greater or equal to 0

Sample read command (note that :bus is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/buses/:bus/max_voltage/"
```

⇒ (possible variant)

```
null
```

Sample (possible variant) write command (note that :bus is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ relay/buses/:bus/max_voltage/"
```

2.23.1 Maximum voltage

(possibly) number	relay/buses/N/max_voltage/
The maximum voltage, above which the affected bus outlets are switched off	

The value is subject to the following constraints: [the value](#) is greater or equal to 0

Sample write command (note that :bus is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: ↵
↵ : application/json" --data-binary "8" "https://192.168.0.100/restapi/relay/ ↵
↵ buses/:bus/max_voltage/"
```

2.24 Bus: Current-affected outlets

array	relay/buses/N/current_affects_outlets/
List of outlets affected by overcurrent	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This array represents a value in persistent storage.

This array represents an unordered set (order of its elements doesn't matter, and each value should not be supplied more than once).

This array contains [Outlet list index](#) elements.

Sample read command (note that :bus is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/buses/:bus/current_affects_outlets/"
```

⇒

```
[
  6,
  5,
  2
]
```

Sample write command (note that :bus is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: ↵
↵ : application/json" --data-binary "[2,2,5,8,10,10,7,4,8,4]" "https: ↵
↵ ://192.168.0.100/restapi/relay/buses/:bus/current_affects_outlets/"
```

Sample outlet list index creation command (note that :bus is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Content-type: application/json" -H "Accept: ↵
↵ application/json" --data-binary "3" "https://192.168.0.100/restapi/relay/ ↵
↵ buses/:bus/current_affects_outlets/"
```

2.24.1 Outlet list index

number	relay/buses/N/current_affects_outlets/N/
Index of outlet in the bus outlet list	

The value is subject to the following constraints: all of the following is true:

- [outlet list\[the value\]](#)
- [current-affected outlets](#) are distinct

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

Sample read command (note that :bus and :outlet_list_index are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/buses/:bus/current_affects_outlets/:outlet_list_index/"
```

⇒

3

Sample write command (note that :bus and :outlet_list_index are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "2" "https://192.168.0.100/restapi/relay/ ↵
↵ buses/:bus/current_affects_outlets/:outlet_list_index/"
```

Sample deletion command (note that :bus and :outlet_list_index are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/relay/buses/:bus/current_affects_outlets/: ↵
↵ outlet_list_index/"
```

2.25 Bus: Maximum current, if any

sum (optional number)	relay/buses/N/max_current/
The maximum current, above which the affected bus outlets are switched off, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	No maximum current	Overcurrent doesn't affect any outlets	
number	Maximum current	The maximum current, above which the affected bus outlets are switched off	the value is greater or equal to 0

Sample read command (note that :bus is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/buses/:bus/max_current/"
```

⇒ (possible variant)

3

Sample (possible variant) write command (note that :bus is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ relay/buses/:bus/max_current/"
```

2.25.1 Maximum current

(possibly) number	relay/buses/N/max_current/
The maximum current, above which the affected bus outlets are switched off	

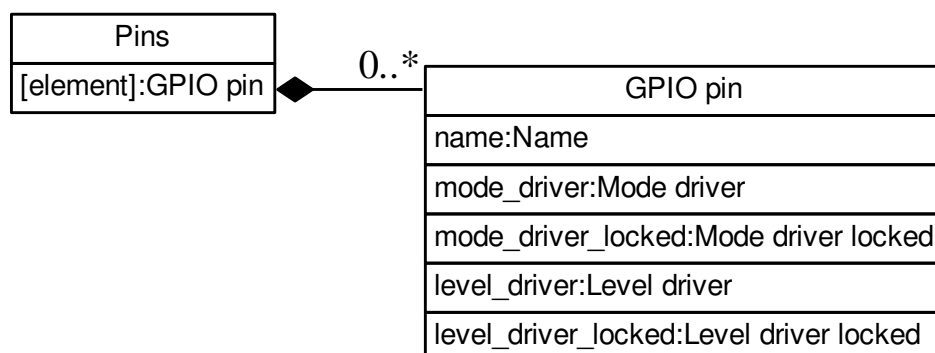
The value is subject to the following constraints: [the value](#) is greater or equal to 0

Sample write command (note that :bus is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "3" "https://192.168.0.100/restapi/relay/ ↵
↵ buses/:bus/max_current/"
```

2.26 Pins

map	relay/pins/
GPIO pins attached to the relay	



This map does not support direct modification if [agent identifier](#) is not equal to relay.

This map contains [GPIO pin](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/pins/"
```

⇒

...

Sample write command:

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/relay/pins/"
```

Sample gpio pin creation command:

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"mode_driver":true,"name":"Sample value of gpio pin pins_5 ↵
↵ of name","mode_driver_locked":true,"level_driver":"Sample value of ↵
↵ gpio pin pins_5 of level driver","level_driver_locked":true}'\
"https://192.168.0.100/restapi/relay/pins/pins_5/"
```

2.26.1 GPIO pin

object	relay/pins/S/
Object representing state and configuration of a GPIO pin	

This object contains the following items:

name	Name
mode_driver	Mode driver
mode_driver_locked	Mode driver locked
level_driver	Level driver
level_driver_locked	Level driver locked

Sample read command (note that :gpio_pin is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/pins/:gpio_pin/"
```

⇒


```
{
  "mode_driver": "Sample value of mode driver",
  "name": "Sample value of name",
  "mode_driver_locked": true,
  "level_driver": "Sample value of level driver",
  "level_driver_locked": true
}
```

Sample write command (note that :gpio_pin is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"mode_driver\":true,\"name\":"Sample value of name\","↵
↵ mode_driver_locked\":true,\"level_driver\":"Sample value of level driver ↵
↵ \","level_driver_locked\":false}'\
"https://192.168.0.100/restapi/relay/pins/:gpio_pin/"
```

Sample deletion command (note that :gpio_pin is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/relay/pins/:gpio_pin/"
```

See also [GPIO pin: Name](#)

See also [GPIO pin: Mode driver](#)

See also [GPIO pin: Mode driver locked](#)

See also [GPIO pin: Level driver](#)

See also [GPIO pin: Level driver locked](#)

2.27 GPIO pin: Name

string	relay/pins/S/name/
User-visible pin name	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Sample read command (note that :gpio_pin is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/pins/:gpio_pin/name/"
```

⇒

"Sample value"

Sample write command (note that :gpio_pin is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/relay/pins/:gpio_pin/name/"
```

2.28 GPIO pin: Mode driver

sum (variant)	relay/pins/S/mode_driver/
Configured signal driving the pin's mode (input or output)	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can change as if by itself or indirectly because of other actions.

This sum can assume the following values:

constant true	Active	The pin is active (output)	
constant false	Tristated	The pin is inactive (input, hi-Z state)	
string	Net name	Name of the net providing the driving value	all of the following is true: <ul style="list-style-type: none"> not the value matches <code>^(.* .*)\$</code> [invalid reference <code>../nets][the value]</code>
string	Invalid net placeholder	A placeholder for a net that has been deleted or renamed (and always has the logical value false)	the value matches <code>^net_↵ deleted:.*\$</code>

Sample read command (note that :gpio_pin is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/pins/:gpio_pin/mode_driver/"
```

⇒ (possible variant)

"Sample value"

Sample (possible variant) write command (note that :gpio_pin is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/relay/pins/:gpio_pin/mode_driver/"
```

2.28.1 Net name

(possibly) string	relay/pins/S/mode_driver/
Name of the net providing the driving value	

The value is subject to the following constraints: all of the following is true:

- not [the value](#) matches $^(\|. * \|. *)\$$
- [invalid reference ../nets][[the value](#)]

Sample write command (note that :gpio_pin is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/relay/pins/:gpio_pin/mode_driver/"
```

2.28.2 Invalid net placeholder

(possibly) string	relay/pins/S/mode_driver/
A placeholder for a net that has been deleted or renamed (and always has the logical value false)	

The value is subject to the following constraints: [the value](#) matches $^net_deleted:.*\$$

Sample write command (note that :gpio_pin is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/relay/pins/:gpio_pin/mode_driver/"
```

2.29 GPIO pin: Mode driver locked

sum (boolean)	relay/pins/S/mode_driver_locked/
Flag indicating if the pin's mode configuration is fixed	

Retrieving the value is denied if not [administrative user](#)

This sum does not support direct modification if [agent identifier](#) is not equal to relay.

This sum can assume the following values:

constant true	Locked	The pin's mode configuration is fixed
constant false	Variable	The pin's mode configuration can be changed

Sample read command (note that :gpio_pin is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/pins/:gpio_pin/mode_driver_locked/"
```

⇒ (possible variant)

true

Sample (possible variant) write command (note that :gpio_pin is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ relay/pins/:gpio_pin/mode_driver_locked/"
```

2.30 GPIO pin: Level driver

sum (variant)	relay/pins/S/level_driver/
Configured signal driving the pin's output state	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can change as if by itself or indirectly because of other actions.

This sum can assume the following values:

constant true	High	The pin is driven high if active or its pull-up resistor is enabled if tristated	
constant false	Low	The pin is driven low if active or its pull-up resistor is disabled if tristated	
string	Net name	Name of the net providing the driving value	all of the following is true: <ul style="list-style-type: none"> not the value matches <code>^(.* .*)\$</code> [invalid reference <code>../nets][the value]</code>
string	Invalid net placeholder	A placeholder for a net that has been deleted or renamed (and always has the logical value false)	the value matches <code>^net_↵ deleted:.*\$</code>

Sample read command (note that :gpio_pin is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/pins/:gpio_pin/level_driver/"
```

⇒ (possible variant)

"Sample value"

Sample (possible variant) write command (note that :gpio_pin is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/relay/pins/:gpio_pin/level_driver/"
```

2.30.1 Net name

(possibly) string	relay/pins/S/level_driver/
Name of the net providing the driving value	

The value is subject to the following constraints: all of the following is true:

- not [the value](#) matches $^(\|. * \|. *)\$$
- [invalid reference ../nets][[the value](#)]

Sample write command (note that :gpio_pin is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/relay/pins/:gpio_pin/level_driver/"
```

2.30.2 Invalid net placeholder

(possibly) string	relay/pins/S/level_driver/
A placeholder for a net that has been deleted or renamed (and always has the logical value false)	

The value is subject to the following constraints: [the value](#) matches $^net_deleted:. * \$$

Sample write command (note that :gpio_pin is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/relay/pins/:gpio_pin/level_driver/"
```

2.31 GPIO pin: Level driver locked

sum (boolean)	relay/pins/S/level_driver_locked/
Flag indicating if the pin's output configuration is fixed	

Retrieving the value is denied if not [administrative user](#)

This sum does not support direct modification if [agent identifier](#) is not equal to relay.

This sum can assume the following values:

constant true	Locked	The pin's output configuration is fixed
constant false	Variable	The pin's output configuration can be changed

Sample read command (note that :gpio_pin is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/pins/:gpio_pin/level_driver_locked/"
```

⇒ (possible variant)

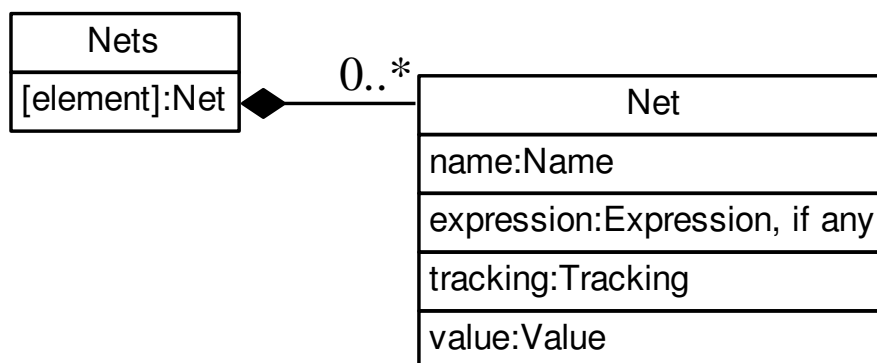
false

Sample (possible variant) write command (note that :gpio_pin is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ relay/pins/:gpio_pin/level_driver_locked/"
```

2.32 Nets

map	relay/nets/
Nets controlling the GPIO pins	



This map represents a value in persistent storage.

This map contains [Net](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/nets/"
```

⇒

```
{
  "nets_5":{
    "value":true,
    "tracking":null,
    "name":"Sample value of net nets_5 of name",
    "expression":null
  }
}
```

```

},
"nets_2":{
  "value":true,
  "tracking":null,
  "name":"Sample value of net nets_2 of name",
  "expression":"Sample value of net nets_2 of expression, if any"
},
"nets_4":{
  "value":false,
  "tracking":"Sample value of net nets_4 of tracking",
  "name":"Sample value of net nets_4 of name",
  "expression":"Sample value of net nets_4 of expression, if any"
},
"nets_3":{
  "value":true,
  "tracking":"Sample value of net nets_3 of tracking",
  "name":"Sample value of net nets_3 of name",
  "expression":null
},
"nets_1":{
  "value":false,
  "tracking":"Sample value of net nets_1 of tracking",
  "name":"Sample value of net nets_1 of name",
  "expression":null
}
}

```

Sample write command:

```

curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/relay/nets/"

```

Sample net creation command:

```

curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"value":true,"tracking":"Sample value of net nets_2 of ↵
↵ tracking","name":"Sample value of net nets_2 of name","expression ↵
↵ ":"Sample value of net nets_2 of expression, if any"}'\
"https://192.168.0.100/restapi/relay/nets/nets_2/"

```

2.32.1 Net

object	relay/nets/S/
Object representing a state of a signal	

This object contains the following items:

name	Name
expression	Expression, if any
tracking	Tracking
value	Value

Sample read command (note that :net is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/nets/:net/"
```

⇒

```
{
  "value":false,
  "tracking":"Sample value of tracking",
  "name":"Sample value of name",
  "expression":null
}
```

Sample write command (note that :net is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"value":false,"tracking":"Sample value of tracking","name ↵
↵ ":"Sample value of name","expression":"Sample value of expression, if ↵
↵ any"}'\
"https://192.168.0.100/restapi/relay/nets/:net/"
```

Sample deletion command (note that :net is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/relay/nets/:net/"
```

See also [Net: Name](#)

See also [Net: Expression, if any](#)

See also [Net: Tracking](#)

See also [Net: Value](#)

2.33 Net: Name

string	relay/nets/S/name/
User-visible net name	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Sample read command (note that :net is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/nets/:net/name/"
```

⇒

```
"Sample value"
```

Sample write command (note that :net is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/relay/nets/:net/name/"
```

2.34 Net: Expression, if any

sum (optional string)	relay/nets/S/expression/
Expression governing the net's value, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Variable	The net value can be modified arbitrarily
string	Expression	Expression governing the net's value

Sample read command (note that :net is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/nets/:net/expression/"
```

⇒ (possible variant)

```
"Sample value"
```

Sample (possible variant) write command (note that :net is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/relay/nets/:net/expression/"
```

2.34.1 Expression

(possibly) string	relay/nets/S/expression/
Expression governing the net's value	

Sample write command (note that :net is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/relay/nets/:net/expression/"
```

2.35 Net: Tracking

sum (optional enumerated string)	relay/nets/S/tracking/
Method of reporting the net's value	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	None	Net value is not updated
constant "pull"	Pull	Net value is updated periodically
constant "push"	Push	Net value is reported when changed

Sample read command (note that :net is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/nets/:net/tracking/"
```

⇒ (possible variant)

```
"Sample value"
```

Sample (possible variant) write command (note that :net is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/relay/nets/:net/tracking/"
```

2.36 Net: Value

sum (boolean)	relay/nets/S/value/
Current net value	

Retrieving the value is denied if any of the following is true:

- not [administrative user](#)
- all of the following is true:
 - [expression](#), if any

- not [tracking](#)

Changing the value is denied if not [administrative user](#)

Using the sum as a field for indexing into the grandparent collection is denied

This sum does not support direct modification if all of the following is true:

- [expression](#), if any
- [agent identifier](#) is not equal to relay

This sum can assume the following values:

constant true	High	The net value is high
constant false	Low	The net value is low

Sample read command (note that :net is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/nets/:net/value/"
```

⇒ (possible variant)

```
true
```

Sample (possible variant) write command (note that :net is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ relay/nets/:net/value/"
```

2.37 Enable measurement-driven outlet control

sum (boolean)	relay/fuses_enabled/
Allow use of measurement results to conditionally switch off outlets, enabling safety shutdown and correct power loss operation	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum is expected to be visible to advanced users only.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/fuses_enabled/"
```

⇒ (possible variant)

true

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ relay/fuses_enabled/"
```

2.38 Minimum relay voltage, if any

sum (optional number)	relay/min_relay_voltage/
Minimum relay voltage below which it cannot drive outlets and they must be considered off, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum is expected to be visible to advanced users only.

This sum can assume the following values:

constant null	Disable relay undervoltage handling	Ignore relay undervoltage. This is unsafe!	
number	Minimum relay voltage	Minimum relay voltage below which it cannot drive outlets and they must be considered off	the value is greater than 0

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/min_relay_voltage/"
```

⇒ (possible variant)

8

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "3" "https://192.168.0.100/restapi/relay/ ↵
↵ min_relay_voltage/"
```

2.38.1 Minimum relay voltage

(possibly) number	relay/min_relay_voltage/
Minimum relay voltage below which it cannot drive outlets and they must be considered off	

The value is subject to the following constraints: [the value](#) is greater than 0

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "9" "https://192.168.0.100/restapi/relay/ ↵
↵ min_relay_voltage/"
```

2.39 Measurement-driven relatch timeout, if any

sum (optional number)	relay/fuse_relatch/
Time to hold outlets off after switching them off due to measurement limits being hit, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Latch OFF	Switch outlets off until the user takes action	
number	Measurement-driven relatch timeout	Time to hold outlets off after switching them off due to measurement limits being hit	the value is greater than 0

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/fuse_relatch/"
```

⇒ (possible variant)

10

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ relay/fuse_relatch/"
```

2.39.1 Measurement-driven relatch timeout

(possibly) number	relay/fuse_relatch/
Time to hold outlets off after switching them off due to measurement limits being hit	

The value is subject to the following constraints: [the value](#) is greater than 0

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "10" "https://192.168.0.100/restapi/relay ↵
↵ /fuse_relatch/"
```

2.40 Keypad state

sum (boolean)	relay/keypad_enabled/
Flag indicating whether keypad is enabled or disabled	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/keypad_enabled/"
```

⇒ (possible variant)

```
false
```

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ relay/keypad_enabled/"
```

2.41 LCD all-caps filter

sum (boolean)	relay/all_caps/
Flag enabling all-caps display of text	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	All CAPS	All LCD strings are displayed in capital letters
constant false	Standard mode	LCD strings are displayed as configured without capitalization

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/all_caps/"
```

⇒ (possible variant)

```
false
```

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ relay/all_caps/"
```

2.42 Beep sequence

string	relay/beep_sequence/
Signal sequence for beeper activation	

The value is subject to the following constraints: [the value](#) matches `^[01._-]*$`

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/beep_sequence/"
```

⇒

```
"Sample value"
```

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/relay/beep_sequence/"
```

2.43 Backlight sequence

string	relay/backlight_sequence/
Signal sequence for backlight blinking	

The value is subject to the following constraints: [the value](#) matches `^[01._-]*$`

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/backlight_sequence/"
```

⇒

```
"Sample value"
```

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/relay/backlight_sequence/"
```

2.44 LCD column count

number	relay/lcd_columns/
Number of LCD columns	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater or equal to 0

This number does not support direct modification.

This number represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/lcd_columns/"
```

⇒

```
6
```

2.45 LCD row count

number	relay/lcd_rows/
Number of LCD rows	

The value is subject to the following constraints: all of the following is true:

- the value is an integer
- the value is greater or equal to 0

This number does not support direct modification.

This number represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/lcd_rows/"
```

⇒

7

2.46 User LCD lines

array	relay/user_lines/
Array of strings to override LCD lines with, from top to bottom	

The value is subject to the following constraints: length of the value is equal to [lcd row count](#)

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This array contains [User LCD line, if any](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/user_lines/"
```

⇒

```
[
  "Sample value of user lcd line, if any #1",
  "Sample value of user lcd line, if any #2",
  "Sample value of user lcd line, if any #3",
  "Sample value of user lcd line, if any #4"
]
```

Sample write command:

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/relay/user_lines/"
```

Sample user lcd line, if any creation command:

```
curl --digest -u admin:1234 -H "Content-type: application/json" -H "Accept: ↵
↵ application/json" --data-binary "\"Sample value\"" "https://192.168.0.100/ ↵
↵ restapi/relay/user_lines/"
```

See also [User LCD lines: User LCD line, if any](#)

2.47 User LCD lines: User LCD line, if any

sum (optional string)	relay/user_lines/N/
The line to override the corresponding line of the LCD output with, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum can assume the following values:

constant null	No user LCD line	Do not override the corresponding line of the ordinary LCD output
string	User LCD line	The line to override the corresponding line of the LCD output with

Sample read command (note that :user_lcd_line__if_any is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/user_lines/:user_lcd_line__if_any/"
```

⇒ (possible variant)

"Sample value"

Sample (possible variant) write command (note that :user_lcd_line__if_any is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/relay/user_lines/:user_lcd_line__if_any/"
```

Sample deletion command (note that :user_lcd_line__if_any is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/relay/user_lines/:user_lcd_line__if_any/"
```

2.47.1 User LCD line

(possibly) string	relay/user_lines/N/
The line to override the corresponding line of the LCD output with	

Sample write command (note that :user_lcd_line__if_any is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/relay/user_lines/:user_lcd_line__if_any/"
```

Sample deletion command (note that :user_lcd_line__if_any is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/relay/user_lines/:user_lcd_line__if_any/"
```

2.48 User message force display timeout, if any

sum (optional number)	relay/user_message_force_timeout/
Time during which the user script LCD message always overrides ordinary LCD output, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Always force user message	The user message always overrides ordinary LCD output	
number	User message force display timeout	Time during which the user script LCD message always overrides ordinary LCD output	the value is greater or equal to 0

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/user_message_force_timeout/"
```

⇒ (possible variant)

6

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "6" "https://192.168.0.100/restapi/relay/ ↵
↵ user_message_force_timeout/"
```

2.48.1 User message force display timeout

(possibly) number	relay/user_message_force_timeout/
Time during which the user script LCD message always overrides ordinary LCD output	

The value is subject to the following constraints: [the value](#) is greater or equal to 0

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "5" "https://192.168.0.100/restapi/relay/ ↵
↵ user_message_force_timeout/"
```

2.49 User message display timeout, if any

sum (optional number)	relay/user_message_timeout/
Time after which the user script LCD message is replaced by ordinary LCD output even if nothing else happens, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Show user message indefinitely	The user message stays on LCD until ordinary LCD output changes	
number	User message display timeout	Time after which the user script LCD message is replaced by ordinary LCD output even if nothing else happens	the value is greater or equal to 0

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/user_message_timeout/"
```

⇒ (possible variant)

1

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "6" "https://192.168.0.100/restapi/relay/ ↵
↵ user_message_timeout/"
```

2.49.1 User message display timeout

(possibly) number	relay/user_message_timeout/
Time after which the user script LCD message is replaced by ordinary LCD output even if nothing else happens	

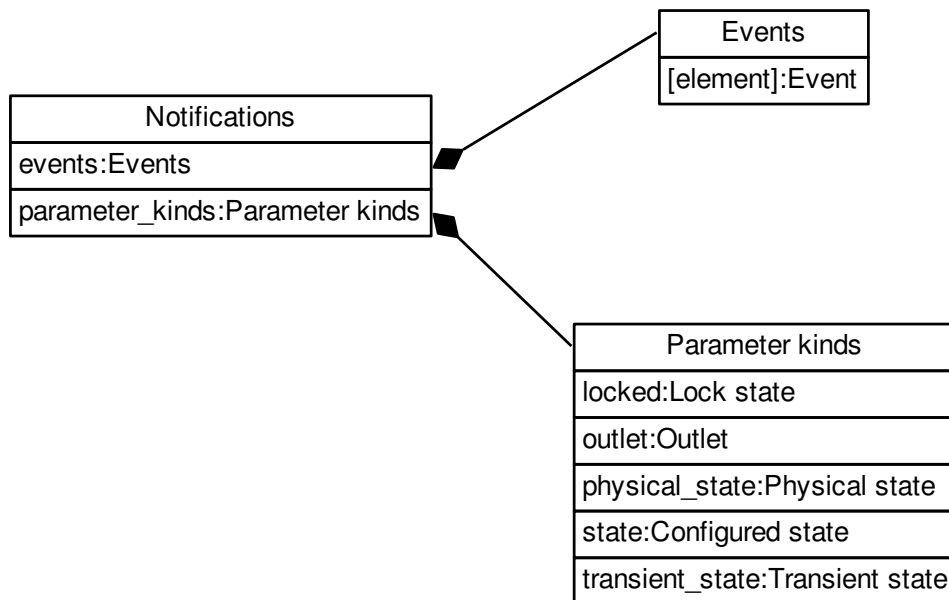
The value is subject to the following constraints: [the value](#) is greater or equal to 0

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "2" "https://192.168.0.100/restapi/relay/ ↵
↵ user_message_timeout/"
```

2.50 Notifications

object	relay/notifications/
Relay-state-related notifications	



This object does not support direct modification.

This object contains the following items:

events	Events
parameter_kinds	Parameter kinds

Sample read command:

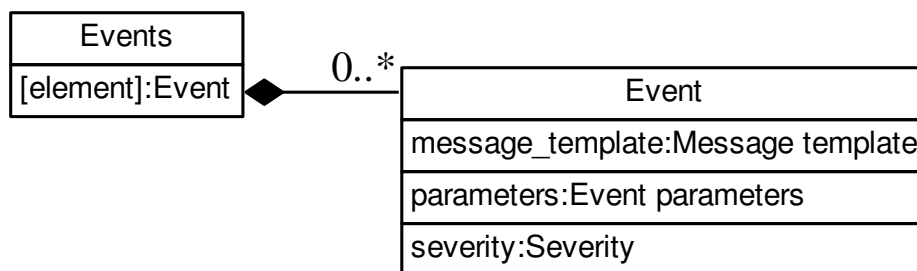
```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/notifications/"
```

⇒

...

2.50.1 Events

map	relay/notifications/events/
Event templates	



This map does not support direct modification.

This map contains [Event](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/notifications/events/"
```

⇒

...

Creating elements in this collection is not supported.

See also [Events: Event](#)

See also [Notifications: Parameter kinds](#)

2.51 Message template: Message template element

sum (variant)	relay/notifications/events/S/message_template/N/
Element of human-readable message template	

This sum does not support direct modification.

This sum can assume the following values:

string	String	Fixed string	
number	Parameter	Index of message parameter to insert	event parameters[the value]

Sample read command (note that :event and :message_template_element are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
    ↵ restapi/relay/notifications/events/:event/message_template/: ↵
    ↵ message_template_element/"
```

⇒ (possible variant)

6

2.51.1 String

(possibly) string	relay/notifications/events/S/message_template/N/
Fixed string	

2.51.2 Parameter

(possibly) number	relay/notifications/events/S/message_template/N/
Index of message parameter to insert	

The value is subject to the following constraints: [event parameters\[the value\]](#)

2.52 Event parameter: Fixed value

sum (variant)	relay/notifications/events/S/parameters/N/fixed_value/
Fixed parameter value for this particular event	

This sum does not support direct modification.

This sum can assume the following values:

constant null	Null	Null
constant true	True	True
constant false	False	False
string	String	This string
number	Number	This number

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
    ↵ restapi/relay/notifications/events/:event/parameters/:event_parameter/ ↵
    ↵ fixed_value/"
```

⇒ (possible variant)

4

2.52.1 String

(possibly) string	relay/notifications/events/S/parameters/N/fixed_value/
This string	

2.52.2 Number

(possibly) number	relay/notifications/events/S/parameters/N/fixed_value/
This number	

2.53 Event parameter: Fixed value flag

sum (boolean)	relay/notifications/events/S/parameters/N/has_fixed_value/
Flag indicating that the parameter's value for this event is fixed	

This sum does not support direct modification.

This sum can assume the following values:

constant true	Fixed	The value is fixed
constant false	Variable	The value is variable

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/notifications/events/:event/parameters/:event_parameter/ ↵
↵ has_fixed_value/"
```

⇒ (possible variant)

false

2.54 Event parameter: Identifier

string	relay/notifications/events/S/parameters/N/id/
Parameter identifier	

The value is subject to the following constraints: [parameter kinds](#)

This string does not support direct modification.

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

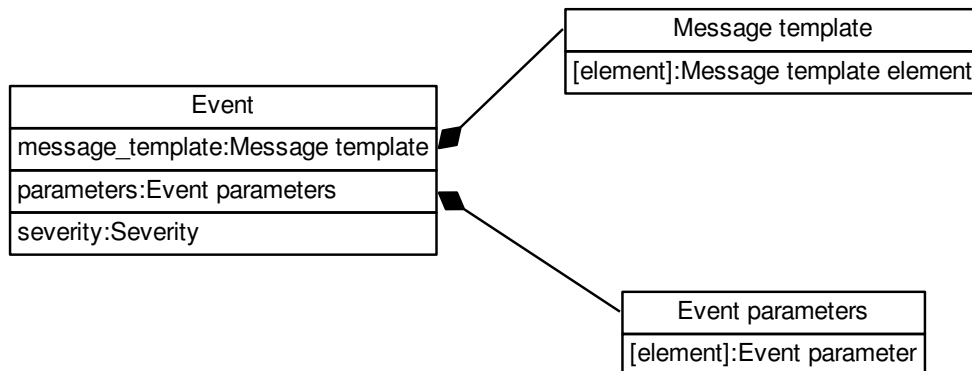
```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/notifications/events/:event/parameters/:event_parameter/id/"
```

⇒

"Sample value"

2.55 Events: Event

object	relay/notifications/events/S/
Event template	



This object contains the following items:

message_template	Message template
parameters	Event parameters
severity	Severity

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/notifications/events/:event/"
```

⇒

```
{
  "severity":2,
  "message_template":[
    "Sample value of message template of message template element #1",
    10,
    5
  ],
  "parameters":[
    {
      "fixed_value":10,
      "has_fixed_value":false,
      "id":"Sample value of event parameters of event parameter #1 of identifier"
    },
    {
      "fixed_value":8,
      "has_fixed_value":true,
      "id":"Sample value of event parameters of event parameter #2 of identifier"
    }
  ],
}
```

```
{
  "fixed_value":false,
  "has_fixed_value":true,
  "id":"Sample value of event parameters of event parameter #3 of identifier"
},
{
  "fixed_value":false,
  "has_fixed_value":false,
  "id":"Sample value of event parameters of event parameter #4 of identifier"
},
{
  "fixed_value":false,
  "has_fixed_value":false,
  "id":"Sample value of event parameters of event parameter #5 of identifier"
}
]
}
```

Sample write command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/relay/notifications/events/:event/"
```

2.55.1 Message template

array	relay/notifications/events/S/message_template/
Template for human-readable message generation	

This array does not support direct modification.

This array contains [Message template element](#) elements.

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/notifications/events/:event/message_template/"
```

⇒

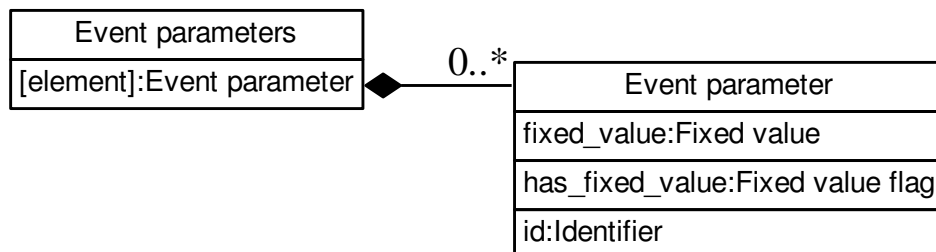
```
[
  "Sample value of message template element #1",
  1
]
```

Creating elements in this collection is not supported.

See also [Message template: Message template element](#)

2.55.2 Event parameters

array	relay/notifications/events/S/parameters/
Additional data associated with the event	



This array does not support direct modification.

This array contains [Event parameter](#) elements.

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/notifications/events/:event/parameters/"
```

⇒

```
[
  {
    "fixed_value":null,
    "has_fixed_value":false,
    "id":"Sample value of event parameter #1 of identifier"
  },
  {
    "fixed_value":false,
    "has_fixed_value":false,
    "id":"Sample value of event parameter #2 of identifier"
  },
  {
    "fixed_value":false,
    "has_fixed_value":true,
    "id":"Sample value of event parameter #3 of identifier"
  },
  {
    "fixed_value":false,
    "has_fixed_value":false,
    "id":"Sample value of event parameter #4 of identifier"
  },
  {
    "fixed_value":null,
    "has_fixed_value":true,
    "id":"Sample value of event parameter #5 of identifier"
  }
]
```

Creating elements in this collection is not supported.

2.55.2.1 Event parameter

object	relay/notifications/events/S/parameters/N/
Properties of a parameter associated with the event	

This object contains the following items:

fixed_value	Fixed value
has_fixed_value	Fixed value flag
id	Identifier

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/notifications/events/:event/parameters/:event_parameter/"
```

⇒

```
{
  "fixed_value":false,
  "has_fixed_value":true,
  "id":"Sample value of identifier"
}
```

Sample write command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"fixed_value":false,"has_fixed_value":true,"id":"Sample ↵
↵ value of identifier"}'\
"https://192.168.0.100/restapi/relay/notifications/events/:event/parameters/: ↵
↵ event_parameter/"
```

See also [Event parameter: Fixed value](#)

See also [Event parameter: Fixed value flag](#)

See also [Event parameter: Identifier](#)

2.55.3 Severity

sum (enumerated number)	relay/notifications/events/S/severity/
Severity rating assigned to the event	

This sum does not support direct modification.

This sum can assume the following values:

constant 1	Emergency	Treat the event as an emergency
constant 2	Alert	Treat the event as an alert
constant 3	Critical	Treat the event as critical
constant 4	Error	Treat the event as an error
constant 5	Warning	Treat the event as a warning
constant 6	Notice	Treat the event as a notice
constant 7	Informational	Treat the event as informational
constant 8	Debug	Treat the event as debugging-related

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/notifications/events/:event/severity/"
```

⇒ (possible variant)

6

2.56 Notifications: Parameter kinds

object	relay/notifications/parameter_kinds/
Kinds of event parameters	

This object does not correspond to an actual resource.

This object contains the following items:

locked	Lock state
outlet	Outlet
physical_state	Physical state
state	Configured state
transient_state	Transient state

2.56.1 Lock state

sum (boolean)	relay/notifications/parameter_kinds/locked/
Indicates whether the outlet state is locked from keypad	

This sum can assume the following values:

constant true	Locked	The outlet state cannot be changed
constant false	Unlocked	The outlet state can be changed

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/notifications/parameter_kinds/locked/"
```

⇒ (possible variant)

true

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ relay/notifications/parameter_kinds/locked/"
```

2.56.2 Outlet

number	relay/notifications/parameter_kinds/outlet/
Outlet index	

The value is subject to the following constraints: [outlets\[the value\]](#)

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/notifications/parameter_kinds/outlet/"
```

⇒

1

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: ↵
↵ : application/json" --data-binary "1" "https://192.168.0.100/restapi/relay/ ↵
↵ notifications/parameter_kinds/outlet/"
```

2.56.3 Physical state

sum (boolean)	relay/notifications/parameter_kinds/physical_state/
Current actual state of the outlet	

This sum can assume the following values:

constant true	On	The outlet is powered
constant false	Off	The outlet is not powered

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/notifications/parameter_kinds/physical_state/"
```

⇒ (possible variant)

true

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ relay/notifications/parameter_kinds/physical_state/"
```

2.56.4 Configured state

sum (boolean)	relay/notifications/parameter_kinds/state/
Saved configured state of the outlet	

This sum can assume the following values:

constant true	On	The outlet is powered
constant false	Off	The outlet is not powered

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/notifications/parameter_kinds/state/"
```

⇒ (possible variant)

false

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ relay/notifications/parameter_kinds/state/"
```

2.56.5 Transient state

sum (boolean)	relay/notifications/parameter_kinds/transient_state/
Current expected state of the outlet	

This sum can assume the following values:

constant true	On	The outlet is powered
constant false	Off	The outlet is not powered

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/relay/notifications/parameter_kinds/transient_state/"
```

⇒ (possible variant)

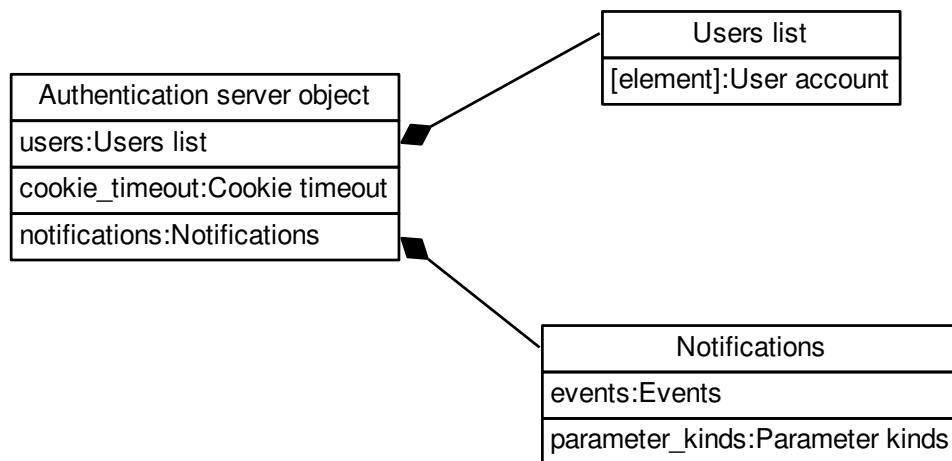
false

Sample (possible variant) write command:


```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ relay/notifications/parameter_kinds/transient_state/"
```

3 Authentication server object

object	auth/
Object representing the authentication server configuration	



This object contains the following items:

users	Users list
cookie_timeout	Cookie timeout
notifications	Notifications

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/auth/"
```

⇒

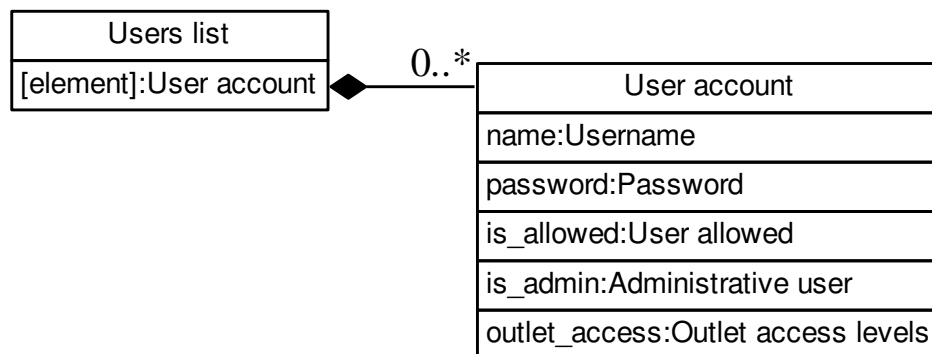
...

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "..." "https://192.168.0.100/restapi/auth ↵
↵ /"
```

3.1 Users list

array	auth/users/
List of user accounts	



Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This array represents a value in persistent storage.

This array represents an unordered set (order of its elements doesn't matter, and each value should not be supplied more than once).

This array contains [User account](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/auth/users/"
```

⇒

```
[
  {
    "password":"Sample value of user account #1 of password",
    "is_admin":false,
    "name":"Sample value of user account #1 of username",
    "is_allowed":false,
    "outlet_access":[
      true,
      false,
      true
    ]
  }
]
```

Sample write command:

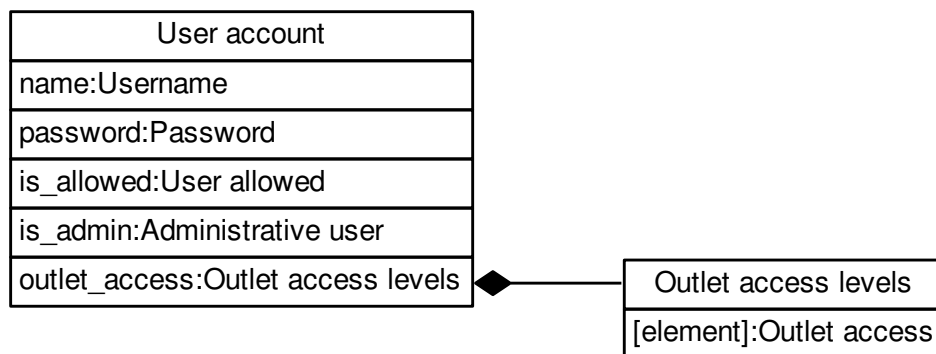
```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "... " "https://192.168.0.100/restapi/auth ↵
↵ /users/"
```

Sample user account creation command:

```
curl\
--digest\
-u admin:1234\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary "{\"password\":\"Sample value of password\", \"is_admin\":false, \" ↵
↵ name\":\"Sample value of username\", \"is_allowed\":false, \"outlet_access ↵
↵ \": [false, true]}\""
"https://192.168.0.100/restapi/auth/users/"
```

3.1.1 User account

object	auth/users/N/
User account configuration	



Removing the object from its parent collection is denied if [administrative user](#)

This object contains the following items:

name	Username
password	Password
is_allowed	User allowed
is_admin	Administrative user
outlet_access	Outlet access levels

Sample read command (note that :user_account is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/auth/users/:user_account/"
```

⇒

```
{
  "password":"Sample value of password",
  "is_admin":false,
  "name":"Sample value of username",
  "is_allowed":true,
  "outlet_access":[
    false,
    true,
    true,
    true,
    true,
    true
  ]
}
```

Sample write command (note that :user_account is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"password\":"Sample value of password\","is_admin\":true,\\" ↵
↵ name\":"Sample value of username\","is_allowed\":true,\"outlet_access\":[ ↵
↵ false,true,false,false]}'\
"https://192.168.0.100/restapi/auth/users/:user_account/"
```

Sample deletion command (note that :user_account is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/auth/users/:user_account/"
```

See also [User account: Username](#)

See also [User account: Password](#)

See also [User account: User allowed](#)

See also [User account: Administrative user](#)

See also [User account: Outlet access levels](#)

3.2 User account: Username

string	auth/users/N/name/
Username	

The value is subject to the following constraints: all of the following is true:

- the value matches `^[a-zA-Z0-9]*$`
- name members of all values of `users list` are distinct

Retrieving the value is denied if not `administrative user`

Changing the value is denied if not `administrative user`

This string represents a value in persistent storage.

Write operations must supply the current value of `password` if `administrative user`

Sample read command (note that `:user_account` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/auth/users/:user_account/name/"
```

⇒

"Sample value"

Sample write command (note that `:user_account` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/auth/users/:user_account/name/"
```

3.3 User account: Password

string	<code>auth/users/N/password/</code>
Password	

The value is subject to the following constraints: the value matches `^[~]*$`

Retrieving the value is denied if any of the following is true:

- not `administrative user`
- `administrative user`
- `hide user passwords`

Using the string as a field for indexing into the grandparent collection is denied

This string represents a value in persistent storage.

This string should be displayed in a secure manner.

Write operations must supply the current value of the value if `administrative user`

Sample read command (note that `:user_account` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/auth/users/:user_account/password/"
```

⇒

"Sample value"

Sample write command (note that :user_account is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/auth/users/:user_account/password/"
```

3.4 User account: User allowed

sum (boolean)	auth/users/N/is_allowed/
Flag indicating whether user is allowed or denied	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum does not support direct modification if [administrative user](#).

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Allowed	The user is allowed to log in
constant false	Denied	The user is denied login

Sample read command (note that :user_account is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/auth/users/:user_account/is_allowed/"
```

⇒ (possible variant)

false

Sample (possible variant) write command (note that :user_account is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ auth/users/:user_account/is_allowed/"
```

3.5 User account: Administrative user

sum (boolean)	auth/users/N/is_admin/
Flag indicating whether the user is an administrator	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum does not support direct modification.

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Administrator	The user is an administrator
constant false	Regular user	The user is a regular user

Sample read command (note that :user_account is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/auth/users/:user_account/is_admin/"
```

⇒ (possible variant)

```
false
```

3.6 User account: Outlet access levels

array	auth/users/N/outlet_access/
Access levels per outlet	

The value is subject to the following constraints: length of [the value](#) is equal to length of [outlets](#)

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This array does not support direct modification if [administrative user](#).

This array represents a value in persistent storage.

This array contains [Outlet access](#) elements.

Sample read command (note that :user_account is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/auth/users/:user_account/outlet_access/"
```

⇒

```
[
  false,
  false,
  true,
  true,
  false,
  false,
  true
]
```

Sample write command (note that :user_account is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "[false,true,false,true,false,true,true, ↵
↵ false,true]" "https://192.168.0.100/restapi/auth/users/:user_account/ ↵
↵ outlet_access/"
```

Sample outlet access creation command (note that :user_account is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X POST -H "Content-type: application/json" -H " ↵
↵ Accept: application/json" --data-binary "false" "https://192.168.0.100/ ↵
↵ restapi/auth/users/:user_account/outlet_access/"
```

3.6.1 Outlet access

sum (boolean)	auth/users/N/outlet_access/N/
Access level for outlet by index	

The value is subject to the following constraints: [outlets](#)[index of the value]

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum does not support direct modification if [administrative user](#).

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Full	Outlet state can be manipulated by the user
constant false	None	Outlet state cannot be neither seen nor manipulated by the user

Sample read command (note that :user_account and :outlet_access are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/auth/users/:user_account/outlet_access/:outlet_access/"
```

⇒ (possible variant)

```
true
```

Sample (possible variant) write command (note that :user_account and :outlet_access are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ auth/users/:user_account/outlet_access/:outlet_access/"
```

Sample deletion command (note that :user_account and :outlet_access are URL template arguments and need to be replaced before trying):


```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵  
↵ ://192.168.0.100/restapi/auth/users/:user_account/outlet_access/: ↵  
↵ outlet_access/"
```

3.7 Cookie timeout

number	auth/cookie_timeout/
The amount of time for which a cookie is valid	

The value is subject to the following constraints: [the value](#) is greater than 0

This number represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/auth/cookie_timeout/"
```

⇒

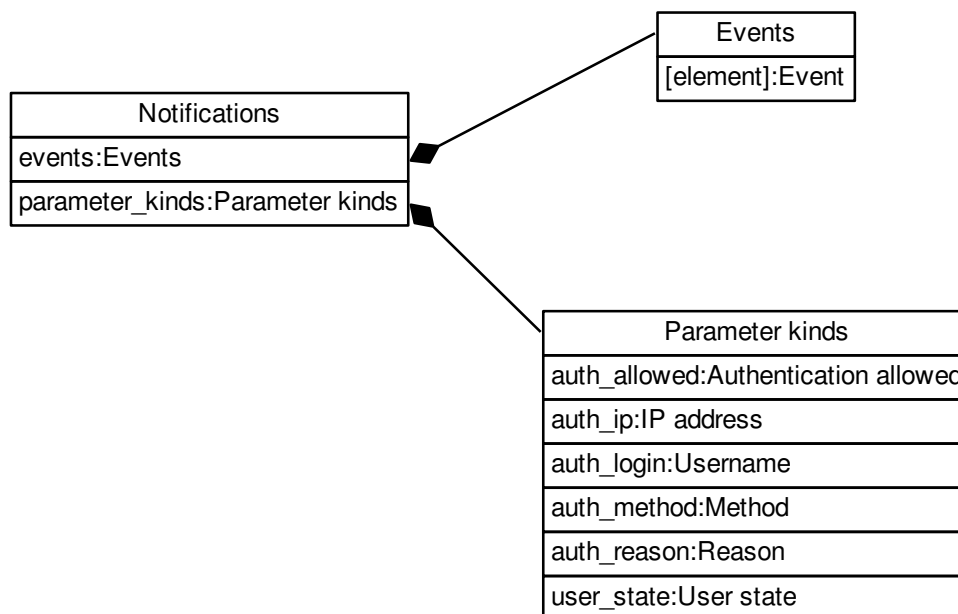
10

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵  
↵ : application/json" --data-binary "5" "https://192.168.0.100/restapi/auth/ ↵  
↵ cookie_timeout/"
```

3.8 Notifications

object	auth/notifications/
Authentication-related notifications	



This object does not support direct modification.

This object contains the following items:

events	Events
parameter_kinds	Parameter kinds

Sample read command:

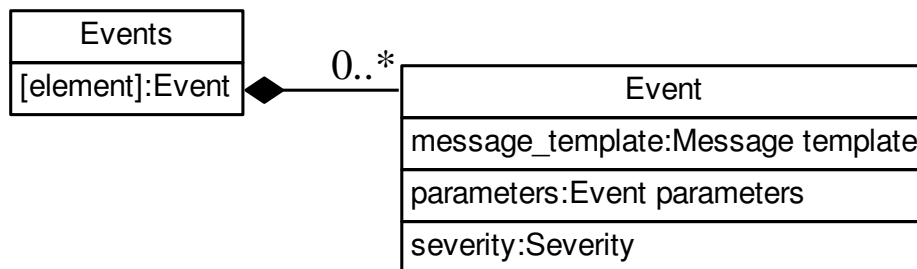
```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/auth/notifications/"
```

⇒

...

3.8.1 Events

map	auth/notifications/events/
Event templates	



This map does not support direct modification.

This map contains [Event](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/auth/notifications/events/"
```

⇒

...

Creating elements in this collection is not supported.

See also [Events: Event](#)

See also [Notifications: Parameter kinds](#)

3.9 Message template: Message template element

sum (variant)	auth/notifications/events/S/message_template/N/
Element of human-readable message template	

This sum does not support direct modification.

This sum can assume the following values:

string	String	Fixed string	
number	Parameter	Index of message parameter to insert	event parameters[the value]

Sample read command (note that :event and :message_template_element are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
    ↵ restapi/auth/notifications/events/:event/message_template/: ↵
    ↵ message_template_element/"
```

⇒ (possible variant)

"Sample value"

3.9.1 String

(possibly) string	auth/notifications/events/S/message_template/N/
Fixed string	

3.9.2 Parameter

(possibly) number	auth/notifications/events/S/message_template/N/
Index of message parameter to insert	

The value is subject to the following constraints: [event parameters\[the value\]](#)

3.10 Event parameter: Fixed value

sum (variant)	auth/notifications/events/S/parameters/N/fixed_value/
Fixed parameter value for this particular event	

This sum does not support direct modification.

This sum can assume the following values:

constant null	Null	Null
constant true	True	True
constant false	False	False
string	String	This string
number	Number	This number

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
    ↵ restapi/auth/notifications/events/:event/parameters/:event_parameter/ ↵
    ↵ fixed_value/"
```

⇒ (possible variant)

1

3.10.1 String

(possibly) string	auth/notifications/events/S/parameters/N/fixed_value/
This string	

3.10.2 Number

(possibly) number	auth/notifications/events/S/parameters/N/fixed_value/
This number	

3.11 Event parameter: Fixed value flag

sum (boolean)	auth/notifications/events/S/parameters/N/has_fixed_value/
Flag indicating that the parameter's value for this event is fixed	

This sum does not support direct modification.

This sum can assume the following values:

constant true	Fixed	The value is fixed
constant false	Variable	The value is variable

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
    ↵ restapi/auth/notifications/events/:event/parameters/:event_parameter/ ↵
    ↵ has_fixed_value/"
```

⇒ (possible variant)

```
true
```

3.12 Event parameter: Identifier

string	auth/notifications/events/S/parameters/N/id/
Parameter identifier	

The value is subject to the following constraints: [parameter kinds](#)

This string does not support direct modification.

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

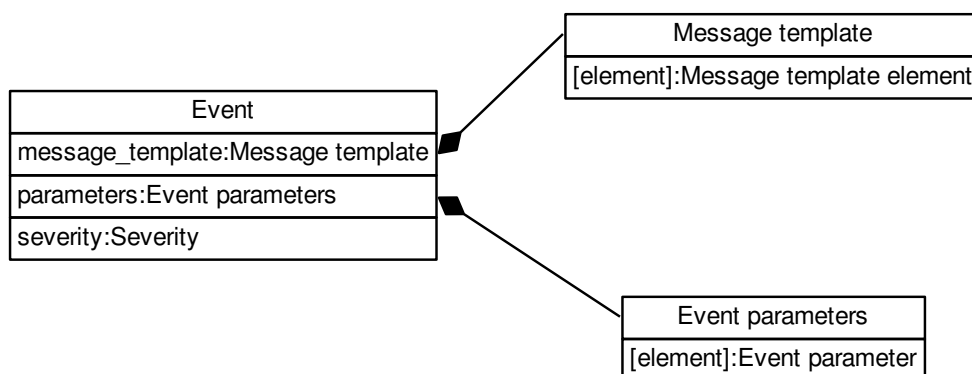
```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
    ↵ restapi/auth/notifications/events/:event/parameters/:event_parameter/id/"
```

⇒

```
"Sample value"
```

3.13 Events: Event

object	auth/notifications/events/S/
Event template	



This object contains the following items:

message_template	Message template
parameters	Event parameters
severity	Severity

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/auth/notifications/events/:event/"
```

⇒

...

Sample write command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/auth/notifications/events/:event/"
```

3.13.1 Message template

array	auth/notifications/events/S/message_template/
Template for human-readable message generation	

This array does not support direct modification.

This array contains [Message template element](#) elements.

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/auth/notifications/events/:event/message_template/"
```

⇒

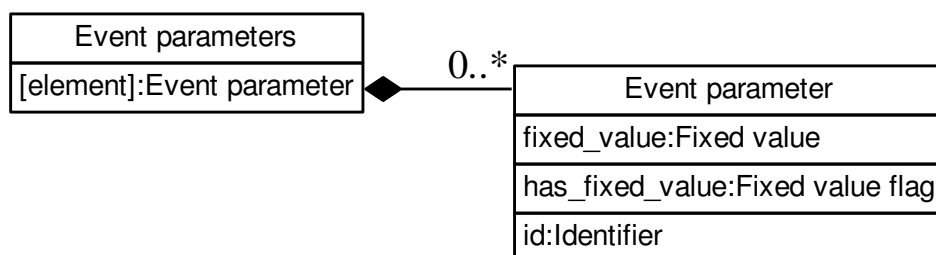
```
[
  9,
  "Sample value of message template element #2",
  7,
  10,
  4
]
```

Creating elements in this collection is not supported.

See also [Message template: Message template element](#)

3.13.2 Event parameters

array	auth/notifications/events/S/parameters/
Additional data associated with the event	



This array does not support direct modification.

This array contains [Event parameter](#) elements.

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/auth/notifications/events/:event/parameters/"
```

⇒

```
[
{
  "fixed_value":false,
  "has_fixed_value":true,
  "id":"Sample value of event parameter #1 of identifier"
}
]
```

Creating elements in this collection is not supported.

3.13.2.1 Event parameter

object	auth/notifications/events/S/parameters/N/
Properties of a parameter associated with the event	

This object contains the following items:

fixed_value	Fixed value
has_fixed_value	Fixed value flag
id	Identifier

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/auth/notifications/events/:event/parameters/:event_parameter/"
```

⇒

```
{
  "fixed_value":true,
  "has_fixed_value":true,
  "id":"Sample value of identifier"
}
```

Sample write command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary "{\"fixed_value\":false,\"has_fixed_value\":false,\"id\": \"Sample ↵
↵ value of identifier\"}"\
"https://192.168.0.100/restapi/auth/notifications/events/:event/parameters/: ↵
↵ event_parameter/"
```

See also [Event parameter: Fixed value](#)

See also [Event parameter: Fixed value flag](#)

See also [Event parameter: Identifier](#)

3.13.3 Severity

sum (enumerated number)	auth/notifications/events/S/severity/
Severity rating assigned to the event	

This sum does not support direct modification.

This sum can assume the following values:

constant 1	Emergency	Treat the event as an emergency
constant 2	Alert	Treat the event as an alert
constant 3	Critical	Treat the event as critical
constant 4	Error	Treat the event as an error
constant 5	Warning	Treat the event as a warning
constant 6	Notice	Treat the event as a notice
constant 7	Informational	Treat the event as informational
constant 8	Debug	Treat the event as debugging-related

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/auth/notifications/events/:event/severity/"
```

⇒ (possible variant)

5

3.14 Notifications: Parameter kinds

object	auth/notifications/parameter_kinds/
Kinds of event parameters	

This object does not correspond to an actual resource.

This object contains the following items:

auth_allowed	Authentication allowed
auth_ip	IP address
auth_login	Username
auth_method	Method
auth_reason	Reason
user_state	User state

3.14.1 Authentication allowed

sum (boolean)	auth/notifications/parameter_kinds/auth_allowed/
Authentication decision result	

This sum can assume the following values:

constant true	Allowed	The user is allowed to log in
constant false	Denied	The user is denied to log in

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/auth/notifications/parameter_kinds/auth_allowed/"
```

⇒ (possible variant)

false

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ auth/notifications/parameter_kinds/auth_allowed/"
```

3.14.2 IP address

string	auth/notifications/parameter_kinds/auth_ip/
The IP address of the user	

The value is subject to the following constraints: [the value](#) matches `^(([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5]).){3}([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5])$`

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/auth/notifications/parameter_kinds/auth_ip/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/auth/notifications/parameter_kinds/auth_ip/"
```

3.14.3 Username

string	auth/notifications/parameter_kinds/auth_login/
The name of the user	

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/auth/notifications/parameter_kinds/auth_login/"
```

⇒

`"Sample value"`

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/auth/notifications/parameter_kinds/auth_login/"
```

3.14.4 Method

string	auth/notifications/parameter_kinds/auth_method/
The authentication method	

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/auth/notifications/parameter_kinds/auth_method/"
```

⇒

`"Sample value"`

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/auth/notifications/parameter_kinds/auth_method/"
```

3.14.5 Reason

string	auth/notifications/parameter_kinds/auth_reason/
The reason for authentication decision	

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/auth/notifications/parameter_kinds/auth_reason/"
```

⇒

`"Sample value"`

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/auth/notifications/parameter_kinds/auth_reason/"
```

3.14.6 User state

sum (variant)	auth/notifications/parameter_kinds/user_state/
The state of the user	

This sum can assume the following values:

constant true	Existing	The user exists
constant false	Deleted	The user has been deleted
constant "new"	New	The user has been created

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/auth/notifications/parameter_kinds/user_state/"
```

⇒ (possible variant)

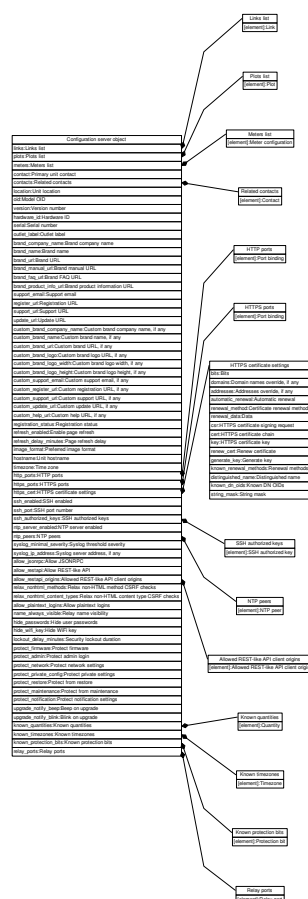
```
true
```

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/auth/notifications/parameter_kinds/user_state/"
```

4 Configuration server object

object	config/
Object representing configuration server	



This object contains the following items:

links	Links list
plots	Plots list
meters	Meters list
contact	Primary unit contact
contacts	Related contacts
location	Unit location
oid	Model OID
version	Version number
hardware_id	Hardware ID
serial	Serial number
outlet_label	Outlet label
brand_company_name	Brand company name
brand_name	Brand name
brand_url	Brand URL
brand_manual_url	Brand manual URL
brand_faq_url	Brand FAQ URL
brand_product_info_url	Brand product information URL
support_email	Support email
register_url	Registration URL
support_url	Support URL
update_url	Update URL
custom_brand_company_name	Custom brand company name, if any
custom_brand_name	Custom brand name, if any

custom_brand_url	Custom brand URL, if any
custom_brand_logo	Custom brand logo URL, if any
custom_brand_logo_width	Custom brand logo width, if any
custom_brand_logo_height	Custom brand logo height, if any
custom_support_email	Custom support email, if any
custom_register_url	Custom registration URL, if any
custom_support_url	Custom support URL, if any
custom_update_url	Custom update URL, if any
custom_help_url	Custom help URL, if any
registration_status	Registration status
refresh_enabled	Enable page refresh
refresh_delay_minutes	Page refresh delay
image_format	Preferred image format
hostname	Unit hostname
timezone	Time zone
http_ports	HTTP ports
https_ports	HTTPS ports
https_cert	HTTPS certificate settings
ssh_enabled	SSH enabled
ssh_port	SSH port number
ssh_authorized_keys	SSH authorized keys
ntp_server_enabled	NTP server enabled
ntp_peers	NTP peers
syslog_minimal_severity	Syslog threshold severity
syslog_ip_address	Syslog server address, if any
allow_jsonrpc	Allow JSONRPC
allow_restapi	Allow REST-like API
allow_restapi_origins	Allowed REST-like API client origins
relax_nonhtml_methods	Relax non-HTML method CSRF checks
relax_nonhtml_content_types	Relax non-HTML content type CSRF checks
allow_plaintext_logins	Allow plaintext logins
name_always_visible	Relay name visibility
hide_passwords	Hide user passwords
hide_wifi_key	Hide WiFi key
lockout_delay_minutes	Security lockout duration
protect_firmware	Protect firmware
protect_admin	Protect admin login
protect_network	Protect network settings
protect_private_config	Protect private settings
protect_restore	Protect from restore
protect_maintenance	Protect from maintenance
protect_notification	Protect notification settings
upgrade_notify_beep	Beep on upgrade
upgrade_notify_blink	Blink on upgrade
known_quantities	Known quantities
known_timezones	Known timezones
known_protection_bits	Known protection bits
relay_ports	Relay ports

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/"
```

⇒

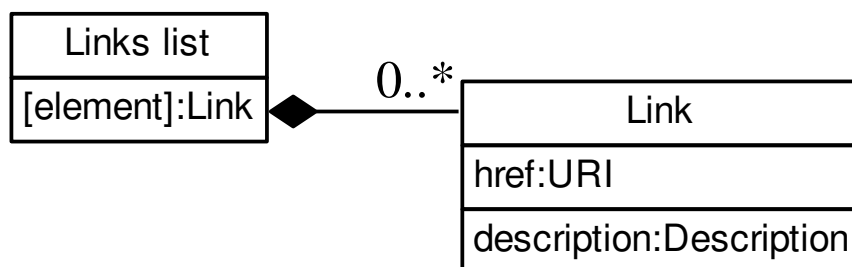
...

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "... " "https://192.168.0.100/restapi/ ↵
↵ config/"
```

4.1 Links list

array	config/links/
List of user-defined links to display in the web UI	



Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This array represents a value in persistent storage.

This array contains [Link](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/links/"
```

⇒

```
[
  {
    "href":"Sample value of link #1 of uri",
    "description":"Sample value of link #1 of description"
  },
  {
    "href":"Sample value of link #2 of uri",
    "description":"Sample value of link #2 of description"
  },
  {
    "href":"Sample value of link #3 of uri",
    "description":"Sample value of link #3 of description"
  },
  {
    "href":"Sample value of link #4 of uri",
    "description":"Sample value of link #4 of description"
  },
  {
    "href":"Sample value of link #5 of uri",
    "description":"Sample value of link #5 of description"
  },
  {
    "href":"Sample value of link #6 of uri",
    "description":"Sample value of link #6 of description"
  }
]
```

Sample write command:

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/config/links/"
```

Sample link creation command:

```
curl --digest -u admin:1234 -H "Content-type: application/json" -H "Accept: ↵
↵ application/json" --data-binary '{"href\":"Sample value of uri\"," ↵
↵ description\":"Sample value of description\"}' "https://192.168.0.100/ ↵
↵ restapi/config/links/"
```

See also [Links list: Link](#)

4.2 Links list: Link

object	config/links/N/
User-defined link	

Retrieving the value is denied if not [administrative user](#)

This object represents a value in persistent storage.

This object contains the following items:

href	URI
description	Description

Sample read command (note that :link is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/links/:link/"
```

⇒

```
{
  "href":"Sample value of uri",
  "description":"Sample value of description"
}
```

Sample write command (note that :link is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary '{"href":"Sample value of uri","\ ↵
↵ description":"Sample value of description"}' "https://192.168.0.100/ ↵
↵ restapi/config/links/:link/"
```

Sample deletion command (note that :link is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/config/links/:link/"
```

4.2.1 URI

string	config/links/N/href/
The target URI of the link	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Sample read command (note that :link is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/links/:link/href/"
```

⇒

```
"Sample value"
```

Sample write command (note that :link is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/links/:link/href/"
```

4.2.2 Description

string	config/links/N/description/
The textual representation of the link	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Sample read command (note that :link is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/config/links/:link/description/"
```

⇒

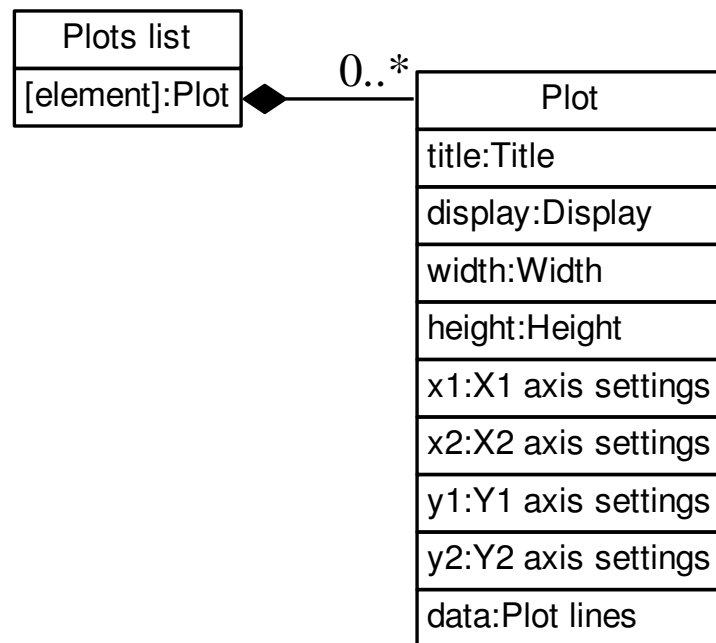
"Sample value"

Sample write command (note that :link is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵  
↵ : application/json" --data-binary "\"Sample value\"" "https ↵  
↵ ://192.168.0.100/restapi/config/links/:link/description/"
```

4.3 Plots list

array	config/plots/
List of plots to display in the web UI	



Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This array represents a value in persistent storage.

This array contains [Plot](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/"
```

⇒

...

Sample write command:

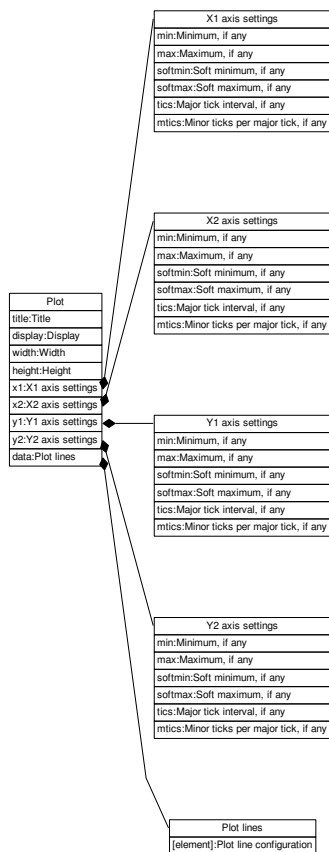
```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "... " "https://192.168.0.100/restapi/ ↵
↵ config/plots/"
```

Sample plot creation command:

```
curl --digest -u admin:1234 -H "Content-type: application/json" -H "Accept: ↵
↵ application/json" --data-binary "... " "https://192.168.0.100/restapi/config ↵
↵ /plots/"
```

4.3.1 Plot

object	config/plots/N/
Configuration of plot for measured values	



This object contains the following items:

title	Title
display	Display
width	Width
height	Height
x1	X1 axis settings
x2	X2 axis settings
y1	Y1 axis settings
y2	Y2 axis settings
data	Plot lines

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/"
```

⇒

...

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "... "https://192.168.0.100/restapi/ ↵
↵ config/plots/:plot/"
```

Sample deletion command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/config/plots/:plot/"
```

See also [Plot: Title](#)

See also [Plot: Display](#)

See also [Plot: Width](#)

See also [Plot: Height](#)

See also [Plot: X1 axis settings](#)

See also [Plot: X2 axis settings](#)

See also [Plot: Y1 axis settings](#)

See also [Plot: Y2 axis settings](#)

See also [Plot: Plot lines](#)

4.4 Plot: Title

string	config/plots/N/title/
The title of the plot	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/title/"
```

⇒

"Sample value"

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/plots/:plot/title/"
```

4.5 Plot: Display

sum (boolean)	config/plots/N/display/
Indicates whether the plot should be displayed	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Shown	The plot is shown
constant false	Hidden	The plot is hidden

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/display/"
```

⇒ (possible variant)

```
true
```

Sample (possible variant) write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ config/plots/:plot/display/"
```

4.6 Plot: Width

number	config/plots/N/width/
The width of the plot	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater than 0

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/width/"
```

⇒

9

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "3" "https://192.168.0.100/restapi/config ↵
↵ /plots/:plot/width/"
```

4.7 Plot: Height

number	config/plots/N/height/
The height of the plot	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater than 0

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/height/"
```

⇒

10

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "2" "https://192.168.0.100/restapi/config ↵
↵ /plots/:plot/height/"
```

4.8 Plot: X1 axis settings

object	config/plots/N/x1/
Configuration for X1 axis	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This object represents a value in persistent storage.

This object contains the following items:

min	Minimum, if any
max	Maximum, if any
softmin	Soft minimum, if any
softmax	Soft maximum, if any
tics	Major tick interval, if any
mtics	Minor ticks per major tick, if any

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/x1/"
```

⇒

```
{
  "softmin":null,
  "softmax":9,
  "max":6,
  "tics":null,
  "mtics":8,
  "min":null
}
```

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary "{ \"softmin\":3, \"softmax\":null, \"max\":null, \"tics\":8, \"mtics\": ↵
↵ null, \"min\":null}" \
"https://192.168.0.100/restapi/config/plots/:plot/x1/"
```

4.8.1 Minimum, if any

sum (optional number)	config/plots/N/x1/min/
Minimum value to display on the axis, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Automatic	The maximum value is derived from data and the soft maximum
number	Minimum	Minimum value to display on the axis

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/x1/min/"
```

⇒ (possible variant)

8

Sample (possible variant) write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ config/plots/:plot/x1/min/"
```

4.8.1.1 Minimum

(possibly) number	config/plots/N/x1/min/
Minimum value to display on the axis	

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "10" "https://192.168.0.100/restapi/ ↵
↵ config/plots/:plot/x1/min/"
```

4.8.2 Maximum, if any

sum (optional number)	config/plots/N/x1/max/
Maximum value to display on the axis, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Automatic	The minimum value is derived from data and the soft minimum
number	Maximum	Maximum value to display on the axis

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/x1/max/"
```

⇒ (possible variant)

10

Sample (possible variant) write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ config/plots/:plot/x1/max/"
```

4.8.2.1 Maximum

(possibly) number	config/plots/N/x1/max/
Maximum value to display on the axis	

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "10" "https://192.168.0.100/restapi/ ↵
↵ config/plots/:plot/x1/max/"
```

4.8.3 Soft minimum, if any

sum (optional number)	config/plots/N/x1/softmin/
Minimum value to display on the axis unless values exist below it, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	None	No soft maximum defined
number	Soft minimum	Minimum value to display on the axis unless values exist below it

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/x1/softmin/"
```

⇒ (possible variant)

```
null
```

Sample (possible variant) write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "10" "https://192.168.0.100/restapi/ ↵
↵ config/plots/:plot/x1/softmin/"
```

4.8.3.1 Soft minimum

(possibly) number	config/plots/N/x1/softmin/
Minimum value to display on the axis unless values exist below it	

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "9" "https://192.168.0.100/restapi/config ↵
↵ /plots/:plot/x1/softmin/"
```

4.8.4 Soft maximum, if any

sum (optional number)	config/plots/N/x1/softmax/
Maximum value to display on the axis unless values exist above it, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	None	No soft minimum defined
number	Soft maximum	Maximum value to display on the axis unless values exist above it

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/x1/softmax/"
```

⇒ (possible variant)

```
null
```

Sample (possible variant) write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "2" "https://192.168.0.100/restapi/config ↵
↵ /plots/:plot/x1/softmax/"
```

4.8.4.1 Soft maximum

(possibly) number	config/plots/N/x1/softmax/
Maximum value to display on the axis unless values exist above it	

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "1" "https://192.168.0.100/restapi/config ↵
```

↪ /plots/:plot/x1/softmax/"

4.8.5 Major tick interval, if any

sum (optional number)	config/plots/N/x1/tics/
The interval, in value units, between major ticks of the axis, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Automatic	The tick interval is derived from data and size
number	Major tick interval	The interval, in value units, between major ticks of the axis

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↪
↪ restapi/config/plots/:plot/x1/tics/"
```

⇒ (possible variant)

null

Sample (possible variant) write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↪
↪ : application/json" --data-binary "9" "https://192.168.0.100/restapi/config ↪
↪ /plots/:plot/x1/tics/"
```

4.8.5.1 Major tick interval

(possibly) number	config/plots/N/x1/tics/
The interval, in value units, between major ticks of the axis	

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↪
↪ : application/json" --data-binary "2" "https://192.168.0.100/restapi/config ↪
↪ /plots/:plot/x1/tics/"
```

4.8.6 Minor ticks per major tick, if any

sum (optional number)	config/plots/N/x1/mtics/
The number of minor ticks between two major ticks, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	None	There are no minor ticks	
number	Minor ticks per major tick	The number of minor ticks between two major ticks	all of the following is true: <ul style="list-style-type: none"> • the value is an integer • the value is greater or equal to 0

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/x1/mtics/"
```

⇒ (possible variant)

null

Sample (possible variant) write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ config/plots/:plot/x1/mtics/"
```

4.8.6.1 Minor ticks per major tick

(possibly) number	config/plots/N/x1/mtics/
The number of minor ticks between two major ticks	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater or equal to 0

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "6" "https://192.168.0.100/restapi/config ↵
↵ /plots/:plot/x1/mtics/"
```

4.9 Plot: X2 axis settings

object	config/plots/N/x2/
Configuration for X2 axis	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This object represents a value in persistent storage.

This object contains the following items:

min	Minimum, if any
max	Maximum, if any
softmin	Soft minimum, if any
softmax	Soft maximum, if any
tics	Major tick interval, if any
mtics	Minor ticks per major tick, if any

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/x2/"
```

⇒

```
{
  "softmin":null,
  "softmax":2,
  "max":null,
  "tics":1,
  "mtics":null,
  "min":8
}
```

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary '{"softmin":9,"softmax":1,"max": ↵
↵ null,"tics":null,"mtics":2,"min":1}' "https://192.168.0.100/restapi/ ↵
↵ config/plots/:plot/x2/"
```

4.9.1 Minimum, if any

sum (optional number)	config/plots/N/x2/min/
Minimum value to display on the axis, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Automatic	The maximum value is derived from data and the soft maximum
number	Minimum	Minimum value to display on the axis

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/x2/min/"
```

⇒ (possible variant)

10

Sample (possible variant) write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ config/plots/:plot/x2/min/"
```

4.9.1.1 Minimum

(possibly) number	config/plots/N/x2/min/
Minimum value to display on the axis	

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "1" "https://192.168.0.100/restapi/config ↵
↵ /plots/:plot/x2/min/"
```

4.9.2 Maximum, if any

sum (optional number)	config/plots/N/x2/max/
Maximum value to display on the axis, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Automatic	The minimum value is derived from data and the soft minimum
number	Maximum	Maximum value to display on the axis

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/x2/max/"
```

⇒ (possible variant)

3

Sample (possible variant) write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ config/plots/:plot/x2/max/"
```

4.9.2.1 Maximum

(possibly) number	config/plots/N/x2/max/
Maximum value to display on the axis	

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "2" "https://192.168.0.100/restapi/config ↵
↵ /plots/:plot/x2/max/"
```

4.9.3 Soft minimum, if any

sum (optional number)	config/plots/N/x2/softmin/
Minimum value to display on the axis unless values exist below it, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	None	No soft maximum defined
number	Soft minimum	Minimum value to display on the axis unless values exist below it

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/x2/softmin/"
```

⇒ (possible variant)

```
null
```

Sample (possible variant) write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ config/plots/:plot/x2/softmin/"
```

4.9.3.1 Soft minimum

(possibly) number	config/plots/N/x2/softmin/
Minimum value to display on the axis unless values exist below it	

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "3" "https://192.168.0.100/restapi/config ↵
↵ /plots/:plot/x2/softmin/"
```

4.9.4 Soft maximum, if any

sum (optional number)	config/plots/N/x2/softmax/
Maximum value to display on the axis unless values exist above it, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	None	No soft minimum defined
number	Soft maximum	Maximum value to display on the axis unless values exist above it

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/x2/softmax/"
```

⇒ (possible variant)

4

Sample (possible variant) write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "9" "https://192.168.0.100/restapi/config ↵
↵ /plots/:plot/x2/softmax/"
```

4.9.4.1 Soft maximum

(possibly) number	config/plots/N/x2/softmax/
Maximum value to display on the axis unless values exist above it	

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "9" "https://192.168.0.100/restapi/config ↵
```

↪ /plots/:plot/x2/softmax/"

4.9.5 Major tick interval, if any

sum (optional number)	config/plots/N/x2/tics/
The interval, in value units, between major ticks of the axis, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Automatic	The tick interval is derived from data and size
number	Major tick interval	The interval, in value units, between major ticks of the axis

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↪
↪ restapi/config/plots/:plot/x2/tics/"
```

⇒ (possible variant)

null

Sample (possible variant) write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↪
↪ : application/json" --data-binary "7" "https://192.168.0.100/restapi/config ↪
↪ /plots/:plot/x2/tics/"
```

4.9.5.1 Major tick interval

(possibly) number	config/plots/N/x2/tics/
The interval, in value units, between major ticks of the axis	

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↪
↪ : application/json" --data-binary "9" "https://192.168.0.100/restapi/config ↪
↪ /plots/:plot/x2/tics/"
```

4.9.6 Minor ticks per major tick, if any

sum (optional number)	config/plots/N/x2/mtics/
The number of minor ticks between two major ticks, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	None	There are no minor ticks	
number	Minor ticks per major tick	The number of minor ticks between two major ticks	all of the following is true: <ul style="list-style-type: none"> • the value is an integer • the value is greater or equal to 0

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/x2/mtics/"
```

⇒ (possible variant)

```
null
```

Sample (possible variant) write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ config/plots/:plot/x2/mtics/"
```

4.9.6.1 Minor ticks per major tick

(possibly) number	config/plots/N/x2/mtics/
The number of minor ticks between two major ticks	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater or equal to 0

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "7" "https://192.168.0.100/restapi/config ↵
↵ /plots/:plot/x2/mtics/"
```

4.10 Plot: Y1 axis settings

object	config/plots/N/y1/
Configuration for Y1 axis	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This object represents a value in persistent storage.

This object contains the following items:

min	Minimum, if any
max	Maximum, if any
softmin	Soft minimum, if any
softmax	Soft maximum, if any
tics	Major tick interval, if any
mtics	Minor ticks per major tick, if any

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/y1/"
```

⇒

```
{
  "softmin":null,
  "softmax":null,
  "max":null,
  "tics":8,
  "mtics":6,
  "min":null
}
```

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary '{"softmin":null,"softmax":7,"max": ↵
↵ null,"tics":9,"mtics":4,"min":null}' "https://192.168.0.100/restapi/ ↵
↵ config/plots/:plot/y1/"
```

4.10.1 Minimum, if any

sum (optional number)	config/plots/N/y1/min/
Minimum value to display on the axis, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Automatic	The maximum value is derived from data and the soft maximum
number	Minimum	Minimum value to display on the axis

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/y1/min/"
```

⇒ (possible variant)

null

Sample (possible variant) write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "9" "https://192.168.0.100/restapi/config ↵
↵ /plots/:plot/y1/min/"
```

4.10.1.1 Minimum

(possibly) number	config/plots/N/y1/min/
Minimum value to display on the axis	

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "10" "https://192.168.0.100/restapi/ ↵
↵ config/plots/:plot/y1/min/"
```

4.10.2 Maximum, if any

sum (optional number)	config/plots/N/y1/max/
Maximum value to display on the axis, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Automatic	The minimum value is derived from data and the soft minimum
number	Maximum	Maximum value to display on the axis

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/y1/max/"
```

⇒ (possible variant)

null

Sample (possible variant) write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ config/plots/:plot/y1/max/"
```

4.10.2.1 Maximum

(possibly) number	config/plots/N/y1/max/
Maximum value to display on the axis	

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "6" "https://192.168.0.100/restapi/config ↵
↵ /plots/:plot/y1/max/"
```

4.10.3 Soft minimum, if any

sum (optional number)	config/plots/N/y1/softmin/
Minimum value to display on the axis unless values exist below it, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	None	No soft maximum defined
number	Soft minimum	Minimum value to display on the axis unless values exist below it

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/y1/softmin/"
```

⇒ (possible variant)

```
null
```

Sample (possible variant) write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "7" "https://192.168.0.100/restapi/config ↵
↵ /plots/:plot/y1/softmin/"
```

4.10.3.1 Soft minimum

(possibly) number	config/plots/N/y1/softmin/
Minimum value to display on the axis unless values exist below it	

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "3" "https://192.168.0.100/restapi/config ↵
↵ /plots/:plot/y1/softmin/"
```

4.10.4 Soft maximum, if any

sum (optional number)	config/plots/N/y1/softmax/
Maximum value to display on the axis unless values exist above it, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	None	No soft minimum defined
number	Soft maximum	Maximum value to display on the axis unless values exist above it

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/y1/softmax/"
```

⇒ (possible variant)

5

Sample (possible variant) write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "10" "https://192.168.0.100/restapi/ ↵
↵ config/plots/:plot/y1/softmax/"
```

4.10.4.1 Soft maximum

(possibly) number	config/plots/N/y1/softmax/
Maximum value to display on the axis unless values exist above it	

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "7" "https://192.168.0.100/restapi/config ↵
```

↪ /plots/:plot/y1/softmax/"

4.10.5 Major tick interval, if any

sum (optional number)	config/plots/N/y1/tics/
The interval, in value units, between major ticks of the axis, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Automatic	The tick interval is derived from data and size
number	Major tick interval	The interval, in value units, between major ticks of the axis

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↪
↪ restapi/config/plots/:plot/y1/tics/"
```

⇒ (possible variant)

null

Sample (possible variant) write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↪
↪ : application/json" --data-binary "5" "https://192.168.0.100/restapi/config ↪
↪ /plots/:plot/y1/tics/"
```

4.10.5.1 Major tick interval

(possibly) number	config/plots/N/y1/tics/
The interval, in value units, between major ticks of the axis	

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↪
↪ : application/json" --data-binary "5" "https://192.168.0.100/restapi/config ↪
↪ /plots/:plot/y1/tics/"
```

4.10.6 Minor ticks per major tick, if any

sum (optional number)	config/plots/N/y1/mtics/
The number of minor ticks between two major ticks, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	None	There are no minor ticks	
number	Minor ticks per major tick	The number of minor ticks between two major ticks	all of the following is true: <ul style="list-style-type: none"> • the value is an integer • the value is greater or equal to 0

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/y1/mtics/"
```

⇒ (possible variant)

5

Sample (possible variant) write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ config/plots/:plot/y1/mtics/"
```

4.10.6.1 Minor ticks per major tick

(possibly) number	config/plots/N/y1/mtics/
The number of minor ticks between two major ticks	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater or equal to 0

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "2" "https://192.168.0.100/restapi/config ↵
↵ /plots/:plot/y1/mtics/"
```

4.11 Plot: Y2 axis settings

object	config/plots/N/y2/
Configuration for Y2 axis	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This object represents a value in persistent storage.

This object contains the following items:

min	Minimum, if any
max	Maximum, if any
softmin	Soft minimum, if any
softmax	Soft maximum, if any
tics	Major tick interval, if any
mtics	Minor ticks per major tick, if any

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/y2/"
```

⇒

```
{
  "softmin":null,
  "softmax":2,
  "max":null,
  "tics":6,
  "mtics":3,
  "min":10
}
```

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"softmin\":"null","\softmax\":"null","\max\":"null","\tics\":"6","\mtics ↵
↵ \":2","\min\":"null"}'\
"https://192.168.0.100/restapi/config/plots/:plot/y2/"
```

4.11.1 Minimum, if any

sum (optional number)	config/plots/N/y2/min/
Minimum value to display on the axis, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Automatic	The maximum value is derived from data and the soft maximum
number	Minimum	Minimum value to display on the axis

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/y2/min/"
```

⇒ (possible variant)

```
null
```

Sample (possible variant) write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ config/plots/:plot/y2/min/"
```

4.11.1.1 Minimum

(possibly) number	config/plots/N/y2/min/
Minimum value to display on the axis	

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "6" "https://192.168.0.100/restapi/config ↵
↵ /plots/:plot/y2/min/"
```

4.11.2 Maximum, if any

sum (optional number)	config/plots/N/y2/max/
Maximum value to display on the axis, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Automatic	The minimum value is derived from data and the soft minimum
number	Maximum	Maximum value to display on the axis

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/y2/max/"
```

⇒ (possible variant)

null

Sample (possible variant) write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ config/plots/:plot/y2/max/"
```

4.11.2.1 Maximum

(possibly) number	config/plots/N/y2/max/
Maximum value to display on the axis	

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "1" "https://192.168.0.100/restapi/config ↵
↵ /plots/:plot/y2/max/"
```

4.11.3 Soft minimum, if any

sum (optional number)	config/plots/N/y2/softmin/
Minimum value to display on the axis unless values exist below it, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	None	No soft maximum defined
number	Soft minimum	Minimum value to display on the axis unless values exist below it

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/y2/softmin/"
```

⇒ (possible variant)

null

Sample (possible variant) write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ config/plots/:plot/y2/softmin/"
```

4.11.3.1 Soft minimum

(possibly) number	config/plots/N/y2/softmin/
Minimum value to display on the axis unless values exist below it	

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "5" "https://192.168.0.100/restapi/config ↵
↵ /plots/:plot/y2/softmin/"
```

4.11.4 Soft maximum, if any

sum (optional number)	config/plots/N/y2/softmax/
Maximum value to display on the axis unless values exist above it, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	None	No soft minimum defined
number	Soft maximum	Maximum value to display on the axis unless values exist above it

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/y2/softmax/"
```

⇒ (possible variant)

8

Sample (possible variant) write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ config/plots/:plot/y2/softmax/"
```

4.11.4.1 Soft maximum

(possibly) number	config/plots/N/y2/softmax/
Maximum value to display on the axis unless values exist above it	

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "10" "https://192.168.0.100/restapi/ ↵
↵ config/plots/:plot/y2/softmax/"
```

4.11.5 Major tick interval, if any

sum (optional number)	config/plots/N/y2/tics/
The interval, in value units, between major ticks of the axis, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Automatic	The tick interval is derived from data and size
number	Major tick interval	The interval, in value units, between major ticks of the axis

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/y2/tics/"
```

⇒ (possible variant)

null

Sample (possible variant) write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "2" "https://192.168.0.100/restapi/config ↵
↵ /plots/:plot/y2/tics/"
```

4.11.5.1 Major tick interval

(possibly) number	config/plots/N/y2/tics/
The interval, in value units, between major ticks of the axis	

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "1" "https://192.168.0.100/restapi/config ↵
↵ /plots/:plot/y2/tics/"
```

4.11.6 Minor ticks per major tick, if any

sum (optional number)	config/plots/N/y2/mtics/
The number of minor ticks between two major ticks, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	None	There are no minor ticks	
number	Minor ticks per major tick	The number of minor ticks between two major ticks	all of the following is true: <ul style="list-style-type: none"> • the value is an integer • the value is greater or equal to 0

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/y2/mtics/"
```

⇒ (possible variant)

```
null
```

Sample (possible variant) write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "3" "https://192.168.0.100/restapi/config ↵
↵ /plots/:plot/y2/mtics/"
```

4.11.6.1 Minor ticks per major tick

(possibly) number	config/plots/N/y2/mtics/
The number of minor ticks between two major ticks	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater or equal to 0

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "6" "https://192.168.0.100/restapi/config ↵
↵ /plots/:plot/y2/mtics/"
```

4.12 Plot line configuration: Style

object	config/plots/N/data/N/style/
Style of the plot line	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This object represents a value in persistent storage.

This object contains the following items:

style	Line style
type	Line type
color	Line color
width	Line width
size	Marker size
axes	Base axes
marker	Marker type

Sample read command (note that :plot and :plot_line_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/data/:plot_line_configuration/style/"
```

⇒

```
{
  "type": "Sample value of line type",
  "style": "Sample value of line style",
  "marker": "Sample value of marker type",
  "color": "Sample value of line color",
  "axes": "Sample value of base axes",
  "size": 9,
  "width": 1
}
```

Sample write command (note that :plot and :plot_line_configuration are URL template arguments and need to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"type\":"Sample value of line type\","style\":"Sample value ↵
↵ of line style\","marker\":"Sample value of marker type\","color\":" ↵
↵ Sample value of line color\","axes\":"Sample value of base axes\","size ↵
↵ \":9,\"width\":6}"\
"https://192.168.0.100/restapi/config/plots/:plot/data/:plot_line_configuration/ ↵
↵ style/"
```

4.12.1 Line style

string	config/plots/N/data/N/style/style/
The style of the line	

The value is subject to the following constraints: [plot styles\[the value\]](#)

This string represents a value in persistent storage.

Sample read command (note that :plot and :plot_line_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/data/:plot_line_configuration/style/style/"
```

⇒

"Sample value"

Sample write command (note that :plot and :plot_line_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/plots/:plot/data/:plot_line_configuration/ ↵
↵ style/style/"
```

4.12.2 Line type

string	config/plots/N/data/N/style/type/
The type of the line	

The value is subject to the following constraints: [line types\[the value\]](#)

This string represents a value in persistent storage.

Sample read command (note that :plot and :plot_line_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/data/:plot_line_configuration/style/type/"
```

⇒

"Sample value"

Sample write command (note that :plot and :plot_line_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/plots/:plot/data/:plot_line_configuration/ ↵
↵ style/type/"
```

4.12.3 Line color

string	config/plots/N/data/N/style/color/
The color of the line	

The value is subject to the following constraints: [the value](#) matches `^[0-9A-F]{6}$`

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Sample read command (note that `:plot` and `:plot_line_configuration` are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/data/:plot_line_configuration/style/color/"
```

⇒

```
"Sample value"
```

Sample write command (note that `:plot` and `:plot_line_configuration` are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/plots/:plot/data/:plot_line_configuration/ ↵
↵ style/color/"
```

4.12.4 Line width

number	config/plots/N/data/N/style/width/
The width of the line	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater or equal to 0

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

Sample read command (note that `:plot` and `:plot_line_configuration` are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/data/:plot_line_configuration/style/width/"
```

⇒

7

Sample write command (note that :plot and :plot_line_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "6" "https://192.168.0.100/restapi/config ↵
↵ /plots/:plot/data/:plot_line_configuration/style/width/"
```

4.12.5 Marker size

number	config/plots/N/data/N/style/size/
The size of the markers	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater or equal to 0

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

Sample read command (note that :plot and :plot_line_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/data/:plot_line_configuration/style/size/"
```

⇒

8

Sample write command (note that :plot and :plot_line_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "5" "https://192.168.0.100/restapi/config ↵
↵ /plots/:plot/data/:plot_line_configuration/style/size/"
```

4.12.6 Base axes

string	config/plots/N/data/N/style/axes/
The axes on which the line should be plotted. Units of lines plotted on the same axes must match	

The value is subject to the following constraints: [axes](#)[[the value](#)]

This string represents a value in persistent storage.

Sample read command (note that :plot and :plot_line_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/data/:plot_line_configuration/style/axes/"
```

⇒

```
"Sample value"
```

Sample write command (note that :plot and :plot_line_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/plots/:plot/data/:plot_line_configuration/ ↵
↵ style/axes/"
```

4.12.7 Marker type

string	config/plots/N/data/N/style/marker/
The type of the marker	

The value is subject to the following constraints: [marker types](#)[\[the value\]](#)

This string represents a value in persistent storage.

Sample read command (note that :plot and :plot_line_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/data/:plot_line_configuration/style/marker/"
```

⇒

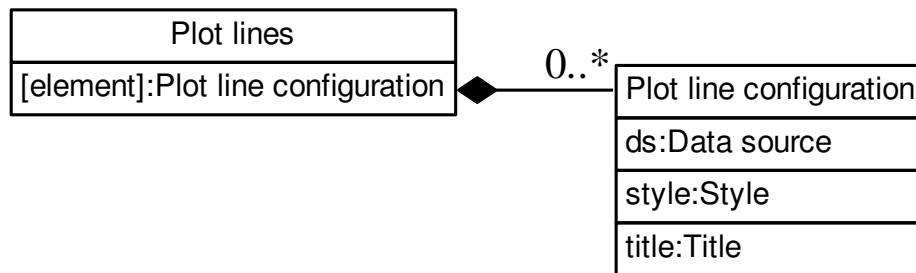
```
"Sample value"
```

Sample write command (note that :plot and :plot_line_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/plots/:plot/data/:plot_line_configuration/ ↵
↵ style/marker/"
```

4.13 Plot: Plot lines

array	config/plots/N/data/
Configurations of values to plot	



This array contains [Plot line configuration](#) elements.

Sample read command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/data/"
```

⇒

...

Sample write command (note that :plot is a URL template argument and needs to be replaced before trying):

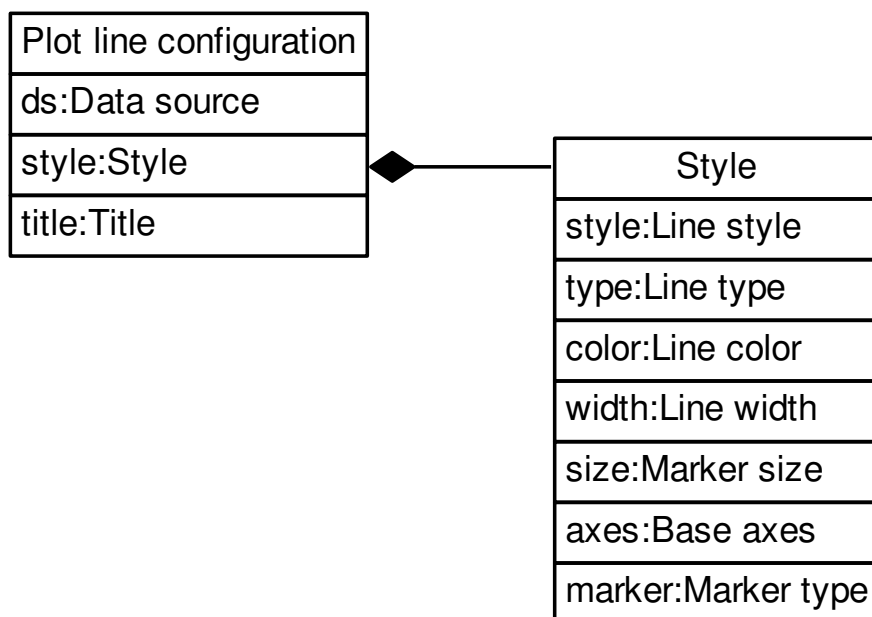
```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "..." "https://192.168.0.100/restapi/ ↵
↵ config/plots/:plot/data/"
```

Sample plot line configuration creation command (note that :plot is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/config/plots/:plot/data/"
```

4.13.1 Plot line configuration

object	config/plots/N/data/N/
Properties of a plot line	



This object contains the following items:

ds	Data source
style	Style
title	Title

Sample read command (note that :plot and :plot_line_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/data/:plot_line_configuration/"
```

⇒

```
{
  "ds":"Sample value of data source",
  "style":{
    "type":"Sample value of style of line type",
    "style":"Sample value of style of line style",
    "marker":"Sample value of style of marker type",
    "color":"Sample value of style of line color",
    "axes":"Sample value of style of base axes",
    "size":2,
    "width":10
  },
  "title":"Sample value of title"
}
```

Sample write command (note that :plot and :plot_line_configuration are URL template arguments and need to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/config/plots/:plot/data/:plot_line_configuration/"
```

Sample deletion command (note that :plot and :plot_line_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/config/plots/:plot/data/:plot_line_configuration/"
```

4.13.1.1 Data source

string	config/plots/N/data/N/ds/
Identifier of the data source to use	

The value is subject to the following constraints: [measured values](#)[[the value](#)]

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Sample read command (note that :plot and :plot_line_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/data/:plot_line_configuration/ds/"
```

⇒

"Sample value"

Sample write command (note that :plot and :plot_line_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/plots/:plot/data/:plot_line_configuration/ ↵
↵ ds/"
```

See also [Plot line configuration: Style](#)

4.13.1.2 Title

string	config/plots/N/data/N/title/
The title of the plot line	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Sample read command (note that :plot and :plot_line_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/plots/:plot/data/:plot_line_configuration/title/"
```

⇒

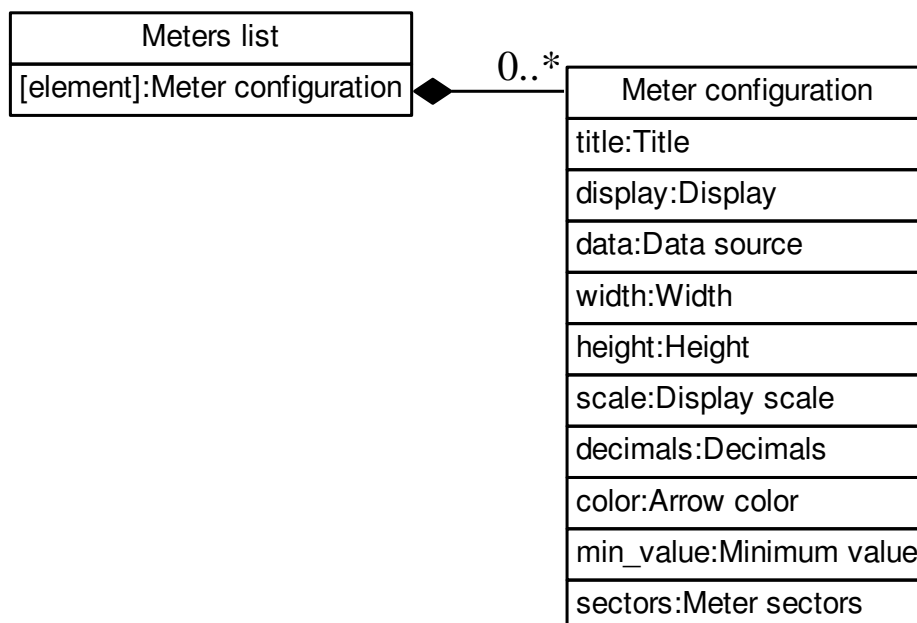
```
"Sample value"
```

Sample write command (note that :plot and :plot_line_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/plots/:plot/data/:plot_line_configuration/ ↵
↵ title/"
```

4.14 Meters list

array	config/meters/
List of meters to display in the web UI	



Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This array represents a value in persistent storage.

This array contains [Meter configuration](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/meters/"
```

⇒

...

Sample write command:

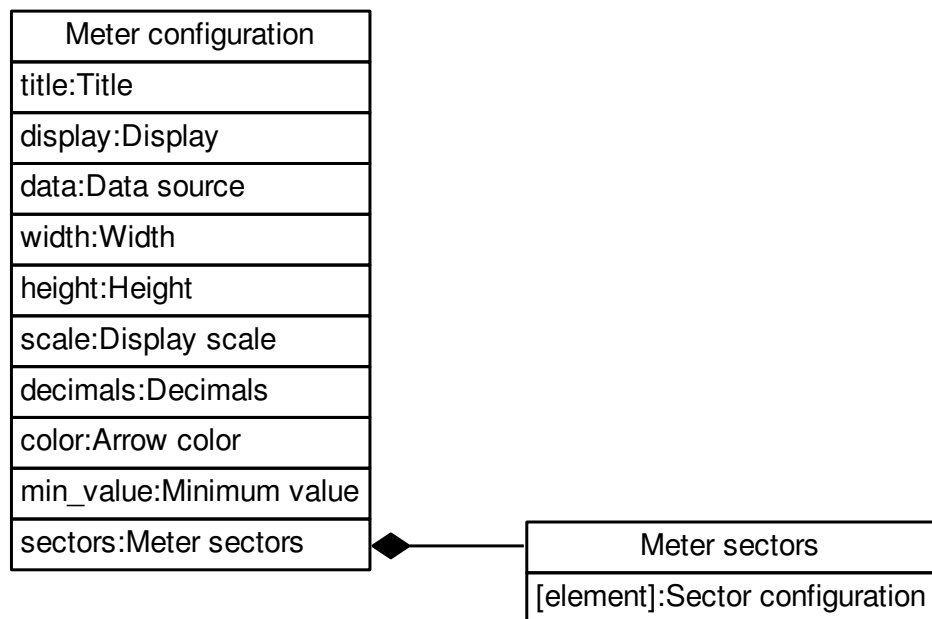
```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "... " "https://192.168.0.100/restapi/ ↵
↵ config/meters/"
```

Sample meter configuration creation command:

```
curl --digest -u admin:1234 -H "Content-type: application/json" -H "Accept: ↵
↵ application/json" --data-binary "... " "https://192.168.0.100/restapi/config ↵
↵ /meters/"
```

4.14.1 Meter configuration

object	config/meters/N/
Configuration of meter for a measured value	



This object contains the following items:

title	Title
display	Display
data	Data source
width	Width
height	Height
scale	Display scale
decimals	Decimals
color	Arrow color
min_value	Minimum value
sectors	Meter sectors

Sample read command (note that :meter_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/meters/:meter_configuration/"
```

⇒

...

Sample write command (note that :meter_configuration is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/config/meters/:meter_configuration/"
```

Sample deletion command (note that :meter_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/config/meters/:meter_configuration/"
```

See also [Meter configuration: Title](#)

See also [Meter configuration: Display](#)

See also [Meter configuration: Data source](#)

See also [Meter configuration: Width](#)

See also [Meter configuration: Height](#)

See also [Meter configuration: Display scale](#)

See also [Meter configuration: Decimals](#)

See also [Meter configuration: Arrow color](#)

See also [Meter configuration: Minimum value](#)

See also [Meter configuration: Meter sectors](#)

4.15 Meter configuration: Title

string	config/meters/N/title/
The title of the meter	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Sample read command (note that :meter_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/meters/:meter_configuration/title/"
```

⇒

"Sample value"

Sample write command (note that :meter_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/meters/:meter_configuration/title/"
```

4.16 Meter configuration: Display

sum (boolean)	config/meters/N/display/
Indicates whether the meter should be displayed	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Shown	The meter is shown
constant false	Hidden	The meter is hidden

Sample read command (note that :meter_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/meters/:meter_configuration/display/"
```

⇒ (possible variant)

```
true
```

Sample (possible variant) write command (note that :meter_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ config/meters/:meter_configuration/display/"
```

4.17 Meter configuration: Data source

string	config/meters/N/data/
Identifier of the data source to use	

The value is subject to the following constraints: [measured values](#)[the value]

This string represents a value in persistent storage.

Sample read command (note that :meter_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/meters/:meter_configuration/data/"
```

⇒

"Sample value"

Sample write command (note that :meter_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/meters/:meter_configuration/data/"
```

4.18 Meter configuration: Width

number	config/meters/N/width/
The width of the meter	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater than 0

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

Sample read command (note that :meter_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/meters/:meter_configuration/width/"
```

⇒

2

Sample write command (note that :meter_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "9" "https://192.168.0.100/restapi/config ↵
↵ /meters/:meter_configuration/width/"
```

4.19 Meter configuration: Height

number	config/meters/N/height/
The height of the meter	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater than 0

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

Sample read command (note that `:meter_configuration` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/meters/:meter_configuration/height/"
```

⇒

5

Sample write command (note that `:meter_configuration` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "9" "https://192.168.0.100/restapi/config ↵
↵ /meters/:meter_configuration/height/"
```

4.20 Meter configuration: Display scale

string	config/meters/N/scale/
The scale function to use for display	

The value is subject to the following constraints: [plot scales](#)[[the value](#)]

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Sample read command (note that `:meter_configuration` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/meters/:meter_configuration/scale/"
```

⇒

"Sample value"

Sample write command (note that :meter_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/meters/:meter_configuration/scale/"
```

4.21 Meter configuration: Decimals

number	config/meters/N/decimals/
Number of decimal places to show in displayed value	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater or equal to 0

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

Sample read command (note that :meter_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/meters/:meter_configuration/decimals/"
```

⇒

2

Sample write command (note that :meter_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "5" "https://192.168.0.100/restapi/config ↵
↵ /meters/:meter_configuration/decimals/"
```

4.22 Meter configuration: Arrow color

string	config/meters/N/color/
The color of the meter arrow	

The value is subject to the following constraints: [the value](#) matches `^[0-9A-F]{6}$`

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Sample read command (note that `:meter_configuration` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/meters/:meter_configuration/color/"
```

⇒

"Sample value"

Sample write command (note that `:meter_configuration` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/meters/:meter_configuration/color/"
```

4.23 Meter configuration: Minimum value

number	config/meters/N/min_value/
The minimum value to be displayed on the meter	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

Sample read command (note that `:meter_configuration` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/meters/:meter_configuration/min_value/"
```

⇒

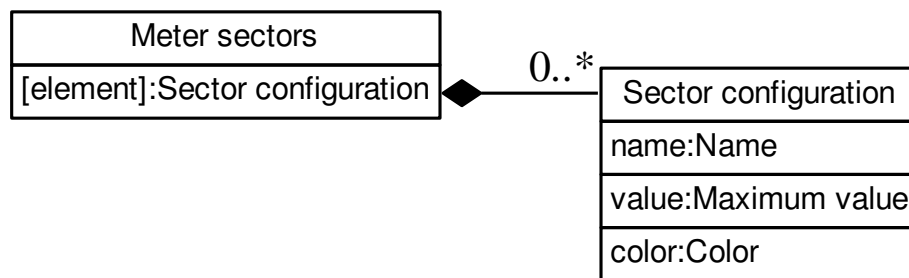
10

Sample write command (note that `:meter_configuration` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "4" "https://192.168.0.100/restapi/config ↵
↵ /meters/:meter_configuration/min_value/"
```

4.24 Meter configuration: Meter sectors

array	config/meters/N/sectors/
Configuration of meter sectors	



Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This array represents a value in persistent storage.

This array contains [Sector configuration](#) elements.

Sample read command (note that :meter_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/meters/:meter_configuration/sectors/"
```

⇒

```
[
  {
    "value":1,
    "name":"Sample value of sector configuration #1 of name",
    "color":"Sample value of sector configuration #1 of color"
  },
  {
    "value":5,
    "name":"Sample value of sector configuration #2 of name",
    "color":"Sample value of sector configuration #2 of color"
  },
  {
    "value":2,
    "name":"Sample value of sector configuration #3 of name",
    "color":"Sample value of sector configuration #3 of color"
  },
  {
    "value":1,
    "name":"Sample value of sector configuration #4 of name",
    "color":"Sample value of sector configuration #4 of color"
  },
  {
    "value":1,
    "name":"Sample value of sector configuration #5 of name",
    "color":"Sample value of sector configuration #5 of color"
  },
]
```

```
{
  "value":5,
  "name":"Sample value of sector configuration #6 of name",
  "color":"Sample value of sector configuration #6 of color"
},
{
  "value":5,
  "name":"Sample value of sector configuration #7 of name",
  "color":"Sample value of sector configuration #7 of color"
}
]
```

Sample write command (note that :meter_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "... "https://192.168.0.100/restapi/ ↵
↵ config/meters/:meter_configuration/sectors/"
```

Sample sector configuration creation command (note that :meter_configuration is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary "{\"value\":8,\"name\":\"Sample value of name\", \"color\": \"Sample ↵
↵ value of color\"}" \
"https://192.168.0.100/restapi/config/meters/:meter_configuration/sectors/"
```

4.24.1 Sector configuration

object	config/meters/N/sectors/N/
Configuration of a meter sector	

This object contains the following items:

name	Name
value	Maximum value
color	Color

Sample read command (note that :meter_configuration and :sector_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/meters/:meter_configuration/sectors/:sector_configuration/"
```

⇒

```
{
  "value":1,
  "name":"Sample value of name",
  "color":"Sample value of color"
}
```

Sample write command (note that :meter_configuration and :sector_configuration are URL template arguments and need to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"value":5,"name":"Sample value of name","color":"Sample
↪ value of color"}'\
"https://192.168.0.100/restapi/config/meters/:meter_configuration/sectors/:
↪ sector_configuration/"
```

Sample deletion command (note that :meter_configuration and :sector_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https
↪ ://192.168.0.100/restapi/config/meters/:meter_configuration/sectors/:
↪ sector_configuration/"
```

4.24.1.1 Name

string	config/meters/N/sectors/N/name/
The name of the sector	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Sample read command (note that :meter_configuration and :sector_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/
↪ restapi/config/meters/:meter_configuration/sectors/:sector_configuration/
↪ name/"
```

⇒

"Sample value"

Sample write command (note that :meter_configuration and :sector_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept
↪ : application/json" --data-binary "\"Sample value\"" "https
↪ ://192.168.0.100/restapi/config/meters/:meter_configuration/sectors/:
↪ sector_configuration/name/"
```

4.24.1.2 Maximum value

number	config/meters/N/sectors/N/value/
The maximum value for the sector	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

Sample read command (note that :meter_configuration and :sector_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/meters/:meter_configuration/sectors/:sector_configuration/ ↵
↵ value/"
```

⇒

5

Sample write command (note that :meter_configuration and :sector_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "6" "https://192.168.0.100/restapi/config ↵
↵ /meters/:meter_configuration/sectors/:sector_configuration/value/"
```

4.24.1.3 Color

string	config/meters/N/sectors/N/color/
The color of the sector	

The value is subject to the following constraints: [the value](#) matches `^[0-9A-F]{6}$`

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Sample read command (note that :meter_configuration and :sector_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/meters/:meter_configuration/sectors/:sector_configuration/ ↵
↵ color/"
```

⇒

"Sample value"

Sample write command (note that :meter_configuration and :sector_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/meters/:meter_configuration/sectors/: ↵
↵ sector_configuration/color/"
```

4.25 Primary unit contact

string	config/contact/
The person or entity responsible for this unit and information on how to contact them	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Changes to this string do not take effect immediately.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/contact/"
```

⇒

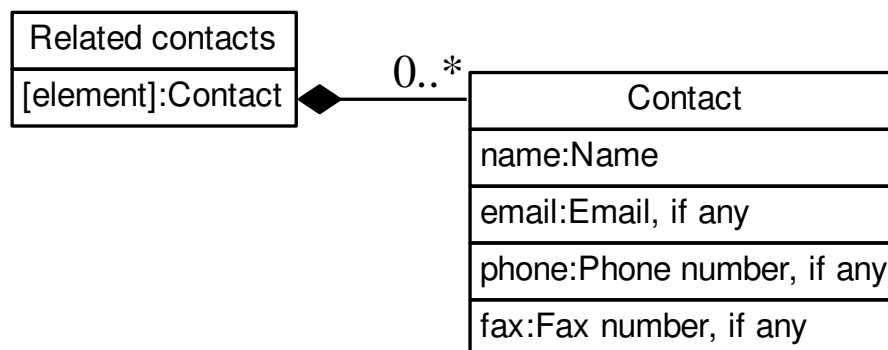
"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/contact/"
```

4.26 Related contacts

map	config/contacts/
Contacts related to the unit in different ways	



Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This map represents a value in persistent storage.

This map contains [Contact](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/contacts/"
```

⇒

...

Sample write command:

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/config/contacts/"
```

Sample contact creation command:

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"phone":null,"fax":null,"name":"Sample value of contact ↵
↵ related_contacts_7 of name","email":null}'\
"https://192.168.0.100/restapi/config/contacts/related_contacts_7/"
```

4.26.1 Contact

object	config/contacts/S/
Contact properties	

The value is subject to the following constraints: not index of the value matches $^(|$.*)$$

This object represents a value in persistent storage.

This object contains the following items:

name	Name
email	Email, if any
phone	Phone number, if any
fax	Fax number, if any

Sample read command (note that :contact is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/contacts/:contact/"
```

⇒

```
{
  "phone":null,
  "fax":"Sample value of fax number, if any",
  "name":"Sample value of name",
  "email":"Sample value of email, if any"
}
```

Sample write command (note that :contact is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary "{\"phone\":null,\"fax\":\"Sample value of fax number, if any\", \" ↵
↵ name\":\"Sample value of name\", \"email\":null}\"\" \
"https://192.168.0.100/restapi/config/contacts/:contact/"
```

Sample deletion command (note that :contact is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/config/contacts/:contact/"
```

See also [Contact: Name](#)

See also [Contact: Email, if any](#)

See also [Contact: Phone number, if any](#)

See also [Contact: Fax number, if any](#)

4.27 Contact: Name

string	config/contacts/S/name/
Contact name	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Sample read command (note that :contact is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/contacts/:contact/name/"
```

⇒

"Sample value"

Sample write command (note that :contact is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/contacts/:contact/name/"
```

4.28 Contact: Email, if any

sum (optional string)	config/contacts/S/email/
Contact email address, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	None	No email address stored	
string	Email	Contact email address	the value is not equal to ""

Sample read command (note that :contact is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/contacts/:contact/email/"
```

⇒ (possible variant)

"Sample value"

Sample (possible variant) write command (note that :contact is a URL template argument and needs to be replaced before trying):


```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ config/contacts/:contact/email/"
```

4.28.1 Email

(possibly) string	config/contacts/S/email/
Contact email address	

The value is subject to the following constraints: [the value](#) is not equal to ""

Sample write command (note that :contact is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/contacts/:contact/email/"
```

4.29 Contact: Phone number, if any

sum (optional string)	config/contacts/S/phone/
Contact phone number, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	None	No phone number stored	
string	Phone number	Contact phone number	the value is not equal to ""

Sample read command (note that :contact is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/contacts/:contact/phone/"
```

⇒ (possible variant)

"Sample value"

Sample (possible variant) write command (note that :contact is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ config/contacts/:contact/phone/"
```

4.29.1 Phone number

(possibly) string	config/contacts/S/phone/
Contact phone number	

The value is subject to the following constraints: [the value](#) is not equal to ""

Sample write command (note that :contact is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/contacts/:contact/phone/"
```

4.30 Contact: Fax number, if any

sum (optional string)	config/contacts/S/fax/
Contact fax number, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	None	No fax number stored	
string	Fax number	Contact fax number	the value is not equal to ""

Sample read command (note that :contact is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/contacts/:contact/fax/"
```

⇒ (possible variant)

"Sample value"

Sample (possible variant) write command (note that :contact is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ config/contacts/:contact/fax/"
```

4.30.1 Fax number

(possibly) string	config/contacts/S/fax/
Contact fax number	

The value is subject to the following constraints: [the value](#) is not equal to ""

Sample write command (note that :contact is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/contacts/:contact/fax/"
```

4.31 Unit location

string	config/location/
The physical location of this unit (e.g. '1st floor, rack 9')	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Changes to this string do not take effect immediately.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/location/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/location/"
```

4.32 Model OID

string	config/oid/
Object identifier of unit model (should be registered under dliRegistration OID)	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

This string represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/oid/"
```

⇒

"Sample value"

4.33 Version number

string	config/version/
Version number of frontend software	

This string does not support direct modification.

This string represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/version/"
```

⇒

"Sample value"

4.34 Hardware ID

string	config/hardware_id/
Identifier of unit hardware model	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

This string represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/hardware_id/"
```

⇒

"Sample value"

4.35 Serial number

string	config/serial/
Unit's serial number	

This string does not support direct modification.

This string represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
    ↵ restapi/config/serial/"
```

⇒

"Sample value"

4.36 Outlet label

string	config/outlet_label/
User-visible label for an outlet controlled by a relay	

This string does not support direct modification.

This string represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
    ↵ restapi/config/outlet_label/"
```

⇒

"Sample value"

4.37 Brand company name

string	config/brand_company_name/
The name of the company which produced the device	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

This string represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
    ↵ restapi/config/brand_company_name/"
```

⇒

"Sample value"

4.38 Brand name

string	config/brand_name/
Default brand name, unless overridden	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

This string represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/brand_name/"
```

⇒

"Sample value"

4.39 Brand URL

string	config/brand_url/
Default brand URL, unless overridden	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

This string represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/brand_url/"
```

⇒

"Sample value"

4.40 Brand manual URL

string	config/brand_manual_url/
Brand product manual URL	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

This string represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/brand_manual_url/"
```

⇒

"Sample value"

4.41 Brand FAQ URL

string	config/brand_faq_url/
Brand product FAQ URL	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

This string represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/brand_faq_url/"
```

⇒

"Sample value"

4.42 Brand product information URL

string	config/brand_product_info_url/
Brand product information URL	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

This string represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/brand_product_info_url/"
```

⇒

"Sample value"

4.43 Support email

string	config/support_email/
Product support email	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

This string represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/support_email/"
```

⇒

"Sample value"

4.44 Registration URL

string	config/register_url/
Default registration URL, unless overridden	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

This string represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/register_url/"
```

⇒

"Sample value"

4.45 Support URL

string	config/support_url/
Default support URL, unless overridden	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

This string represents a value in persistent storage.

Sample read command:


```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/support_url/"
```

⇒

"Sample value"

4.46 Update URL

string	config/update_url/
Default update URL, unless overridden	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

This string represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/update_url/"
```

⇒

"Sample value"

4.47 Custom brand company name, if any

sum (optional string)	config/custom_brand_company_name/
User-visible brand company name, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Default	Use default brand company name	
string	Custom brand company name	User-visible brand company name	the value is not equal to ""

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/custom_brand_company_name/"
```

⇒ (possible variant)

null

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/custom_brand_company_name/"
```

4.47.1 Custom brand company name

(possibly) string	config/custom_brand_company_name/
User-visible brand company name	

The value is subject to the following constraints: [the value](#) is not equal to ""

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/custom_brand_company_name/"
```

4.48 Custom brand name, if any

sum (optional string)	config/custom_brand_name/
User-visible product brand name, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Default	Use default product brand name	
string	Custom brand name	User-visible product brand name	the value is not equal to ""

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/custom_brand_name/"
```

⇒ (possible variant)

"Sample value"

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/custom_brand_name/"
```

4.48.1 Custom brand name

(possibly) string	config/custom_brand_name/
User-visible product brand name	

The value is subject to the following constraints: [the value](#) is not equal to ""

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: ↵
↵ : application/json" --data-binary "\"Sample value\"" "https: ↵
↵ ://192.168.0.100/restapi/config/custom_brand_name/"
```

4.49 Custom brand URL, if any

sum (optional string)	config/custom_brand_url/
User-visible brand URL, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Default	Use default brand URL	
string	Custom brand URL	User-visible brand URL	the value is not equal to ""

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/custom_brand_url/"
```

⇒ (possible variant)

"Sample value"

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ config/custom_brand_url/"
```

4.49.1 Custom brand URL

(possibly) string	config/custom_brand_url/
User-visible brand URL	

The value is subject to the following constraints: [the value](#) is not equal to ""

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/custom_brand_url/"
```

4.50 Custom brand logo URL, if any

sum (optional string)	config/custom_brand_logo/
User-visible brand logo URL, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Default	Use default brand logo	
string	Custom brand logo URL	User-visible brand logo URL	the value is not equal to ""

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/custom_brand_logo/"
```

⇒ (possible variant)

null

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ config/custom_brand_logo/"
```

4.50.1 Custom brand logo URL

(possibly) string	config/custom_brand_logo/
User-visible brand logo URL	

The value is subject to the following constraints: [the value](#) is not equal to ""

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/custom_brand_logo/"
```

4.51 Custom brand logo width, if any

sum (optional number)	config/custom_brand_logo_width/
User-visible brand logo width, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Default	Use default brand logo width
number	Custom brand logo width	User-visible brand logo width

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/custom_brand_logo_width/"
```

⇒ (possible variant)

4

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ config/custom_brand_logo_width/"
```

4.51.1 Custom brand logo width

(possibly) number	config/custom_brand_logo_width/
User-visible brand logo width	

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "3" "https://192.168.0.100/restapi/config ↵
↵ /custom_brand_logo_width/"
```

4.52 Custom brand logo height, if any

sum (optional number)	config/custom_brand_logo_height/
User-visible brand logo height, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Default	Use default brand logo height
number	Custom brand logo height	User-visible brand logo height

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/custom_brand_logo_height/"
```

⇒ (possible variant)

null

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "2" "https://192.168.0.100/restapi/config ↵
↵ /custom_brand_logo_height/"
```

4.52.1 Custom brand logo height

(possibly) number	config/custom_brand_logo_height/
User-visible brand logo height	

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "7" "https://192.168.0.100/restapi/config ↵
↵ /custom_brand_logo_height/"
```

4.53 Custom support email, if any

sum (optional string)	config/custom_support_email/
User-visible product support email, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Default	Use default support email	
string	Custom support email	User-visible product support email	the value is not equal to ""

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/custom_support_email/"
```

⇒ (possible variant)

null

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ config/custom_support_email/"
```

4.53.1 Custom support email

(possibly) string	config/custom_support_email/
User-visible product support email	

The value is subject to the following constraints: [the value](#) is not equal to ""

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/custom_support_email/"
```

4.54 Custom registration URL, if any

sum (optional string)	config/custom_register_url/
User-visible registration URL, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Default	Use default registration URL	
string	Custom registration URL	User-visible registration URL	the value is not equal to ""

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/custom_register_url/"
```

⇒ (possible variant)

"Sample value"

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: application/json" --data-binary "\"Sample value\"" "https://192.168.0.100/restapi/config/custom_register_url/"
```

4.54.1 Custom registration URL

(possibly) string	config/custom_register_url/
User-visible registration URL	

The value is subject to the following constraints: [the value](#) is not equal to ""

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: application/json" --data-binary "\"Sample value\"" "https://192.168.0.100/restapi/config/custom_register_url/"
```

4.55 Custom support URL, if any

sum (optional string)	config/custom_support_url/
User-visible support URL, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Default	Use default support URL	
string	Custom support URL	User-visible support URL	the value is not equal to ""

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/restapi/config/custom_support_url/"
```

⇒ (possible variant)

"Sample value"

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: application/json" --data-binary "null" "https://192.168.0.100/restapi/config/custom_support_url/"
```


4.55.1 Custom support URL

(possibly) string	config/custom_support_url/
User-visible support URL	

The value is subject to the following constraints: [the value](#) is not equal to ""

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/custom_support_url/"
```

4.56 Custom update URL, if any

sum (optional string)	config/custom_update_url/
User-visible update URL, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Default	Use default update URL	
string	Custom update URL	User-visible update URL	the value is not equal to ""

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/custom_update_url/"
```

⇒ (possible variant)

"Sample value"

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/custom_update_url/"
```

4.56.1 Custom update URL

(possibly) string	config/custom_update_url/
User-visible update URL	

The value is subject to the following constraints: [the value](#) is not equal to ""

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/custom_update_url/"
```

4.57 Custom help URL, if any

sum (optional string)	config/custom_help_url/
User-visible help URL, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Internal help	Use the internal embedded help system	
string	Custom help URL	User-visible help URL	the value is not equal to ""

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/custom_help_url/"
```

⇒ (possible variant)

"Sample value"

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/custom_help_url/"
```

4.57.1 Custom help URL

(possibly) string	config/custom_help_url/
User-visible help URL	

The value is subject to the following constraints: [the value](#) is not equal to ""

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/custom_help_url/"
```

4.58 Registration status

sum (boolean)	config/registration_status/
Status of the unit registration	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Defined	The user has either registered the unit, or refused to do so
constant false	Undefined	The user hasn't decided on registering the unit and needs to be reminded

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/registration_status/"
```

⇒ (possible variant)

```
false
```

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ config/registration_status/"
```

4.59 Enable page refresh

sum (boolean)	config/refresh_enabled/
Periodically refresh web UI status page	

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/refresh_enabled/"
```

⇒ (possible variant)

true

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: application/json" --data-binary "false" "https://192.168.0.100/restapi/config/refresh_enabled/"
```

4.60 Page refresh delay

number	config/refresh_delay_minutes/
Status page refresh delay, if refresh is enabled	

The value is subject to the following constraints: [the value](#) is greater than 0

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/restapi/config/refresh_delay_minutes/"
```

⇒

1

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: application/json" --data-binary "5" "https://192.168.0.100/restapi/config/refresh_delay_minutes/"
```

4.61 Preferred image format

string	config/image_format/
Default image format for plots and meters	

The value is subject to the following constraints: [image formats](#)[[the value](#)]

This string represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/restapi/config/image_format/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/image_format/"
```

4.62 Unit hostname

string	config/hostname/
Host name of the unit (sent by DHCP client, redirected to on network configuration changes when next IP address is unknown)	

The value is subject to the following constraints: [the value](#) matches $^([a-zA-Z0-9][a-zA-Z0-9][a-zA-Z0-9]*[a-zA-Z0-9]).)*([A-Za-z]([A-Za-z0-9]*[A-Za-z0-9])?|[A-Za-z0-9][A-Za-z0-9]*[A-Za-z]([A-Za-z0-9]*[A-Za-z0-9])?)$$

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Changes to this string do not take effect immediately.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/hostname/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/hostname/"
```

4.63 Time zone

string	config/timezone/
System time zone	

The value is subject to the following constraints: [known timezones](#)[[the value](#)]

This string represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/timezone/"
```

⇒

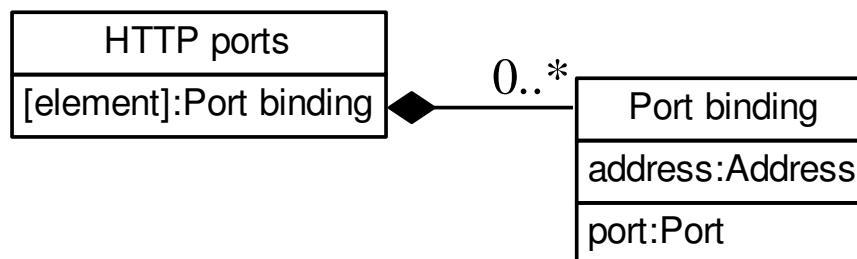
"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/timezone/"
```

4.64 HTTP ports

array	config/http_ports/
HTTP port bindings	



Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This array represents a value in persistent storage.

This array represents an unordered set (order of its elements doesn't matter, and each value should not be supplied more than once).

Changes to this array do not take effect immediately.

This array contains [Port binding](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/http_ports/"
```

⇒

```
[
  {
    "port":4,
    "address":"Sample value of port binding #1 of address"
  },
  {
    "port":6,
    "address":"Sample value of port binding #2 of address"
  },
  {
    "port":6,
    "address":"Sample value of port binding #3 of address"
  }
]
```

Sample write command:

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/config/http_ports/"
```

Sample port binding creation command:

```
curl --digest -u admin:1234 -H "Content-type: application/json" -H "Accept: ↵
↵ application/json" --data-binary '{"port":5,"address\":"Sample value of ↵
↵ address\}"' "https://192.168.0.100/restapi/config/http_ports/"
```

See also [HTTP ports: Port binding](#)

4.65 HTTP ports: Port binding

object	config/http_ports/N/
Address and port to bind service to	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This object represents a value in persistent storage.

Changes to this object do not take effect immediately.

This object contains the following items:

address	Address
port	Port

Sample read command (note that :port_binding is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/http_ports/:port_binding/"
```

⇒

```
{
  "port":2,
  "address":"Sample value of address"
}
```

Sample write command (note that :port_binding is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "{\"port\":3,\"address\":\"Sample value ↵
↵ of address\"}" "https://192.168.0.100/restapi/config/http_ports/: ↵
↵ port_binding/"
```

Sample deletion command (note that :port_binding is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/config/http_ports/:port_binding/"
```

4.65.1 Address

string	config/http_ports/N/address/
Address to listen on	

The value is subject to the following constraints: the value matches $^(((0-9)|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5]).){3}([0-9]|1[0-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5])$$

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Changes to this string do not take effect immediately.

Sample read command (note that :port_binding is a URL template argument and needs to be replaced before trying):


```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/http_ports/:port_binding/address/"
```

⇒

"Sample value"

Sample write command (note that :port_binding is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/http_ports/:port_binding/address/"
```

4.65.2 Port

number	config/http_ports/N/port/
Port number to bind to	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater than 0
- [the value](#) is less than 65535

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This number represents a value in persistent storage.

Changes to this number do not take effect immediately.

Sample read command (note that :port_binding is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/http_ports/:port_binding/port/"
```

⇒

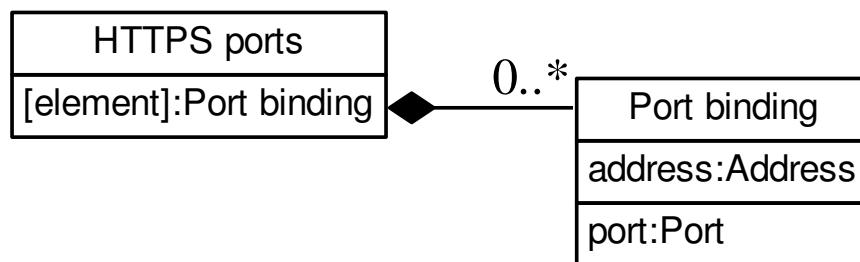
5

Sample write command (note that :port_binding is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "9" "https://192.168.0.100/restapi/config ↵
↵ /http_ports/:port_binding/port/"
```

4.66 HTTPS ports

array	config/https_ports/
HTTPS port bindings	



Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This array represents a value in persistent storage.

This array represents an unordered set (order of its elements doesn't matter, and each value should not be supplied more than once).

Changes to this array do not take effect immediately.

This array contains [Port binding](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/https_ports/"
```

⇒

```
[
  {
    "port":5,
    "address":"Sample value of port binding #1 of address"
  },
  {
    "port":3,
    "address":"Sample value of port binding #2 of address"
  },
  {
    "port":10,
    "address":"Sample value of port binding #3 of address"
  }
]
```

Sample write command:

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/config/https_ports/"
```

Sample port binding creation command:

```
curl --digest -u admin:1234 -H "Content-type: application/json" -H "Accept: ↩
↩ application/json" --data-binary '{"port":3,"address":"Sample value of ↩
↩ address"}' "https://192.168.0.100/restapi/config/https_ports/"
```

See also [HTTPS ports: Port binding](#)

4.67 HTTPS ports: Port binding

object	config/https_ports/N/
Address and port to bind service to	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This object represents a value in persistent storage.

Changes to this object do not take effect immediately.

This object contains the following items:

address	Address
port	Port

Sample read command (note that :port_binding is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↩
↩ restapi/config/https_ports/:port_binding/"
```

⇒

```
{
  "port":8,
  "address":"Sample value of address"
}
```

Sample write command (note that :port_binding is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "{\"port\":1,\"address\": \"Sample value ↵
↵ of address\"}" "https://192.168.0.100/restapi/config/https_ports/: ↵
↵ port_binding/"
```

Sample deletion command (note that :port_binding is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/config/https_ports/:port_binding/"
```

4.67.1 Address

string	config/https_ports/N/address/
Address to listen on	

The value is subject to the following constraints: the value matches $^((([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5]).){3}([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5]))$$

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Changes to this string do not take effect immediately.

Sample read command (note that :port_binding is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/https_ports/:port_binding/address/"
```

⇒

"Sample value"

Sample write command (note that :port_binding is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/https_ports/:port_binding/address/"
```

4.67.2 Port

number	config/https_ports/N/port/
Port number to bind to	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater than 0
- [the value](#) is less than 65535

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This number represents a value in persistent storage.

Changes to this number do not take effect immediately.

Sample read command (note that :port_binding is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/config/https_ports/:port_binding/port/"
```

⇒

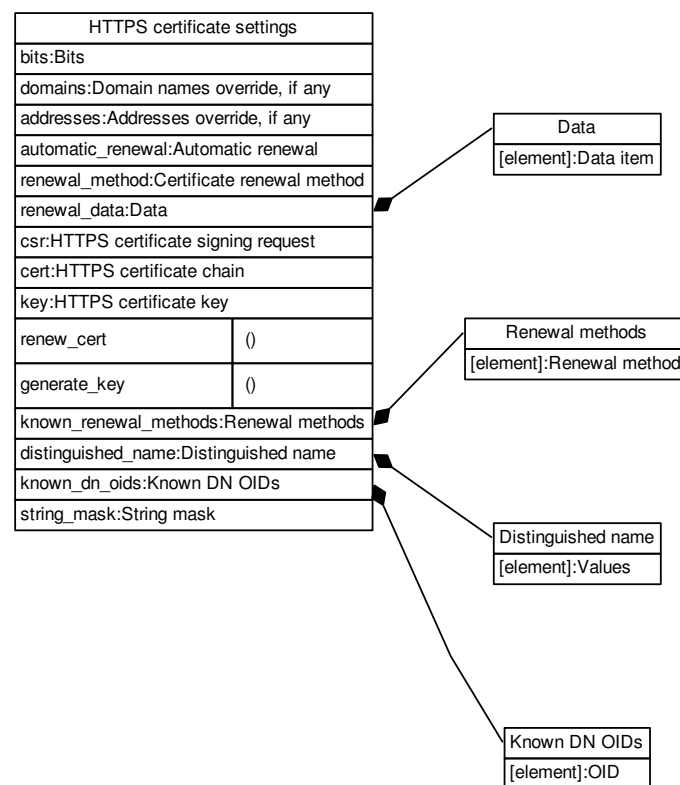
2

Sample write command (note that :port_binding is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵  
↵ : application/json" --data-binary "4" "https://192.168.0.100/restapi/config ↵  
↵ /https_ports/:port_binding/port/"
```

4.68 HTTPS certificate settings

object	config/https_cert/
HTTPS certificate configuration	



This object contains the following items:

bits	Bits
domains	Domain names override, if any
addresses	Addresses override, if any
automatic_renewal	Automatic renewal
renewal_method	Certificate renewal method
renewal_data	Data
csr	HTTPS certificate signing request
cert	HTTPS certificate chain
key	HTTPS certificate key
renew_cert	Renew certificate
generate_key	Generate key
known_renewal_methods	Renewal methods
distinguished_name	Distinguished name
known_dn_oids	Known DN OIDs
string_mask	String mask

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/"
```

⇒

...

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵  
↵ : application/json" --data-binary "... " "https://192.168.0.100/restapi/ ↵  
↵ config/https_cert/"
```

4.68.1 Bits

number	config/https_cert/bits/
Size of new private keys	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater than 0

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/config/https_cert/bits/"
```

⇒

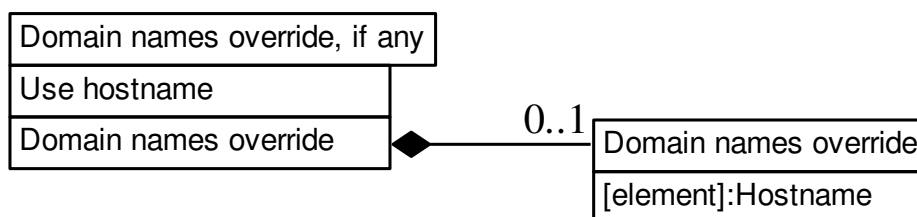
4

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵  
↵ : application/json" --data-binary "6" "https://192.168.0.100/restapi/config ↵  
↵ /https_cert/bits/"
```

4.68.2 Domain names override, if any

sum (optional array)	config/https_cert/domains/
Explicit domain name list to certify for when enrolling certificate, if any	



This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Use hostname	Certify for the current hostname when enrolling certificate
array	Domain names override	Explicit domain name list to certify for when enrolling certificate

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/domains/"
```

⇒ (possible variant)

```
[
  "Sample value of hostname #1"
]
```

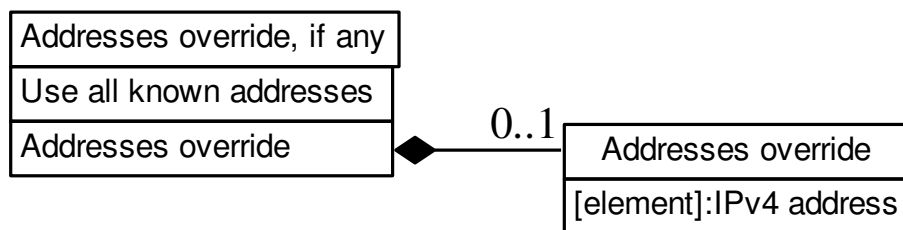
Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ config/https_cert/domains/"
```

See also [Domain names override, if any: Domain names override](#)

4.68.3 Addresses override, if any

sum (optional array)	config/https_cert/addresses/
Explicit list of addresses to certify for when enrolling certificate, if any	



This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Use all known addresses	Certify for all current addresses when enrolling certificate automatically
array	Addresses override	Explicit list of addresses to certify for when enrolling certificate

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/addresses/"
```

⇒ (possible variant)

```
[
  "Sample value of ipv4 address #1"
]
```

Sample (possible variant) write command:

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary "[\"Sample value of ipv4 address #1\", \"Sample value of ipv4 ↵
↵ address #2\", \"Sample value of ipv4 address #3\"]"\
"https://192.168.0.100/restapi/config/https_cert/addresses/"
```

See also [Addresses override, if any: Addresses override](#)

4.68.4 Automatic renewal

sum (boolean)	config/https_cert/automatic_renewal/
Automatic renewal of certificate at or near expiry	

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/automatic_renewal/"
```

⇒ (possible variant)

```
true
```

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ config/https_cert/automatic_renewal/"
```

4.68.5 Certificate renewal method

string	config/https_cert/renewal_method/
Method to use when renewing the certificate	

The value is subject to the following constraints: [renewal methods](#)[the value]

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/renewal_method/"
```

⇒

```
"Sample value"
```

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/https_cert/renewal_method/"
```

See also [HTTPS certificate settings: Data](#)

4.68.6 HTTPS certificate signing request

string	config/https_cert/csr/
The certificate signing request you need to sign in order to obtain an HTTPS certificate for the unit, to be honored by an external entity (read may fail if key generation is in progress)	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

This string can change as if by itself or indirectly because of other actions.

Changes to this string cannot be tracked.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/csr/"
```

⇒

"Sample value"

4.68.7 HTTPS certificate chain

string	config/https_cert/cert/
HTTPS certificate chain presented by the unit to clients (read may fail if renewal is in progress)	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

Using the string as a field for indexing into the grandparent collection is denied

This string represents a value in persistent storage.

This string can change as if by itself or indirectly because of other actions.

Changes to this string cannot be tracked.

Changes to this string may have an effect besides setting value.

Changes to this string do not take effect immediately.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/cert/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/https_cert/cert/"
```

4.68.8 HTTPS certificate key

string	config/https_cert/key/
The key used by the HTTPS certificate presented by the unit; certificate will be renewed as a side effect of writing; writing actual data is not recommended, please use the certificate request signing path instead	

Retrieving the value is denied

Changing the value is denied if not [administrative user](#)

Using the string as a field for indexing into the grandparent collection is denied

This string represents a value in persistent storage.

This string can change as if by itself or indirectly because of other actions.

Changes to this string cannot be tracked.

Changes to this string may have an effect besides setting value.

Changes to this string do not take effect immediately.

This string should be displayed in a secure manner.

Representation of the resource cannot be obtained. Attempts to do so will succeed but return JSON '{"\$ref":""}' which means "the value of this resource".

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/https_cert/key/"
```

4.68.9 Renew certificate

call	config/https_cert/renew_cert/
Initiate attempt to renew the certificate using the selected method	

Performing the function call is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

The call has no arguments (supply empty tuple).

The call returns no results (expect an empty tuple).

Sample invocation:

```
curl --digest -u admin:1234 -X POST -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/config/https_cert/renew_cert/"
```

⇒

null

4.68.10 Generate key

call	config/https_cert/generate_key/
Initiate generation of a new private key; certificate renewal will be attempted as a side effect; if that fails, the key is unchanged	

Performing the function call is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

The call has no arguments (supply empty tuple).

The call returns no results (expect an empty tuple).

Sample invocation:

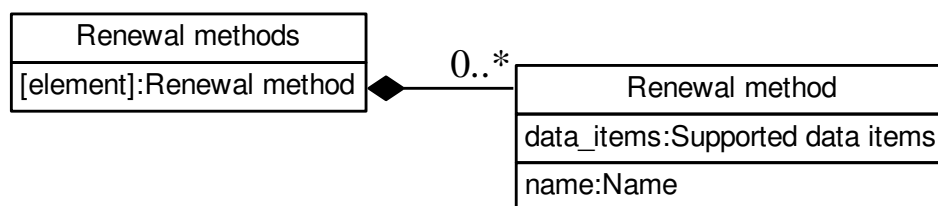
```
curl --digest -u admin:1234 -X POST -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/config/https_cert/generate_key/"
```

⇒

null

4.68.11 Renewal methods

map	config/https_cert/known_renewal_methods/
Known renewal methods	



Retrieving the value is denied if not [administrative user](#)

This map does not support direct modification.

This map contains [Renewal method](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/known_renewal_methods/"
```

⇒

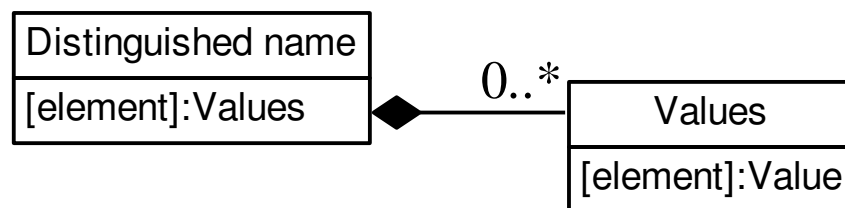
...

Creating elements in this collection is not supported.

See also [Renewal methods: Renewal method](#)

4.68.12 Distinguished name

map	config/https_cert/distinguished_name/
New certificate distinguished name elements	



Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This map represents a value in persistent storage.

This map contains [Values](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/distinguished_name/"
```

⇒

...

Sample write command:

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/config/https_cert/distinguished_name/"
```

Sample values creation command:

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary "[\"Sample value of values distinguished_name_3 of value #1\", \" ↵
↵ Sample value of values distinguished_name_3 of value #2\"]"\
"https://192.168.0.100/restapi/config/https_cert/distinguished_name/ ↵
↵ distinguished_name_3/"
```

See also [Distinguished name: Values](#)

See also [HTTPS certificate settings: Known DN OIDs](#)

4.68.13 String mask

sum (enumerated string)	config/https_cert/string_mask/
The set of string types to use for new certificates	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant "default"	OpenSSL default	PrintableString, T61String and BMPString
constant "pkix"	PKIX	PrintableString and BMPString
constant "utf8only"	UTF-8 strings only	UTF8String
constant "nombstr"	No multibyte strings	PrintableString and T61String

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/string_mask/"
```

⇒ (possible variant)

"Sample value"

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/https_cert/string_mask/"
```

4.69 Domain names override, if any: Domain names override

(possibly) array	config/https_cert/domains/
Explicit domain name list to certify for when enrolling certificate	

This array contains [Hostname](#) elements.

Sample write command:

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary "[\"Sample value of hostname #1\", \"Sample value of hostname ↵
↵ #2\", \"Sample value of hostname #3\", \"Sample value of hostname #4\", \" ↵
↵ Sample value of hostname #5\", \"Sample value of hostname #6\", \"Sample ↵
↵ value of hostname #7\"]\"
https://192.168.0.100/restapi/config/https_cert/domains/"
```

Sample hostname creation command:

```
curl --digest -u admin:1234 -H "Content-type: application/json" -H "Accept: ↵
↵ application/json" --data-binary "\"Sample value\"" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/domains/"
```

4.69.1 Hostname

string	config/https_cert/domains/N/
Hostname to certify for	

The value is subject to the following constraints: [the value](#) matches $\wedge(([\text{a-zA-Z0-9}]|[\text{a-zA-Z0-9}][\text{a-zA-Z0-9-}][\text{a-zA-Z0-9}])\wedge)*([\text{A-Za-z}]([\text{A-Za-z0-9-}][\text{A-Za-z0-9}])?([\text{A-Za-z0-9}][\text{A-Za-z0-9-}][\text{A-Za-z}]([\text{A-Za-z0-9-}][\text{A-Za-z0-9}])?)$$

This string represents a value in persistent storage.

Sample read command (note that :hostname is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/domains/:hostname/"
```


⇒

`"Sample value"`

Sample write command (note that :hostname is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/https_cert/domains/:hostname/"
```

4.70 Addresses override, if any: Addresses override

(possibly) array	config/https_cert/addresses/
Explicit list of addresses to certify for when enrolling certificate	

This array contains [IPv4 address](#) elements.

Sample write command:

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/config/https_cert/addresses/"
```

Sample ipv4 address creation command:

```
curl --digest -u admin:1234 -H "Content-type: application/json" -H "Accept: ↵
↵ application/json" --data-binary "\"Sample value\"" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/addresses/"
```

4.70.1 IPv4 address

string	config/https_cert/addresses/N/
IPv4 address to certify for, in dotted quad notation	

The value is subject to the following constraints: the value matches `^(([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5]).){3}([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5])$`

This string represents a value in persistent storage.

Sample read command (note that :ipv4_address is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/addresses/:ipv4_address/"
```

⇒

`"Sample value"`

Sample write command (note that :ipv4_address is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/https_cert/addresses/:ipv4_address/"
```

4.71 HTTPS certificate settings: Data

map	config/https_cert/renewal_data/
Renewal-method-specific data	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This map represents a value in persistent storage.

This map contains [Data item](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/renewal_data/"
```

⇒

```
{
  "data_1": "Sample value of data item data_1"
}
```

Sample write command:

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary "{\"data_2\": \"Sample value of data item data_2\", \"data_1\": \" ↵
↵ Sample value of data item data_1\"}"\
"https://192.168.0.100/restapi/config/https_cert/renewal_data/"
```

Sample data item creation command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value of data item data_2\"" " ↵
↵ https://192.168.0.100/restapi/config/https_cert/renewal_data/data_2/"
```

4.71.1 Data item

string	config/https_cert/renewal_data/S/
Item of renewal-method-specific data	

The value is subject to the following constraints: [the value](#) matches [renewal methods\[certificate renewal method\].data_items\[index of the value\].regex](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

Using the string as a field for indexing into the grandparent collection is denied if any of the following is true:

- not [administrative user](#)
- all of the following is true:
 - index of the value is not equal to ""
 - [renewal methods\[certificate renewal method\].data_items\[index of the value\].secret](#)

This string represents a value in persistent storage.

This string should be displayed in a secure manner if all of the following is true:

- index of the value is not equal to ""
- [renewal methods\[certificate renewal method\].data_items\[index of the value\].secret](#)

Sample read command (note that :data_item is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/renewal_data/:data_item/"
```

⇒

"Sample value"

Sample write command (note that :data_item is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/https_cert/renewal_data/:data_item/"
```

Sample deletion command (note that :data_item is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/config/https_cert/renewal_data/:data_item/"
```

4.72 Supported data items: Data item properties

object	config/https_cert/known_renewal_methods/S/data_items/S/
Properties of data item	

This object contains the following items:

name	Name
regexp	Regular expression
secret	Secret

Sample read command (note that :renewal_method and :data_item_properties are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/known_renewal_methods/:renewal_method/data_items ↵
↵ /:data_item_properties/"
```

⇒

```
{
  "regexp": "Sample value of regular expression",
  "name": "Sample value of name",
  "secret": true
}
```

Sample write command (note that :renewal_method and :data_item_properties are URL template arguments and need to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary "{\"regexp\":\"Sample value of regular expression\", \"name\": \" ↵
↵ Sample value of name\", \"secret\": true}"\
"https://192.168.0.100/restapi/config/https_cert/known_renewal_methods/: ↵
↵ renewal_method/data_items/:data_item_properties/"
```

4.72.1 Name

string	config/https_cert/known_renewal_methods/S/data_items/S/name/
Data item name	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

Sample read command (note that :renewal_method and :data_item_properties are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/known_renewal_methods/:renewal_method/data_items ↵
↵ /:data_item_properties/name/"
```

⇒

`"Sample value"`

4.72.2 Regular expression

string	config/https_cert/known_renewal_methods/S/data_items/S/regexp/
Regular expression which the data item must match	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

Sample read command (note that `:renewal_method` and `:data_item_properties` are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/known_renewal_methods/:renewal_method/data_items ↵
↵ /:data_item_properties/regexp/"
```

⇒

`"Sample value"`

4.72.3 Secret

sum (boolean)	config/https_cert/known_renewal_methods/S/data_items/S/secret/
Flag indicating whether the data item can contain private information	

Retrieving the value is denied if not [administrative user](#)

This sum does not support direct modification.

This sum can assume the following values:

constant true	Secret	The data item can contain private information
constant false	Not secret	The data item contains only public information

Sample read command (note that `:renewal_method` and `:data_item_properties` are URL template arguments and need to be replaced before trying):

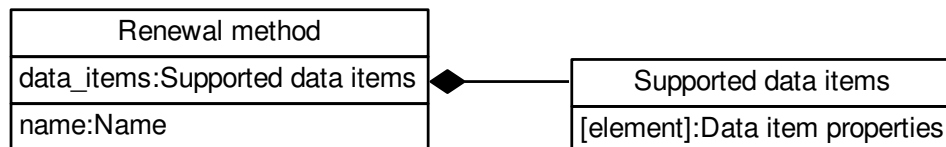
```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/known_renewal_methods/:renewal_method/data_items ↵
↵ /:data_item_properties/secret/"
```

⇒ (possible variant)

`true`

4.73 Renewal methods: Renewal method

object	config/https_cert/known_renewal_methods/S/
Method of certificate renewal	



Retrieving the value is denied if not [administrative user](#)

This object contains the following items:

data_items	Supported data items
name	Name

Sample read command (note that `:renewal_method` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/known_renewal_methods/:renewal_method/"
```

⇒

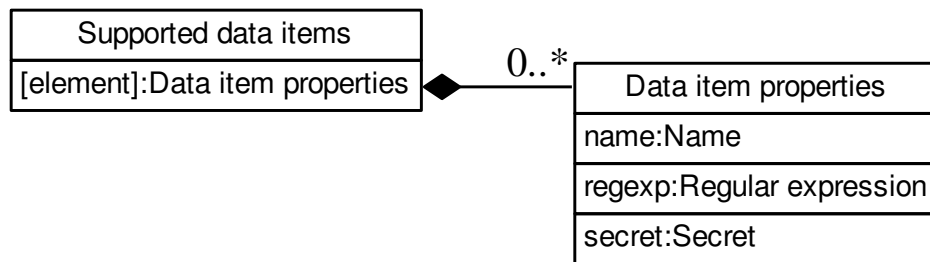
...

Sample write command (note that `:renewal_method` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "... " "https://192.168.0.100/restapi/ ↵
↵ config/https_cert/known_renewal_methods/:renewal_method/"
```

4.73.1 Supported data items

map	config/https_cert/known_renewal_methods/S/data_items/
Properties of supported data items	



Retrieving the value is denied if not [administrative user](#)

This map does not support direct modification.

This map contains [Data item properties](#) elements.

Sample read command (note that :renewal_method is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/known_renewal_methods/:renewal_method/data_items ↵
↵ /" ↵
```

⇒

...

Creating elements in this collection is not supported.

See also [Supported data items: Data item properties](#)

4.73.2 Name

string	config/https_cert/known_renewal_methods/S/name/
Renewal method name	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

Sample read command (note that :renewal_method is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/known_renewal_methods/:renewal_method/name/" ↵
```

⇒

"Sample value"

4.74 Distinguished name: Values

array	config/https_cert/distinguished_name/S/
Distinguished name element value set	

The value is subject to the following constraints: any of the following is true:

- [known dn oids](#)[index of the value]
- index of the value matches $\wedge 012\{1,\}$

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This array represents a value in persistent storage.

This array contains [Value](#) elements.

Sample read command (note that :values is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/distinguished_name/:values/"
```

⇒

```
[
  "Sample value of value #1"
]
```

Sample write command (note that :values is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: ↵
↵ : application/json" --data-binary "[\"Sample value of value #1\"]" "https ↵
↵ ://192.168.0.100/restapi/config/https_cert/distinguished_name/:values/"
```

Sample value creation command (note that :values is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Content-type: application/json" -H "Accept: ↵
↵ application/json" --data-binary "\"Sample value\"" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/distinguished_name/:values/"
```

Sample deletion command (note that :values is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/config/https_cert/distinguished_name/:values/"
```

4.74.1 Value

string	config/https_cert/distinguished_name/S/N/
Distinguished name element value	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :values and :value are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/distinguished_name/:values/:value/"
```

⇒

"Sample value"

Sample write command (note that :values and :value are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/https_cert/distinguished_name/:values/: ↵
↵ value/"
```

Sample deletion command (note that :values and :value are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/config/https_cert/distinguished_name/:values/: ↵
↵ value/"
```

4.75 HTTPS certificate settings: Known DN OIDs

map	config/https_cert/known_dn_oids/
Known distinguished name element object identifiers	

Retrieving the value is denied if not [administrative user](#)

This map does not support direct modification.

This map contains [OID](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/known_dn_oids/"
```

⇒

```
{
  "known_dn_oids_6": "Sample value of oid known_dn_oids_6",
  "known_dn_oids_9": "Sample value of oid known_dn_oids_9",
  "known_dn_oids_7": "Sample value of oid known_dn_oids_7",
  "known_dn_oids_4": "Sample value of oid known_dn_oids_4",
  "known_dn_oids_8": "Sample value of oid known_dn_oids_8",
  "known_dn_oids_1": "Sample value of oid known_dn_oids_1",
  "known_dn_oids_5": "Sample value of oid known_dn_oids_5",
  "known_dn_oids_2": "Sample value of oid known_dn_oids_2",
  "known_dn_oids_3": "Sample value of oid known_dn_oids_3"
}
```

Creating elements in this collection is not supported.

4.75.1 OID

string	config/https_cert/known_dn_oids/S/
Object identifier value	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

Sample read command (note that :oid is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/https_cert/known_dn_oids/:oid/"
```

⇒

```
"Sample value"
```

4.76 SSH enabled

sum (boolean)	config/ssh_enabled/
Whether the SSH server should be enabled	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

Changes to this sum do not take effect immediately.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/config/ssh_enabled/"
```

⇒ (possible variant)

false

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵  
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵  
↵ config/ssh_enabled/"
```

4.77 SSH port number

number	config/ssh_port/
Port number of the SSH server	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater than 0
- [the value](#) is less than 65535

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This number represents a value in persistent storage.

Changes to this number do not take effect immediately.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/config/ssh_port/"
```

⇒

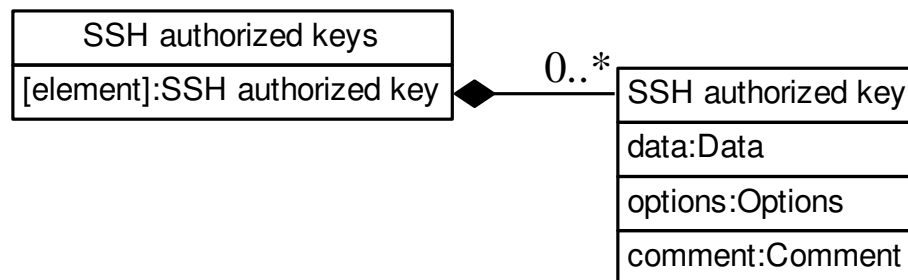
3

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵  
↵ : application/json" --data-binary "2" "https://192.168.0.100/restapi/config ↵  
↵ /ssh_port/"
```

4.78 SSH authorized keys

array	config/ssh_authorized_keys/
List of public keys allowed to log in	



Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This array represents a value in persistent storage.

Changes to this array do not take effect immediately.

This array contains [SSH authorized key](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/ssh_authorized_keys/"
```

⇒

...

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "... " "https://192.168.0.100/restapi/ ↵
↵ config/ssh_authorized_keys/"
```

Sample ssh authorized key creation command:

```
curl\
--digest\
-u admin:1234\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary "{ \"comment\": \"Sample value of comment\", \"options\": \"Sample ↵
↵ value of options\", \"data\": \"Sample value of data\" }" \
"https://192.168.0.100/restapi/config/ssh_authorized_keys/"
```

See also [SSH authorized keys: SSH authorized key](#)

4.79 SSH authorized keys: SSH authorized key

object	config/ssh_authorized_keys/N/
Public key allowed to log in	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This object represents a value in persistent storage.

Changes to this object do not take effect immediately.

This object contains the following items:

data	Data
options	Options
comment	Comment

Sample read command (note that :ssh_authorized_key is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/ssh_authorized_keys/:ssh_authorized_key/"
```

⇒

```
{
  "comment": "Sample value of comment",
  "options": "Sample value of options",
  "data": "Sample value of data"
}
```

Sample write command (note that :ssh_authorized_key is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"comment\":"Sample value of comment\","options\":"Sample ↵
↵ value of options\","data\":"Sample value of data\"}'\
"https://192.168.0.100/restapi/config/ssh_authorized_keys/:ssh_authorized_key/"
```

Sample deletion command (note that :ssh_authorized_key is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/config/ssh_authorized_keys/:ssh_authorized_key/"
```

4.79.1 Data

string	config/ssh_authorized_keys/N/data/
Public key data	

The value is subject to the following constraints: [the value](#) matches $\wedge((([0-9])^+ * ([0-9])^+ * ([0-9])^+ | (ecdsa-sha2-nistp256|ecdsa-sha2-nistp384|ecdsa-sha2-nistp521|ssh-ed25519|ssh-dss|ssh-rsa) * ([0-9A-Za-z+/+]=[0,3]))^{\$}$

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Changes to this string do not take effect immediately.

Sample read command (note that :ssh_authorized_key is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/ssh_authorized_keys/:ssh_authorized_key/data/"
```

⇒

```
"Sample value"
```

Sample write command (note that :ssh_authorized_key is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/ssh_authorized_keys/:ssh_authorized_key/ ↵
↵ data/"
```

4.79.2 Options

string	config/ssh_authorized_keys/N/options/
Public key options	

The value is subject to the following constraints: [the value](#) matches $\wedge([\wedge]^+ | [\wedge]^*)^{\$}$

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Changes to this string do not take effect immediately.

Sample read command (note that :ssh_authorized_key is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/ssh_authorized_keys/:ssh_authorized_key/options/"
```

⇒

"Sample value"

Sample write command (note that :ssh_authorized_key is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/ssh_authorized_keys/:ssh_authorized_key/ ↵
↵ options/"
```

4.79.3 Comment

string	config/ssh_authorized_keys/N/comment/
Public key comment	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Changes to this string do not take effect immediately.

Sample read command (note that :ssh_authorized_key is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/ssh_authorized_keys/:ssh_authorized_key/comment/"
```

⇒

"Sample value"

Sample write command (note that :ssh_authorized_key is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/ssh_authorized_keys/:ssh_authorized_key/ ↵
↵ comment/"
```

4.80 NTP server enabled

sum (boolean)	config/ntp_server_enabled/
Whether the device should act as NTP server	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

Changes to this sum do not take effect immediately.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/ntp_server_enabled/"
```

⇒ (possible variant)

```
false
```

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ config/ntp_server_enabled/"
```

4.81 NTP peers

array	config/ntp_peers/
List of NTP servers to get time information from	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This array represents a value in persistent storage.

Changes to this array do not take effect immediately.

This array contains [NTP peer](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/ntp_peers/"
```

⇒

```
[
  "Sample value of ntp peer #1",
  "Sample value of ntp peer #2",
  "Sample value of ntp peer #3",
  "Sample value of ntp peer #4",
  "Sample value of ntp peer #5",
  "Sample value of ntp peer #6",
  "Sample value of ntp peer #7"
]
```

Sample write command:

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/config/ntp_peers/"
```

Sample ntp peer creation command:

```
curl --digest -u admin:1234 -H "Content-type: application/json" -H "Accept: ↵
↵ application/json" --data-binary "\"Sample value\"" "https://192.168.0.100/ ↵
↵ restapi/config/ntp_peers/"
```

See also [NTP peers: NTP peer](#)

4.82 NTP peers: NTP peer

sum (string)	config/ntp_peers/N/
NTP server to get time information from	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

Changes to this sum do not take effect immediately.

This sum can assume the following values:

string	Hostname	Hostname	the value matches <code>^([a-zA-Z0-9][a-zA-Z0-9][a-zA-Z0-9]*[a-zA-Z0-9]).*([A-Za-z]([A-Za-z0-9]*[A-Za-z0-9])? [A-Za-z0-9][A-Za-z0-9]*[A-Za-z]([A-Za-z0-9]*[A-Za-z0-9])?)\$</code>
string	IPv4 address	IPv4 address in dotted quad notation	the value matches <code>^([0-9] [1-9][0-9] 1[0-9]{2} 2[0-4][0-9] 25[0-5]).{3}([0-9] [1-9][0-9] 1[0-9]{2} 2[0-4][0-9] 25[0-5])\$</code>

Sample read command (note that `:ntp_peer` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/ntp_peers/:ntp_peer/"
```

⇒ (possible variant)

"Sample value"

Sample (possible variant) write command (note that `:ntp_peer` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/ntp_peers/:ntp_peer/"
```

Sample deletion command (note that `:ntp_peer` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/config/ntp_peers/:ntp_peer/"
```

4.82.1 Hostname

(possibly) string	<code>config/ntp_peers/N/</code>
Hostname	

The value is subject to the following constraints: the value matches `^([a-zA-Z0-9][a-zA-Z0-9][a-zA-Z0-9]*[a-zA-Z0-9]).*([A-Za-z]([A-Za-z0-9]*[A-Za-z0-9])?|[A-Za-z0-9][A-Za-z0-9]*[A-Za-z]([A-Za-z0-9]*[A-Za-z0-9])?)$`

Sample write command (note that `:ntp_peer` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/ntp_peers/:ntp_peer/"
```

Sample deletion command (note that `:ntp_peer` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/config/ntp_peers/:ntp_peer/"
```

4.82.2 IPv4 address

(possibly) string	config/ntp_peers/N/
IPv4 address in dotted quad notation	

The value is subject to the following constraints: [the value](#) matches `^(([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5]).){3}([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5])$`

Sample write command (note that `:ntp_peer` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/ntp_peers/:ntp_peer/"
```

Sample deletion command (note that `:ntp_peer` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/config/ntp_peers/:ntp_peer/"
```

4.83 Syslog threshold severity

sum (enumerated number)	config/syslog_minimal_severity/
Threshold severity for system messages, below which they are not logged	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

Changes to this sum do not take effect immediately.

This sum can assume the following values:

constant 1	Emergency	Log when unit becomes unstable or unusable
constant 2	Alert	Log conditions requiring immediate action
constant 3	Critical	Log critical conditions
constant 4	Error	Log error conditions
constant 5	Warning	Log warning conditions
constant 6	Notice	Log normal but significant conditions
constant 7	Informational	Log informational messages
constant 8	Debug	Log tracing and debugging messages

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/syslog_minimal_severity/"
```

⇒ (possible variant)

10

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "6" "https://192.168.0.100/restapi/config ↵
↵ /syslog_minimal_severity/"
```

4.84 Syslog server address, if any

sum (optional string)	config/syslog_ip_address/
Host name or IPv4 address of the syslog server to forward log messages to, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

Changes to this sum do not take effect immediately.

This sum can assume the following values:

constant null	Syslog server disabled	System log messages are not forwarded to a server	
string	Hostname	Hostname	the value matches <code>^([a-zA-Z0-9] [a-zA-Z0-9][a-zA-Z0-9-]*[a-zA-Z0-9]).*([A-Za-z]([A-Za-z0-9-]*[A-Za-z0-9])? [A-Za-z0-9][A-↵Za-z0-9-]*[A-Za-z]([A-Za-z0-9-]*[A-Za-z0-9])?)\$</code>
string	IPv4 address	IPv4 address in dotted quad notation	the value matches <code>^([0-9] 1[0-9] 2[0-4][0-9] 25[0-5]).{3}([0-9] 1[0-9] 2[0-4][0-9] 25[0-5])\$</code>

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/syslog_ip_address/"
```

⇒ (possible variant)

null

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ config/syslog_ip_address/"
```

4.84.1 Hostname

(possibly) string	config/syslog_ip_address/
Hostname	

The value is subject to the following constraints: [the value](#) matches `^([a-zA-Z0-9][a-zA-Z0-9][a-zA-Z0-9]*[a-zA-Z0-9]).*([A-Za-z]([A-Za-z0-9]*[A-Za-z0-9])?[A-Za-z0-9][A-Za-z0-9]*[A-Za-z]([A-Za-z0-9]*[A-Za-z0-9])?)$`

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/syslog_ip_address/"
```

4.84.2 IPv4 address

(possibly) string	config/syslog_ip_address/
IPv4 address in dotted quad notation	

The value is subject to the following constraints: [the value](#) matches `^(([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5]).){3}([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5])$`

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/syslog_ip_address/"
```

4.85 Allow JSONRPC

sum (boolean)	config/allow_jsonrpc/
Enable HTTP clients to perform JSON-RPC requests	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/allow_jsonrpc/"
```

⇒ (possible variant)

```
true
```

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ config/allow_jsonrpc/"
```

4.86 Allow REST-like API

sum (boolean)	config/allow_restapi/
Enable HTTP clients to perform REST-like API requests	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/allow_restapi/"
```

⇒ (possible variant)

```
false
```

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ config/allow_restapi/"
```

4.87 Allowed REST-like API client origins

array	config/allow_restapi_origins/
List of origins permitted to access the REST-like API	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This array represents a value in persistent storage.

This array contains [Allowed REST-like API client origin](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/allow_restapi_origins/"
```

⇒

```
[
  "Sample value of allowed rest-like api client origin #1",
  "Sample value of allowed rest-like api client origin #2",
  "Sample value of allowed rest-like api client origin #3",
  "Sample value of allowed rest-like api client origin #4"
]
```

Sample write command:

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary "[\"Sample value of allowed rest-like api client origin #1\", \" ↵
↵ Sample value of allowed rest-like api client origin #2\", \"Sample value of ↵
↵ allowed rest-like api client origin #3\", \"Sample value of allowed rest- ↵
↵ like api client origin #4\"]"\
"https://192.168.0.100/restapi/config/allow_restapi_origins/"
```

Sample allowed rest-like api client origin creation command:

```
curl --digest -u admin:1234 -H "Content-type: application/json" -H "Accept: ↵
↵ application/json" --data-binary "\"Sample value\"" "https://192.168.0.100/ ↵
↵ restapi/config/allow_restapi_origins/"
```

4.87.1 Allowed REST-like API client origin

string	config/allow_restapi_origins/N/
Origin permitted to access the REST-like API	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :allowed_rest_like_api_client_origin is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/allow_restapi_origins/:allowed_rest_like_api_client_origin/"
```

⇒

"Sample value"

Sample write command (note that :allowed_rest_like_api_client_origin is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/allow_restapi_origins/: ↵
↵ allowed_rest_like_api_client_origin/"
```

Sample deletion command (note that :allowed_rest_like_api_client_origin is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/config/allow_restapi_origins/: ↵
↵ allowed_rest_like_api_client_origin/"
```

4.88 Relax non-HTML method CSRF checks

sum (boolean)	config/relax_nonhtml_methods/
Enable HTTP clients to perform PUT/PATCH/DELETE API requests without a CSRF protection header (currently cannot be sent via an HTML form)	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/relax_nonhtml_methods/"
```

⇒ (possible variant)

false

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ config/relax_nonhtml_methods/"
```

4.89 Relax non-HTML content type CSRF checks

sum (boolean)	config/relax_nonhtml_content_types/
Enable HTTP clients to perform API requests with e.g. application/json or application/json-rpc without a CSRF protection header (currently cannot be sent via an HTML form)	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/relax_nonhtml_content_types/"
```

⇒ (possible variant)

false

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ config/relax_nonhtml_content_types/"
```

4.90 Allow plaintext logins

sum (boolean)	config/allow_plaintext_logins/
Allow HTTP clients to authenticate using Basic authentication or plaintext login form	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/allow_plaintext_logins/"
```

⇒ (possible variant)

```
false
```

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ config/allow_plaintext_logins/"
```

4.91 Relay name visibility

sum (boolean)	config/name_always_visible/
Flag enabling visibility of relay name	

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Everywhere	Relay name visible everywhere, including the login page
constant false	Authorized users only	Relay name visible only on pages which require authorization

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/name_always_visible/"
```

⇒ (possible variant)

false

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: application/json" --data-binary "false" "https://192.168.0.100/restapi/config/name_always_visible/"
```

4.92 Hide user passwords

sum (boolean)	config/hide_passwords/
Whether user passwords should be hidden	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Hide	Do not display user passwords in web UI
constant false	Show	Display user passwords in web UI

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/restapi/config/hide_passwords/"
```

⇒ (possible variant)

false

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: application/json" --data-binary "true" "https://192.168.0.100/restapi/config/hide_passwords/"
```

4.93 Hide WiFi key

sum (boolean)	config/hide_wifi_key/
Whether the WiFi key should be hidden	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Hide	Do not display WiFi key in web UI
constant false	Show	Display WiFi key in web UI

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/hide_wifi_key/"
```

⇒ (possible variant)

false

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ config/hide_wifi_key/"
```

4.94 Security lockout duration

number	config/lockout_delay_minutes/
Time during which, after several unsuccessful logins, subsequent logins are denied	

The value is subject to the following constraints: [the value](#) is greater or equal to 0

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/lockout_delay_minutes/"
```

⇒

9

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "10" "https://192.168.0.100/restapi/ ↵
↵ config/lockout_delay_minutes/"
```

4.95 Protect firmware

sum (boolean)	config/protect_firmware/
Protect firmware from being overwritten	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [the value](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Protected	Associated object cannot be changed
constant false	Not protected	Associated object can be changed

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/protect_firmware/"
```

⇒ (possible variant)

false

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ config/protect_firmware/"
```

4.96 Protect admin login

sum (boolean)	config/protect_admin/
Protect admin settings from being modified	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [the value](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Protected	Associated object cannot be changed
constant false	Not protected	Associated object can be changed

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/protect_admin/"
```

⇒ (possible variant)

```
true
```

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ config/protect_admin/"
```

4.97 Protect network settings

sum (boolean)	config/protect_network/
Protect network settings from being modified	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [the value](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Protected	Associated object cannot be changed
constant false	Not protected	Associated object can be changed

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/protect_network/"
```

⇒ (possible variant)

```
false
```

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ config/protect_network/"
```

4.98 Protect private settings

sum (boolean)	config/protect_private_config/
Protect private configuration settings from being stored in backups	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [the value](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Protected	Associated object cannot be changed
constant false	Not protected	Associated object can be changed

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/protect_private_config/"
```

⇒ (possible variant)

```
true
```

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ config/protect_private_config/"
```

4.99 Protect from restore

sum (boolean)	config/protect_restore/
Protect settings from being restored from backups	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [the value](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Protected	Associated object cannot be changed
constant false	Not protected	Associated object can be changed

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/protect_restore/"
```

⇒ (possible variant)

false

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ config/protect_restore/"
```

4.100 Protect from maintenance

sum (boolean)	config/protect_maintenance/
Disable remote maintenance support	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [the value](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Protected	Associated object cannot be changed
constant false	Not protected	Associated object can be changed

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/protect_maintenance/"
```

⇒ (possible variant)

false

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ config/protect_maintenance/"
```


4.101 Protect notification settings

sum (variant)	config/protect_notification/
Protect notification settings from being modified	

Changing the value is denied if [the value](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Protected	Associated object cannot be changed, and its security-related parameters cannot be read
constant false	Not protected	Associated object can be changed, and its security-related parameters can be read
constant "sender"	Protect sender configuration	Associated object cannot be changed, and its security-related parameters cannot be read; properties not related to sender configuration can still be read and changed

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/protect_notification/"
```

⇒ (possible variant)

```
true
```

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ config/protect_notification/"
```

4.102 Beep on upgrade

sum (boolean)	config/upgrade_notify_beep/
Indicate firmware upgrade progress by beeping	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/upgrade_notify_beep/"
```

⇒ (possible variant)

false

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ config/upgrade_notify_beep/"
```

4.103 Blink on upgrade

sum (boolean)	config/upgrade_notify_blink/
Indicate firmware upgrade progress by blinking	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/upgrade_notify_blink/"
```

⇒ (possible variant)

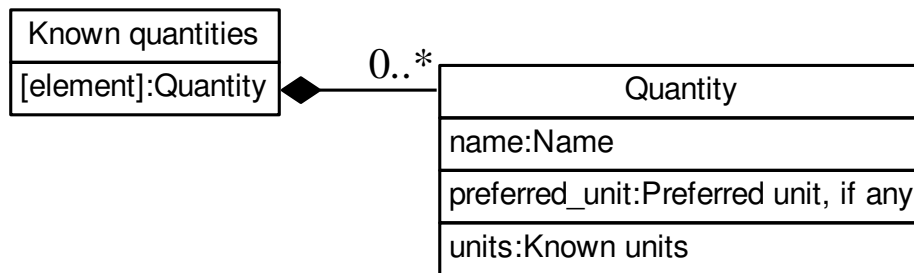
false

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ config/upgrade_notify_blink/"
```

4.104 Known quantities

map	config/known_quantities/
Map of known physical quantities	



This map does not support direct modification.

This map represents a value in persistent storage.

This map contains [Quantity](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/known_quantities/"
```

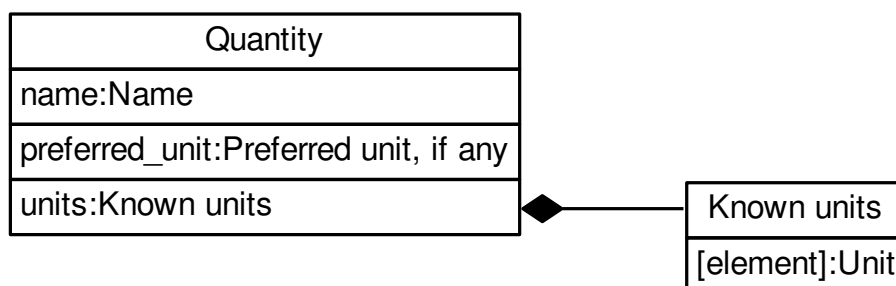
⇒

...

Creating elements in this collection is not supported.

4.104.1 Quantity

object	config/known_quantities/S/
Physical quantity	



This object contains the following items:

name	Name
preferred_unit	Preferred unit, if any
units	Known units

Sample read command (note that :quantity is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/known_quantities/:quantity/"
```

⇒

```
{
  "preferred_unit":null,
  "name":"Sample value of name",
  "units":{
    "known_units_3":{
      "offset":10,
      "internal":true,
      "name":"Sample value of known units of unit known_units_3 of name",
      "scale":2
    },
    "known_units_5":{
      "offset":5,
      "internal":false,
      "name":"Sample value of known units of unit known_units_5 of name",
      "scale":9
    },
    "known_units_2":{
      "offset":8,
      "internal":true,
      "name":"Sample value of known units of unit known_units_2 of name",
      "scale":1
    },
    "known_units_4":{
      "offset":2,
      "internal":true,
      "name":"Sample value of known units of unit known_units_4 of name",

```

```

    "scale":5
  },
  "known_units_1":{
    "offset":10,
    "internal":true,
    "name":"Sample value of known units of unit known_units_1 of name",
    "scale":6
  }
}
}

```

Sample write command (note that :quantity is a URL template argument and needs to be replaced before trying):

```

curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/config/known_quantities/:quantity/"

```

See also [Quantity: Name](#)

See also [Quantity: Preferred unit, if any](#)

See also [Quantity: Known units](#)

4.105 Quantity: Name

string	config/known_quantities/S/name/
Quantity name	

This string does not support direct modification.

This string represents a value in persistent storage.

Sample read command (note that :quantity is a URL template argument and needs to be replaced before trying):

```

curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/known_quantities/:quantity/name/"

```

⇒

"Sample value"

4.106 Quantity: Preferred unit, if any

sum (optional string)	config/known_quantities/S/preferred_unit/
Default UI unit for quantity, if any	

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Standard unit	UI shows quantity in SI units	
string	Preferred unit	Default UI unit for quantity	known units[the value]

Sample read command (note that :quantity is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/known_quantities/:quantity/preferred_unit/"
```

⇒ (possible variant)

"Sample value"

Sample (possible variant) write command (note that :quantity is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/known_quantities/:quantity/preferred_unit/"
```

4.106.1 Preferred unit

(possibly) string	config/known_quantities/S/preferred_unit/
Default UI unit for quantity	

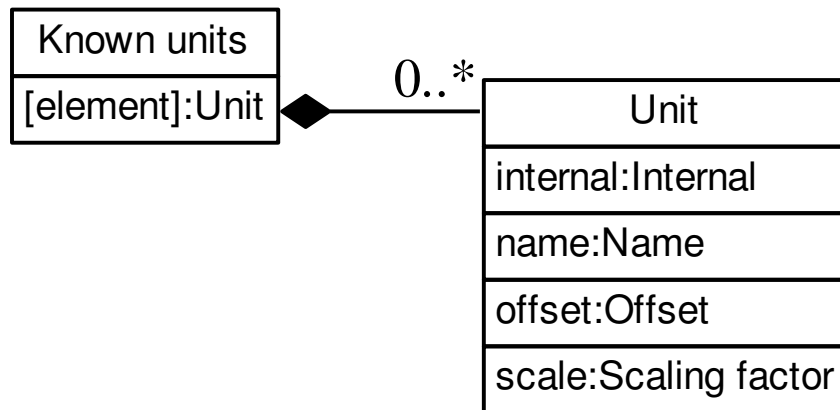
The value is subject to the following constraints: [known units\[the value\]](#)

Sample write command (note that :quantity is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/known_quantities/:quantity/preferred_unit/"
```

4.107 Quantity: Known units

map	config/known_quantities/S/units/
Map of known units for quantity	



Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This map represents a value in persistent storage.

This map contains [Unit](#) elements.

Sample read command (note that :quantity is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/known_quantities/:quantity/units/"
```

⇒

```
{
  "known_units_3":{
    "offset":6,
    "internal":false,
    "name":"Sample value of unit known_units_3 of name",
    "scale":7
  },
  "known_units_1":{
    "offset":3,
    "internal":false,
    "name":"Sample value of unit known_units_1 of name",
    "scale":5
  },
  "known_units_4":{
    "offset":6,
    "internal":false,
    "name":"Sample value of unit known_units_4 of name",
    "scale":8
  },
  "known_units_2":{
```

```

    "offset":7,
    "internal":false,
    "name":"Sample value of unit known_units_2 of name",
    "scale":5
  }
}

```

Sample write command (note that :quantity is a URL template argument and needs to be replaced before trying):

```

curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/config/known_quantities/:quantity/units/"

```

Sample unit creation command (note that :quantity is a URL template argument and needs to be replaced before trying):

```

curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"offset":4,"internal":false,"name":"Sample value of unit ↵
↵ known_units_6 of name","scale":6}'\
"https://192.168.0.100/restapi/config/known_quantities/:quantity/units/ ↵
↵ known_units_6/"

```

4.107.1 Unit

object	config/known_quantities/S/units/S/
Unit of physical quantity	

Changing the value is denied if not [administrative user](#)

This object does not support direct modification if [internal](#).

This object represents a value in persistent storage.

This object contains the following items:

internal	Internal
name	Name
offset	Offset
scale	Scaling factor

Sample read command (note that :quantity and :unit are URL template arguments and need to be replaced before trying):

```

curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/known_quantities/:quantity/units/:unit/"

```


⇒

```
{
  "offset":5,
  "internal":false,
  "name":"Sample value of name",
  "scale":2
}
```

Sample write command (note that :quantity and :unit are URL template arguments and need to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"offset":3,"internal":false,"name":"Sample value of name' ↵
↵  ","scale":1}'\
"https://192.168.0.100/restapi/config/known_quantities/:quantity/units/:unit/"
```

Sample deletion command (note that :quantity and :unit are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/config/known_quantities/:quantity/units/:unit/"
```

4.107.1.1 Internal

sum (boolean)	config/known_quantities/S/units/S/internal/
Flag indicating whether this measurement unit is internal	

This sum does not support direct modification.

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Internal	This unit is internal and cannot be modified
constant false	User	This unit is user-supplied and can be modified

Sample read command (note that :quantity and :unit are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/known_quantities/:quantity/units/:unit/internal/"
```

⇒ (possible variant)

```
true
```

4.107.1.2 Name

string	config/known_quantities/S/units/S/name/
Unit name	

This string does not support direct modification if [internal](#).

This string represents a value in persistent storage.

Sample read command (note that :quantity and :unit are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/known_quantities/:quantity/units/:unit/name/"
```

⇒

"Sample value"

Sample write command (note that :quantity and :unit are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/config/known_quantities/:quantity/units/:unit/name ↵
↵ /"
```

4.107.1.3 Offset

number	config/known_quantities/S/units/S/offset/
Offset for conversion from standard SI unit	

Changing the value is denied if not [administrative user](#)

This number does not support direct modification if [internal](#).

This number represents a value in persistent storage.

Sample read command (note that :quantity and :unit are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/known_quantities/:quantity/units/:unit/offset/"
```

⇒

6

Sample write command (note that :quantity and :unit are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "1" "https://192.168.0.100/restapi/config ↵
↵ /known_quantities/:quantity/units/:unit/offset/"
```

4.107.1.4 Scaling factor

number	config/known_quantities/S/units/S/scale/
Scaling factor for conversion from standard SI unit	

Changing the value is denied if not [administrative user](#)

This number does not support direct modification if [internal](#).

This number represents a value in persistent storage.

Sample read command (note that :quantity and :unit are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/known_quantities/:quantity/units/:unit/scale/"
```

⇒

1

Sample write command (note that :quantity and :unit are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "5" "https://192.168.0.100/restapi/config ↵
↵ /known_quantities/:quantity/units/:unit/scale/"
```

4.108 Known timezones

map	config/known_timezones/
Map of known time zones	

Retrieving the value is denied if not [administrative user](#)

This map does not support direct modification.

This map represents a value in persistent storage.

This map contains [Timezone](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/known_timezones/"
```

⇒

```
{
  "known_timezones_4": "Sample value of timezone known_timezones_4",
  "known_timezones_8": "Sample value of timezone known_timezones_8",
  "known_timezones_3": "Sample value of timezone known_timezones_3",
  "known_timezones_7": "Sample value of timezone known_timezones_7",
  "known_timezones_6": "Sample value of timezone known_timezones_6",
  "known_timezones_1": "Sample value of timezone known_timezones_1",
  "known_timezones_2": "Sample value of timezone known_timezones_2",
  "known_timezones_5": "Sample value of timezone known_timezones_5"
}
```

Creating elements in this collection is not supported.

4.108.1 Timezone

string	config/known_timezones/S/
Time zone name	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

This string represents a value in persistent storage.

Sample read command (note that :timezone is a URL template argument and needs to be replaced before trying):

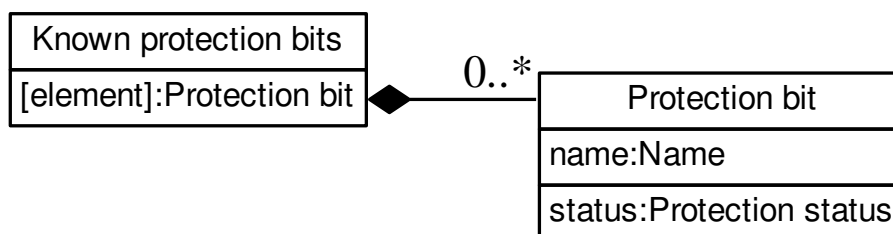
```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/known_timezones/:timezone/"
```

⇒

"Sample value"

4.109 Known protection bits

map	config/known_protection_bits/
Map of known protection bits	



Retrieving the value is denied if not [administrative user](#)

This map does not support direct modification.

This map contains [Protection bit](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/known_protection_bits/"
```

⇒

...

Creating elements in this collection is not supported.

4.109.1 Protection bit

object	config/known_protection_bits/S/
Protection bit properties	

Retrieving the value is denied if not [administrative user](#)

This object contains the following items:

name	Name
status	Protection status

Sample read command (note that :protection_bit is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/known_protection_bits/:protection_bit/"
```

⇒

```
{
  "name": "Sample value of name",
  "status": "Sample value of protection status"
}
```

Sample write command (note that :protection_bit is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "{ \"name\": \"Sample value of name\", \" ↵
↵ status\": true }" "https://192.168.0.100/restapi/config/known_protection_bits ↵
↵ /:protection_bit/"
```

See also [Protection bit: Name](#)

See also [Protection bit: Protection status](#)

4.110 Protection bit: Name

string	config/known_protection_bits/S/name/
Protection bit name	

This string does not support direct modification.

Sample read command (note that :protection_bit is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/known_protection_bits/:protection_bit/name/"
```

⇒

```
"Sample value"
```

4.111 Protection bit: Protection status

sum (variant)	config/known_protection_bits/S/status/
Status of protection	

Retrieving the value is denied if not [administrative user](#)

This sum does not support direct modification.

This sum can change as if by itself or indirectly because of other actions.

Changes to this sum cannot be tracked.

This sum can assume the following values:

constant true	Enabled	Protection is enabled and effective
constant false	Disabled	Protection is disabled
string	Ineffective	Protection is enabled, but not effective for the following reason

Sample read command (note that :protection_bit is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/config/known_protection_bits/:protection_bit/status/"
```

⇒ (possible variant)

```
true
```

4.111.1 Ineffective

(possibly) string	config/known_protection_bits/S/status/
Protection is enabled, but not effective for the following reason	

4.112 Relay ports

array	config/relay_ports/
List of devices to which relay modules are connected	

This array does not support direct modification.

This array represents a value in persistent storage.

This array is expected to be visible to advanced users only.

This array contains [Relay port](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/config/relay_ports/"
```

⇒

```
[  
  "Sample value of relay port #1",  
  "Sample value of relay port #2",  
  "Sample value of relay port #3",  
  "Sample value of relay port #4",  
  "Sample value of relay port #5",  
  "Sample value of relay port #6",  
  "Sample value of relay port #7",  
  "Sample value of relay port #8",  
  "Sample value of relay port #9"  
]
```

Creating elements in this collection is not supported.

4.112.1 Relay port

string	config/relay_ports/N/
Filename of a relay module device	

This string does not support direct modification.

This string represents a value in persistent storage.

This string is expected to be visible to advanced users only.

Sample read command (note that :relay_port is a URL template argument and needs to be replaced before trying):

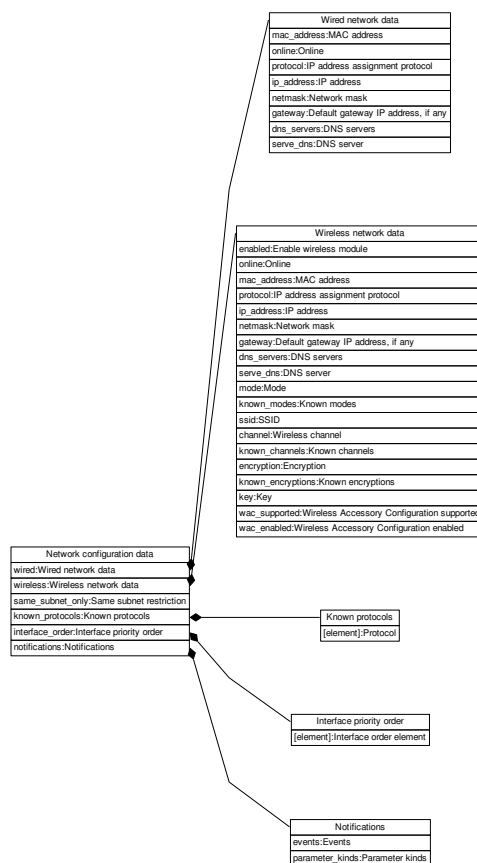
```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/config/relay_ports/:relay_port/"
```

⇒

```
"Sample value"
```

5 Network configuration data

object	network/
Data related to network state and configuration	



Retrieving the value is denied if not **administrative user**

This object contains the following items:

wired	Wired network data
wireless	Wireless network data
same_subnet_only	Same subnet restriction
known_protocols	Known protocols
interface_order	Interface priority order
notifications	Notifications

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/"
```

⇒

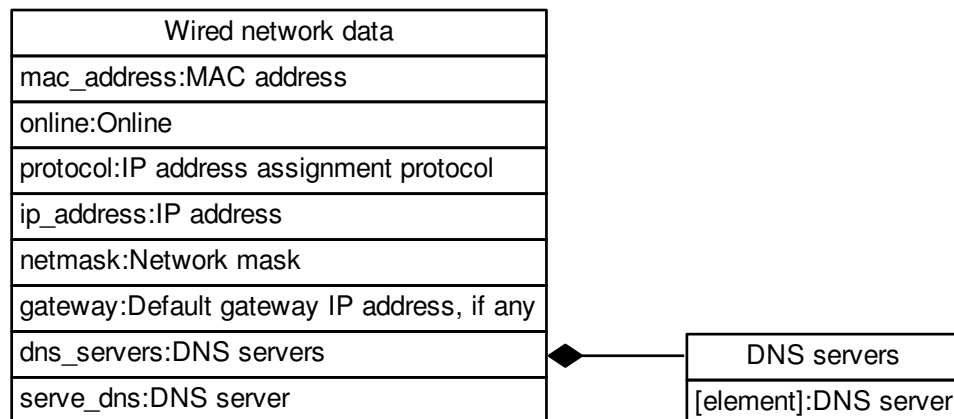
...

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "... " "https://192.168.0.100/restapi/ ↵
↵ network/"
```

5.1 Wired network data

object	network/wired/
Data related to wired network state and configuration	



Retrieving the value is denied if not [administrative user](#)

This object contains the following items:

mac_address	MAC address
online	Online
protocol	IP address assignment protocol
ip_address	IP address
netmask	Network mask
gateway	Default gateway IP address, if any
dns_servers	DNS servers
serve_dns	DNS server

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/wired/"
```

⇒

```
{
  "ip_address": "Sample value of ip address",
  "online": true,
  "protocol": "Sample value of ip address assignment protocol",
  "serve_dns": false,
  "netmask": "Sample value of network mask",
  "dns_servers": [
    "Sample value of dns servers of dns server #1",
    "Sample value of dns servers of dns server #2",
  ]
}
```

```

"Sample value of dns servers of dns server #3",
"Sample value of dns servers of dns server #4",
"Sample value of dns servers of dns server #5",
"Sample value of dns servers of dns server #6",
"Sample value of dns servers of dns server #7"
],
"mac_address": "Sample value of mac address",
"gateway": "Sample value of default gateway ip address, if any"
}

```

Sample write command:

```

curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/network/wired/"

```

5.1.1 MAC address

string	network/wired/mac_address/
MAC address to use for this interface	

The value is subject to the following constraints: [the value](#) matches $^{\wedge}([0-9A-Fa-f]{2}:){5}[0-9A-Fa-f]{2}\$$

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Changes to this string do not take effect immediately.

Sample read command:

```

curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/wired/mac_address/"

```

⇒

```
"Sample value"
```

Sample write command:

```

curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/network/wired/mac_address/"

```

5.1.2 Online

sum (boolean)	network/wired/online/
Flag indicating the interface online status	

Retrieving the value is denied if not [administrative user](#)

This sum does not support direct modification.

This sum can change as if by itself or indirectly because of other actions.

This sum can assume the following values:

constant true	Online	The interface is online
constant false	Offline	The interface is offline

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/wired/online/"
```

⇒ (possible variant)

```
true
```

5.1.3 IP address assignment protocol

string	network/wired/protocol/
Method for obtaining an IP address for this interface	

The value is subject to the following constraints: [known protocols](#)[[the value](#)]

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Changes to this string do not take effect immediately.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/wired/protocol/"
```

⇒

```
"Sample value"
```

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/network/wired/protocol/"
```

5.1.4 IP address

string	network/wired/ip_address/
IP address to use for this interface	

The value is subject to the following constraints: [the value](#) matches `^(((0-9)|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5]).){3}((0-9)|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5])$`

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This string does not support direct modification if [ip address assignment protocol](#) is not equal to static.

This string represents a value in persistent storage.

This string can change as if by itself or indirectly because of other actions.

Changes to this string do not take effect immediately.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/wired/ip_address/"
```

⇒

```
"Sample value"
```

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/network/wired/ip_address/"
```

5.1.5 Network mask

string	network/wired/netmask/
Network mask to use for this interface	

The value is subject to the following constraints: [the value](#) matches `^((2(5[42]|4[80]|24)|192|128|0).0.0.0|255.(2(5[42]|4[80]|24)|192|128|0).0.0.0|255.0.0.0|0.0.0.0)$`

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This string does not support direct modification if [ip address assignment protocol](#) is not equal to static.

This string represents a value in persistent storage.

This string can change as if by itself or indirectly because of other actions.

Changes to this string do not take effect immediately.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/wired/netmask/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/network/wired/netmask/"
```

See also [Wired network data: Default gateway IP address, if any](#)

See also [Wired network data: DNS servers](#)

5.1.6 DNS server

sum (boolean)	network/wired/serve_dns/
Respond to DNS queries	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

Changes to this sum do not take effect immediately.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/wired/serve_dns/"
```

⇒ (possible variant)

false

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ network/wired/serve_dns/"
```

5.2 Wired network data: Default gateway IP address, if any

sum (optional string)	network/wired/gateway/
The IP address to send packets which are not targeted to local networks, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum does not support direct modification if [ip address assignment protocol](#) is not equal to static.

This sum represents a value in persistent storage.

This sum can change as if by itself or indirectly because of other actions.

Changes to this sum do not take effect immediately.

This sum can assume the following values:

constant null	No default gateway	Packets with nonlocal destination are dropped	
string	Default gateway IP address	The IP address to send packets which are not targeted to local networks	the value matches $^(((0-9) [1-9][0-9] 1[0-9]\{2\} 2[0-4][0-9] 25[0-5]).)\{3\}([0-9] 1[0-9] 1[0-9]\{2\} 2[0-4][0-9] 25[0-5])\$$

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/wired/gateway/"
```

⇒ (possible variant)

"Sample value"

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/network/wired/gateway/"
```

5.2.1 Default gateway IP address

(possibly) string	network/wired/gateway/
The IP address to send packets which are not targeted to local networks	

The value is subject to the following constraints: [the value](#) matches $^(((0-9)|[1-9][0-9]|1[0-9]\{2\}|2[0-4][0-9]|25[0-5]).)\{3\}([0-9]|1[0-9]|1[0-9]\{2\}|2[0-4][0-9]|25[0-5])\$$

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/network/wired/gateway/"
```

5.3 Wired network data: DNS servers

array	network/wired/dns_servers/
List of DNS server IP addresses	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This array does not support direct modification if [ip address assignment protocol](#) is not equal to static.

This array represents a value in persistent storage.

This array can change as if by itself or indirectly because of other actions.

Changes to this array do not take effect immediately.

This array contains [DNS server](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/wired/dns_servers/"
```

⇒

```
[
  "Sample value of dns server #1"
]
```

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: ↵
↵ : application/json" --data-binary "[\"Sample value of dns server #1\"]" " ↵
↵ https://192.168.0.100/restapi/network/wired/dns_servers/"
```

Sample dns server creation command:

```
curl --digest -u admin:1234 -H "Content-type: application/json" -H "Accept: ↵
↵ application/json" --data-binary "\"Sample value\"" "https://192.168.0.100/ ↵
↵ restapi/network/wired/dns_servers/"
```

5.3.1 DNS server

string	network/wired/dns_servers/N/
DNS server IP address	

The value is subject to the following constraints: [the value](#) matches `^((([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5]).){3}([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5]))$`

Sample read command (note that :dns_server is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/wired/dns_servers/:dns_server/"
```

⇒

`"Sample value"`

Sample write command (note that `:dns_server` is a URL template argument and needs to be replaced before trying):

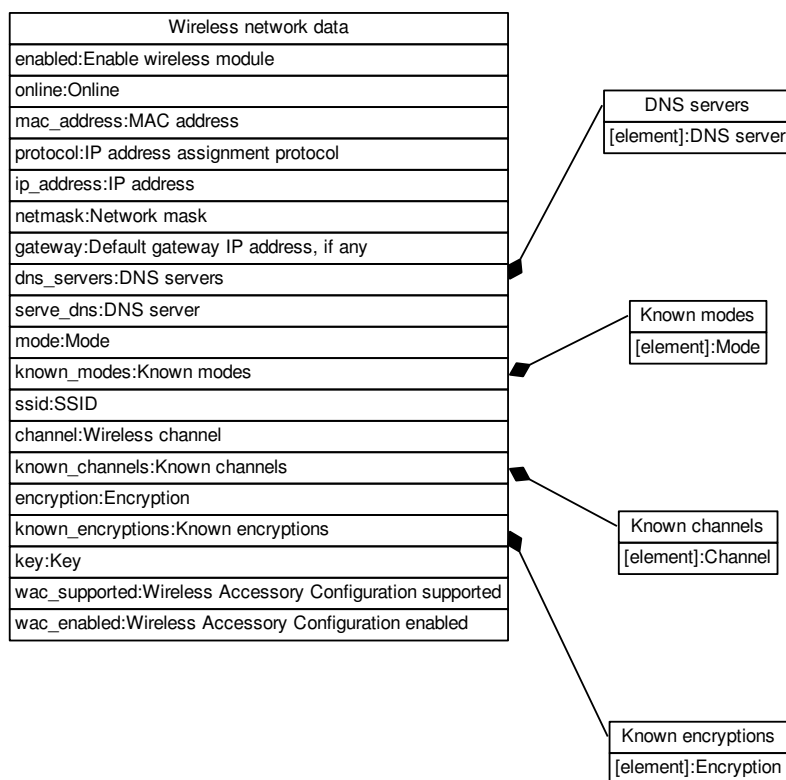
```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/network/wired/dns_servers/:dns_server/"
```

Sample deletion command (note that `:dns_server` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/network/wired/dns_servers/:dns_server/"
```

5.4 Wireless network data

object	network/wireless/
Data related to wireless network state and configuration	



Retrieving the value is denied if not [administrative user](#)

This object contains the following items:

enabled	Enable wireless module
online	Online
mac_address	MAC address
protocol	IP address assignment protocol
ip_address	IP address
netmask	Network mask
gateway	Default gateway IP address, if any
dns_servers	DNS servers
serve_dns	DNS server
mode	Mode
known_modes	Known modes
ssid	SSID
channel	Wireless channel
known_channels	Known channels
encryption	Encryption
known_encryptions	Known encryptions
key	Key
wac_supported	Wireless Accessory Configuration supported
wac_enabled	Wireless Accessory Configuration enabled

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/wireless/"
```

⇒

...

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "... " "https://192.168.0.100/restapi/ ↵
↵ network/wireless/"
```

5.4.1 Enable wireless module

sum (boolean)	network/wireless/enabled/
Flag indicating whether the wireless module is enabled	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

Changes to this sum do not take effect immediately.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/wireless/enabled/"
```

⇒ (possible variant)

```
true
```

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ network/wireless/enabled/"
```

5.4.2 Online

sum (boolean)	network/wireless/online/
Flag indicating the interface online status	

Retrieving the value is denied if not [administrative user](#)

This sum does not support direct modification.

This sum can change as if by itself or indirectly because of other actions.

This sum can assume the following values:

constant true	Online	The interface is online
constant false	Offline	The interface is offline

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/wireless/online/"
```

⇒ (possible variant)

```
false
```

5.4.3 MAC address

string	network/wireless/mac_address/
MAC address to use for this interface	

The value is subject to the following constraints: [the value](#) matches $^([0-9A-Fa-f]{2}:){5}[0-9A-Fa-f]{2}$$

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Changes to this string do not take effect immediately.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/network/wireless/mac_address/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵  
↵ : application/json" --data-binary "\"Sample value\"" "https ↵  
↵ ://192.168.0.100/restapi/network/wireless/mac_address/"
```

5.4.4 IP address assignment protocol

string	network/wireless/protocol/
Method for obtaining an IP address for this interface	

The value is subject to the following constraints: [known protocols](#)[[the value](#)]

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Changes to this string do not take effect immediately.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/network/wireless/protocol/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵  
↵ : application/json" --data-binary "\"Sample value\"" "https ↵  
↵ ://192.168.0.100/restapi/network/wireless/protocol/"
```

5.4.5 IP address

string	network/wireless/ip_address/
IP address to use for this interface	

The value is subject to the following constraints: the value matches $^(((0-9)|[1-9][0-9]|1[0-9]\{2\}|2[0-4][0-9]|25[0-5]).\{3\}([0-9]|[1-9][0-9]|1[0-9]\{2\}|2[0-4][0-9]|25[0-5]))$$

Retrieving the value is denied if not administrative user

Changing the value is denied if not administrative user

This string does not support direct modification if ip address assignment protocol is not equal to static.

This string represents a value in persistent storage.

This string can change as if by itself or indirectly because of other actions.

Changes to this string do not take effect immediately.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/wireless/ip_address/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/network/wireless/ip_address/"
```

5.4.6 Network mask

string	network/wireless/netmask/
Network mask to use for this interface	

The value is subject to the following constraints: the value matches $^((2(5[42]|4[80]|24)|192|128|0).0.0.0|255.(2(5[42]|4[80]|24)|192|128|0).0.0.0|255.0.0.0)$$

Retrieving the value is denied if not administrative user

Changing the value is denied if not administrative user

This string does not support direct modification if ip address assignment protocol is not equal to static.

This string represents a value in persistent storage.

This string can change as if by itself or indirectly because of other actions.

Changes to this string do not take effect immediately.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/wireless/netmask/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: application/json" --data-binary "\"Sample value\"" "https://192.168.0.100/restapi/network/wireless/netmask/"
```

See also [Wireless network data: Default gateway IP address, if any](#)

See also [Wireless network data: DNS servers](#)

5.4.7 DNS server

sum (boolean)	network/wireless/serve_dns/
Respond to DNS queries	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

Changes to this sum do not take effect immediately.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/restapi/network/wireless/serve_dns/"
```

⇒ (possible variant)

false

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: application/json" --data-binary "true" "https://192.168.0.100/restapi/network/wireless/serve_dns/"
```

5.4.8 Mode

string	network/wireless/mode/
Wireless module mode	

The value is subject to the following constraints: [known modes](#)[the value]

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Changes to this string do not take effect immediately.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/wireless/mode/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/network/wireless/mode/"
```

See also [Wireless network data: Known modes](#)

5.4.9 SSID

string	network/wireless/ssid/
SSID (wireless network name) to use	

The value is subject to the following constraints: length of [the value](#) is less or equal to 32

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Changes to this string do not take effect immediately.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/wireless/ssid/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/network/wireless/ssid/"
```

5.4.10 Wireless channel

string	network/wireless/channel/
Wireless channel to use	

The value is subject to the following constraints: [known channels](#)[the value]

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Changes to this string do not take effect immediately.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/network/wireless/channel/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵  
↵ : application/json" --data-binary "\"Sample value\"" "https ↵  
↵ ://192.168.0.100/restapi/network/wireless/channel/"
```

See also [Wireless network data: Known channels](#)

5.4.11 Encryption

string	network/wireless/encryption/
Wireless encryption to use	

The value is subject to the following constraints: [known encryptions](#)[the value]

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Changes to this string do not take effect immediately.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/network/wireless/encryption/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/network/wireless/encryption/"
```

See also [Wireless network data: Known encryptions](#)

5.4.12 Key

string	network/wireless/key/
Encryption key	

The value is subject to the following constraints: any of the following is true:

- all of the following is true:
 - length of [the value](#) is greater or equal to 8
 - length of [the value](#) is less or equal to 63
- [encryption](#) is equal to none

Retrieving the value is denied if any of the following is true:

- not [administrative user](#)
- [hide wifi key](#)

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Changes to this string do not take effect immediately.

This string should be displayed in a secure manner.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/wireless/key/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/network/wireless/key/"
```

5.4.13 Wireless Accessory Configuration supported

sum (boolean)	network/wireless/wac_supported/
Flag indicating device support for Wireless Accessory Configuration	

Retrieving the value is denied if not [administrative user](#)

This sum does not support direct modification.

This sum can assume the following values:

constant true	Supported	The device supports WAC
constant false	Not supported	The device does not support WAC

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/network/wireless/wac_supported/"
```

⇒ (possible variant)

false

5.4.14 Wireless Accessory Configuration enabled

sum (boolean)	network/wireless/wac_enabled/
Flag indicating whether Wireless Accessory Configuration is currently active (any manual changes automatically disable it)	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- not [wireless accessory configuration supported](#)

This sum can change as if by itself or indirectly because of other actions.

Changes to this sum cannot be tracked.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/network/wireless/wac_enabled/"
```

⇒ (possible variant)

true

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: application/json" --data-binary "true" "https://192.168.0.100/restapi/network/wireless/wac_enabled/"
```

5.5 Wireless network data: Default gateway IP address, if any

sum (optional string)	network/wireless/gateway/
The IP address to send packets which are not targeted to local networks, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum does not support direct modification if [ip address assignment protocol](#) is not equal to static.

This sum represents a value in persistent storage.

This sum can change as if by itself or indirectly because of other actions.

Changes to this sum do not take effect immediately.

This sum can assume the following values:

constant null	No default gateway	Packets with nonlocal destination are dropped	
string	Default gateway IP address	The IP address to send packets which are not targeted to local networks	the value matches <code>^((([0-9] [1-9][0-9] 1[0-9]{2} 2[0-4][0-9] 25[0-5]).){3}([0-9] [1-9][0-9] 1[0-9]{2} 2[0-4][0-9] 25[0-5]))\$</code>

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/restapi/network/wireless/gateway/"
```

⇒ (possible variant)

null

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: application/json" --data-binary "\"Sample value\"" "https://192.168.0.100/restapi/network/wireless/gateway/"
```

5.5.1 Default gateway IP address

(possibly) string	network/wireless/gateway/
The IP address to send packets which are not targeted to local networks	

The value is subject to the following constraints: the value matches $^(((0-9)|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5]).){3}([0-9]|1[0-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5])$$

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: ↵
↵ : application/json" --data-binary "\"Sample value\"" "https: ↵
↵ : //192.168.0.100/restapi/network/wireless/gateway/"
```

5.6 Wireless network data: DNS servers

array	network/wireless/dns_servers/
List of DNS server IP addresses	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This array does not support direct modification if [ip address assignment protocol](#) is not equal to static.

This array represents a value in persistent storage.

This array can change as if by itself or indirectly because of other actions.

Changes to this array do not take effect immediately.

This array contains [DNS server](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/wireless/dns_servers/"
```

⇒

```
[
  "Sample value of dns server #1"
]
```

Sample write command:

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary "[\"Sample value of dns server #1\", \"Sample value of dns server ↵
↵ #2\", \"Sample value of dns server #3\", \"Sample value of dns server #4\"]"\
"https://192.168.0.100/restapi/network/wireless/dns_servers/"
```

Sample dns server creation command:

```
curl --digest -u admin:1234 -H "Content-type: application/json" -H "Accept: ↵
↵ application/json" --data-binary "\"Sample value\"" "https://192.168.0.100/ ↵
↵ restapi/network/wireless/dns_servers/"
```

5.6.1 DNS server

string	network/wireless/dns_servers/N/
DNS server IP address	

The value is subject to the following constraints: [the value](#) matches `^(([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5]).){3}([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5])$`

Sample read command (note that `:dns_server` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/wireless/dns_servers/:dns_server/"
```

⇒

"Sample value"

Sample write command (note that `:dns_server` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/network/wireless/dns_servers/:dns_server/"
```

Sample deletion command (note that `:dns_server` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/network/wireless/dns_servers/:dns_server/"
```

5.7 Wireless network data: Known modes

map	network/wireless/known_modes/
Known wireless modes	

Retrieving the value is denied if not [administrative user](#)

This map does not support direct modification.

This map contains [Mode](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/wireless/known_modes/"
```

⇒

```
{
  "known_modes_3": "Sample value of mode known_modes_3",
  "known_modes_1": "Sample value of mode known_modes_1",
  "known_modes_4": "Sample value of mode known_modes_4",
  "known_modes_2": "Sample value of mode known_modes_2"
}
```

Creating elements in this collection is not supported.

5.7.1 Mode

string	network/wireless/known_modes/S/
Name of wireless mode	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

Sample read command (note that :mode is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/wireless/known_modes/:mode/"
```

⇒

"Sample value"

5.8 Wireless network data: Known channels

map	network/wireless/known_channels/
Known wireless channels	

Retrieving the value is denied if not [administrative user](#)

This map does not support direct modification.

This map contains [Channel](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/wireless/known_channels/"
```

⇒

```
{
  "known_channels_4": "Sample value of channel known_channels_4",
  "known_channels_10": "Sample value of channel known_channels_10",
  "known_channels_3": "Sample value of channel known_channels_3",
  "known_channels_5": "Sample value of channel known_channels_5",
  "known_channels_1": "Sample value of channel known_channels_1",
  "known_channels_9": "Sample value of channel known_channels_9",
  "known_channels_8": "Sample value of channel known_channels_8",
  "known_channels_2": "Sample value of channel known_channels_2",
  "known_channels_6": "Sample value of channel known_channels_6",
  "known_channels_7": "Sample value of channel known_channels_7"
}
```

Creating elements in this collection is not supported.

5.8.1 Channel

string	network/wireless/known_channels/S/
Name of wireless channel	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

Sample read command (note that :channel is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/wireless/known_channels/:channel/"
```

⇒

```
"Sample value"
```

5.9 Wireless network data: Known encryptions

map	network/wireless/known_encryptions/
Known wireless encryptions	

Retrieving the value is denied if not [administrative user](#)

This map does not support direct modification.

This map contains [Encryption](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/wireless/known_encryptions/"
```

⇒

```
{
  "known_encryptions_1": "Sample value of encryption known_encryptions_1",
  "known_encryptions_2": "Sample value of encryption known_encryptions_2"
}
```

Creating elements in this collection is not supported.

5.9.1 Encryption

string	network/wireless/known_encryptions/S/
Name of wireless encryption	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

Sample read command (note that :encryption is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/wireless/known_encryptions/:encryption/"
```

⇒

```
"Sample value"
```

5.10 Same subnet restriction

sum (boolean)	network/same_subnet_only/
Reject incoming connections from networks other than local subnets	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

Changes to this sum do not take effect immediately.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/same_subnet_only/"
```

⇒ (possible variant)

```
true
```

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ network/same_subnet_only/"
```

5.11 Known protocols

map	network/known_protocols/
Known IP address assignment protocols	

Retrieving the value is denied if not [administrative user](#)

This map does not support direct modification.

This map contains [Protocol](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/known_protocols/"
```

⇒

```
{
  "known_protocols_2": "Sample value of protocol known_protocols_2",
  "known_protocols_1": "Sample value of protocol known_protocols_1"
}
```

Creating elements in this collection is not supported.

5.11.1 Protocol

string	network/known_protocols/S/
Name of IP address assignment protocol	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

Sample read command (note that :protocol is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/known_protocols/:protocol/"
```

⇒

```
"Sample value"
```

5.12 Interface priority order

array	network/interface_order/
The order of preference in which interfaces will be used	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This array contains [Interface order element](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/interface_order/"
```

⇒

```
[
  "Sample value of interface order element #1",
  "Sample value of interface order element #2",
  "Sample value of interface order element #3",
  "Sample value of interface order element #4",
  "Sample value of interface order element #5",
  "Sample value of interface order element #6"
]
```

Sample write command:

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/network/interface_order/"
```


Sample interface order element creation command:

```
curl --digest -u admin:1234 -H "Content-type: application/json" -H "Accept: ↵
↵ application/json" --data-binary "\"Sample value\"" "https://192.168.0.100/ ↵
↵ restapi/network/interface_order/"
```

5.12.1 Interface order element

sum (enumerated string)	network/interface_order/N/
Element of the interface preference order	

This sum can assume the following values:

constant "wired"	Wired	Wired network interface
constant "wireless"	Wireless	Wireless network interface

Sample read command (note that :interface_order_element is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/interface_order/:interface_order_element/"
```

⇒ (possible variant)

"Sample value"

Sample (possible variant) write command (note that :interface_order_element is a URL template argument and needs to be replaced before trying):

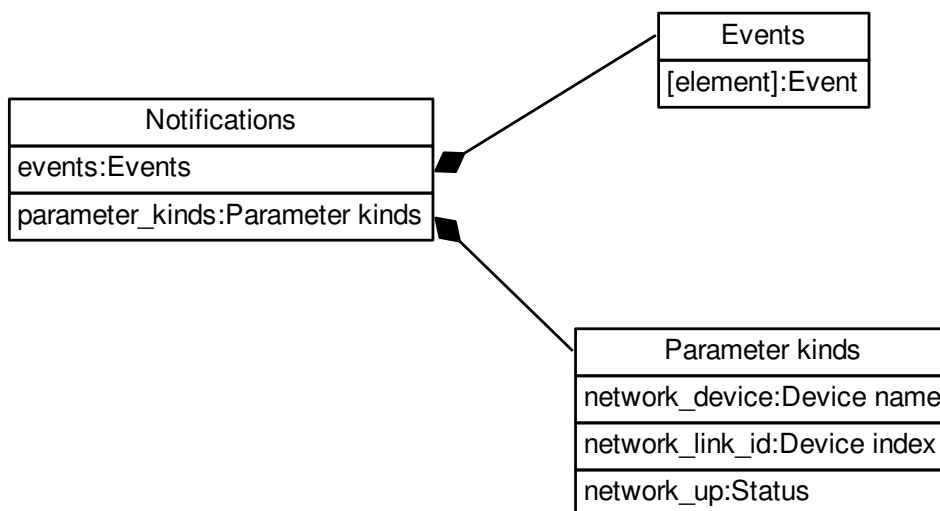
```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/network/interface_order/:interface_order_element/"
```

Sample deletion command (note that :interface_order_element is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/network/interface_order/:interface_order_element/"
```

5.13 Notifications

object	network/notifications/
Network interface status notifications	



This object does not support direct modification.

This object contains the following items:

events	Events
parameter_kinds	Parameter kinds

Sample read command:

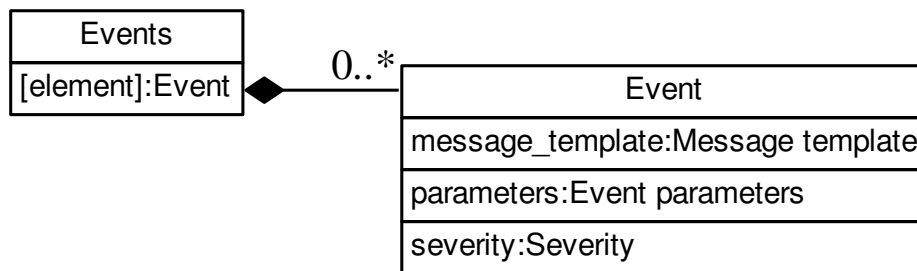
```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/notifications/"
```

⇒

...

5.13.1 Events

map	network/notifications/events/
Event templates	



This map does not support direct modification.

This map contains [Event](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/notifications/events/"
```

⇒

...

Creating elements in this collection is not supported.

See also [Events: Event](#)

See also [Notifications: Parameter kinds](#)

5.14 Message template: Message template element

sum (variant)	network/notifications/events/S/message_template/N/
Element of human-readable message template	

This sum does not support direct modification.

This sum can assume the following values:

string	String	Fixed string	
number	Parameter	Index of message parameter to insert	event parameters[the value]

Sample read command (note that :event and :message_template_element are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/notifications/events/:event/message_template/: ↵
↵ message_template_element/"
```

⇒ (possible variant)

"Sample value"

5.14.1 String

(possibly) string	network/notifications/events/S/message_template/N/
Fixed string	

5.14.2 Parameter

(possibly) number	network/notifications/events/S/message_template/N/
Index of message parameter to insert	

The value is subject to the following constraints: [event parameters\[the value\]](#)

5.15 Event parameter: Fixed value

sum (variant)	network/notifications/events/S/parameters/N/fixed_value/
Fixed parameter value for this particular event	

This sum does not support direct modification.

This sum can assume the following values:

constant null	Null	Null
constant true	True	True
constant false	False	False
string	String	This string
number	Number	This number

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/notifications/events/:event/parameters/:event_parameter/ ↵
↵ fixed_value/"
```

⇒ (possible variant)

"Sample value"

5.15.1 String

(possibly) string	network/notifications/events/S/parameters/N/fixed_value/
This string	

5.15.2 Number

(possibly) number	network/notifications/events/S/parameters/N/fixed_value/
This number	

5.16 Event parameter: Fixed value flag

sum (boolean)	network/notifications/events/S/parameters/N/has_fixed_value/
Flag indicating that the parameter's value for this event is fixed	

This sum does not support direct modification.

This sum can assume the following values:

constant true	Fixed	The value is fixed
constant false	Variable	The value is variable

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/notifications/events/:event/parameters/:event_parameter/ ↵
↵ has_fixed_value/"
```

⇒ (possible variant)

```
true
```

5.17 Event parameter: Identifier

string	network/notifications/events/S/parameters/N/id/
Parameter identifier	

The value is subject to the following constraints: [parameter kinds](#)

This string does not support direct modification.

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

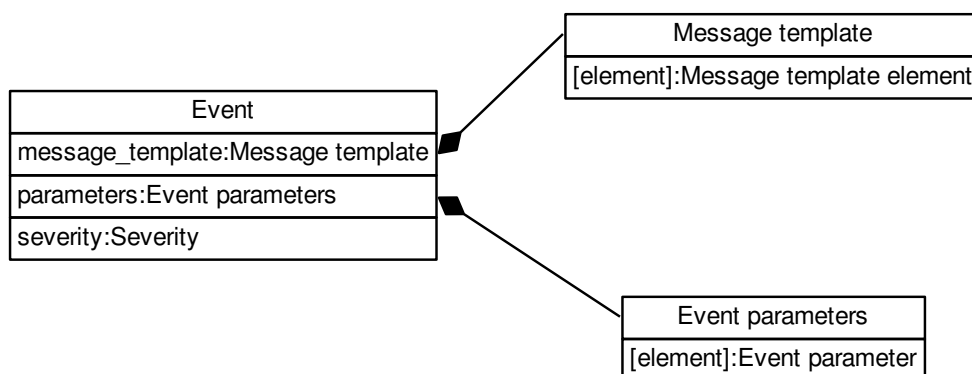
```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/notifications/events/:event/parameters/:event_parameter/id ↵
↵ /"
```

⇒

```
"Sample value"
```

5.18 Events: Event

object	network/notifications/events/S/
Event template	



This object contains the following items:

message_template	Message template
parameters	Event parameters
severity	Severity

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/notifications/events/:event/"
```

⇒

...

Sample write command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/network/notifications/events/:event/"
```

5.18.1 Message template

array	network/notifications/events/S/message_template/
Template for human-readable message generation	

This array does not support direct modification.

This array contains [Message template element](#) elements.

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/notifications/events/:event/message_template/"
```

⇒

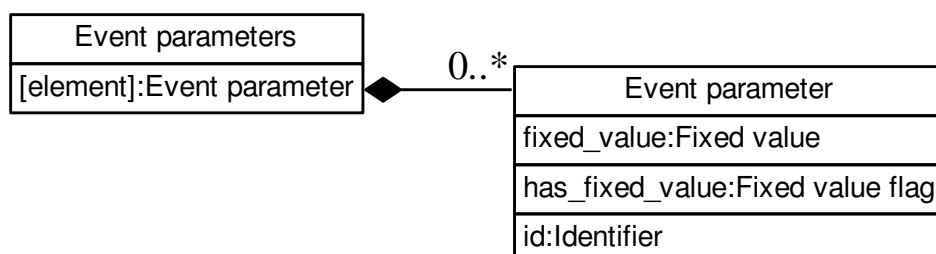
```
[
  10,
  "Sample value of message template element #2",
  "Sample value of message template element #3",
  1,
  "Sample value of message template element #5",
  "Sample value of message template element #6",
  "Sample value of message template element #7",
  1
]
```

Creating elements in this collection is not supported.

See also [Message template: Message template element](#)

5.18.2 Event parameters

array	network/notifications/events/S/parameters/
Additional data associated with the event	



This array does not support direct modification.

This array contains [Event parameter](#) elements.

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/notifications/events/:event/parameters/"
```

⇒

```
[
  {
    "fixed_value":3,
    "has_fixed_value":true,
    "id":"Sample value of event parameter #1 of identifier"
  },
  {
    "fixed_value":null,
    "has_fixed_value":true,
    "id":"Sample value of event parameter #2 of identifier"
  }
]
```

Creating elements in this collection is not supported.

5.18.2.1 Event parameter

object	network/notifications/events/S/parameters/N/
Properties of a parameter associated with the event	

This object contains the following items:

fixed_value	Fixed value
has_fixed_value	Fixed value flag
id	Identifier

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/notifications/events/:event/parameters/:event_parameter/"
```

⇒

```
{
  "fixed_value":null,
  "has_fixed_value":true,
  "id":"Sample value of identifier"
}
```

Sample write command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"
```



```
-H "Accept: application/json"\  
--data-binary '{"fixed_value\:null,\"has_fixed_value\:true,\"id\\":\"Sample  
↪ value of identifier\"}'\  
"https://192.168.0.100/restapi/network/notifications/events/:event/parameters/:  
↪ event_parameter/"
```

See also [Event parameter: Fixed value](#)

See also [Event parameter: Fixed value flag](#)

See also [Event parameter: Identifier](#)

5.18.3 Severity

sum (enumerated number)	network/notifications/events/S/severity/
Severity rating assigned to the event	

This sum does not support direct modification.

This sum can assume the following values:

constant 1	Emergency	Treat the event as an emergency
constant 2	Alert	Treat the event as an alert
constant 3	Critical	Treat the event as critical
constant 4	Error	Treat the event as an error
constant 5	Warning	Treat the event as a warning
constant 6	Notice	Treat the event as a notice
constant 7	Informational	Treat the event as informational
constant 8	Debug	Treat the event as debugging-related

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/  
↪ restapi/network/notifications/events/:event/severity/"
```

⇒ (possible variant)

2

5.19 Notifications: Parameter kinds

object	network/notifications/parameter_kinds/
Kinds of event parameters	

This object does not correspond to an actual resource.

This object contains the following items:

network_device	Device name
network_link↔ _id	Device index
network_up	Status

5.19.1 Device name

string	network/notifications/parameter_kinds/network_device/
Low-level network interface name	

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/notifications/parameter_kinds/network_device/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/network/notifications/parameter_kinds/ ↵
↵ network_device/"
```

5.19.2 Device index

number	network/notifications/parameter_kinds/network_link_id/
Low-level network interface index	

The value is subject to the following constraints: [the value](#) is an integer

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/network/notifications/parameter_kinds/network_link_id/"
```

⇒

10

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "1" "https://192.168.0.100/restapi/ ↵
↵ network/notifications/parameter_kinds/network_link_id/"
```

5.19.3 Status

sum (boolean)	network/notifications/parameter_kinds/network_up/
Network interface status	

This sum can assume the following values:

constant true	Up	The network interface is connected
constant false	Down	The network interface is disconnected

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/network/notifications/parameter_kinds/network_up/"
```

⇒ (possible variant)

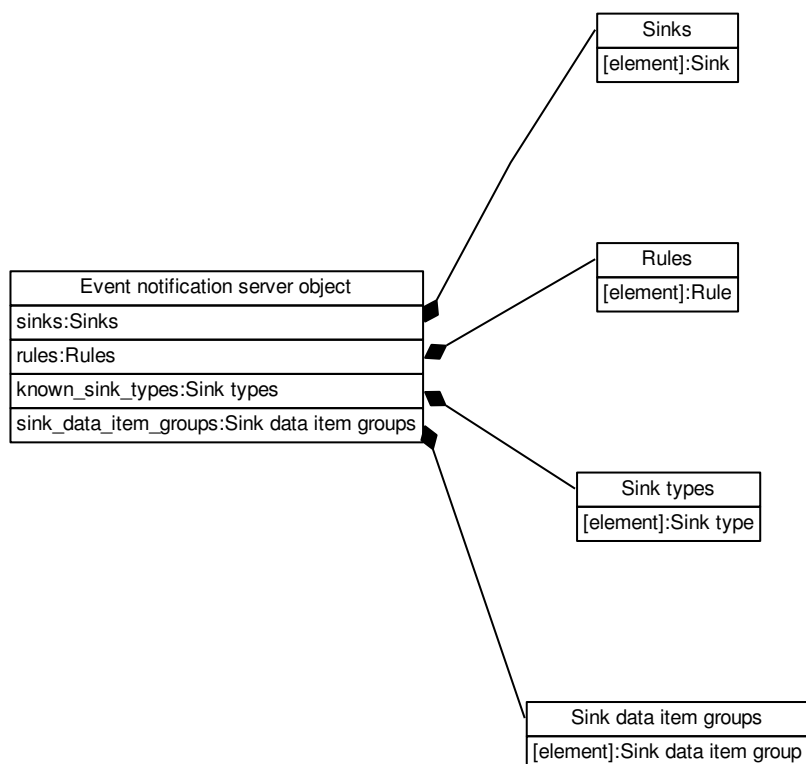
false

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵  
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵  
↵ network/notifications/parameter_kinds/network_up/"
```

6 Event notification server object

object	notification/
Object representing the event notification server configuration	



This object contains the following items:

sinks	Sinks
rules	Rules
known_sink_types	Sink types
sink_data_item_groups	Sink data item groups

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/notification/"
```

⇒

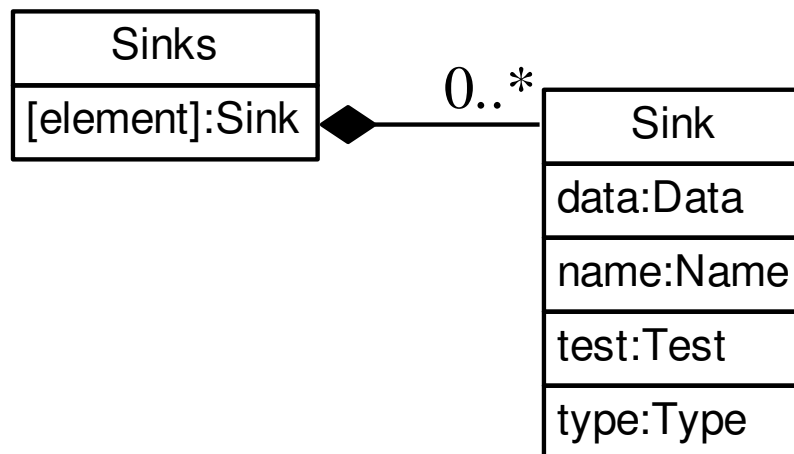
...

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "... " "https://192.168.0.100/restapi/ ↵
↵ notification/"
```

6.1 Sinks

array	notification/sinks/
Sink array	



Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This array represents a value in persistent storage.

This array contains [Sink](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/notification/sinks/"
```

⇒

```
[
{
  "type":"Sample value of sink #1 of type",
  "name":"Sample value of sink #1 of name",
  "data":{
    "data_2":"Sample value of sink #1 of data of data item data_2",
    "data_5":"Sample value of sink #1 of data of data item data_5",
    "data_3":"Sample value of sink #1 of data of data item data_3",
    "data_4":"Sample value of sink #1 of data of data item data_4",
    "data_1":"Sample value of sink #1 of data of data item data_1",
    "data_6":"Sample value of sink #1 of data of data item data_6"
  }
}
]
```

Sample write command:

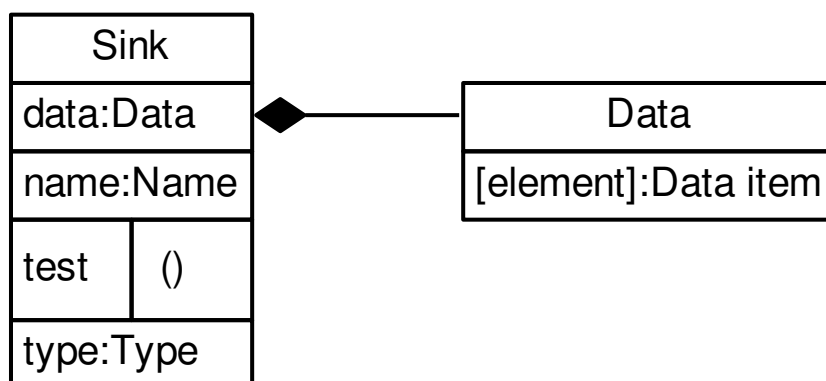
```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "... "https://192.168.0.100/restapi/ ↵
↵ notification/sinks/"
```

Sample sink creation command:

```
curl\
--digest\
-u admin:1234\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary "{\"type\":\"Sample value of type\", \"name\":\"Sample value of name ↵
↵ \", \"data\":{\"data_2\":\"Sample value of data of data item data_2\", \" ↵
↵ data_1\":\"Sample value of data of data item data_1\"}}"\
"https://192.168.0.100/restapi/notification/sinks/"
```

6.1.1 Sink

object	notification/sinks/N/
Event sink	



Retrieving the value is denied if not [administrative user](#)

This object represents a value in persistent storage.

This object contains the following items:

data	Data
name	Name
test	Test
type	Type

Sample read command (note that :sink is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/notification/sinks/:sink/"
```

⇒

```
{
  "type": "Sample value of type",
  "name": "Sample value of name",
  "data": {
    "data_9": "Sample value of data of data item data_9",
    "data_7": "Sample value of data of data item data_7",
    "data_2": "Sample value of data of data item data_2",
    "data_8": "Sample value of data of data item data_8",
    "data_5": "Sample value of data of data item data_5",
    "data_3": "Sample value of data of data item data_3",
    "data_4": "Sample value of data of data item data_4",
    "data_1": "Sample value of data of data item data_1",
    "data_6": "Sample value of data of data item data_6"
  }
}
```

Sample write command (note that :sink is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/notification/sinks/:sink/"
```

Sample deletion command (note that :sink is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/notification/sinks/:sink/"
```

See also [Sink: Data](#)

See also [Sink: Name](#)

See also [Sink: Test](#)

See also [Sink: Type](#)

6.2 Sink: Data

map	notification/sinks/N/data/
Sink-type-specific data	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)

- [protect notification settings](#)

This map represents a value in persistent storage.

This map contains [Data item](#) elements.

Sample read command (note that :sink is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/notification/sinks/:sink/data/"
```

⇒

```
{
  "data_9": "Sample value of data item data_9",
  "data_7": "Sample value of data item data_7",
  "data_2": "Sample value of data item data_2",
  "data_8": "Sample value of data item data_8",
  "data_5": "Sample value of data item data_5",
  "data_3": "Sample value of data item data_3",
  "data_4": "Sample value of data item data_4",
  "data_1": "Sample value of data item data_1",
  "data_6": "Sample value of data item data_6",
  "data_10": "Sample value of data item data_10"
}
```

Sample write command (note that :sink is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"data_2": "Sample value of data item data_2", "data_1": " ↵
↵ Sample value of data item data_1"}'\
"https://192.168.0.100/restapi/notification/sinks/:sink/data/"
```

Sample data item creation command (note that :sink is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value of data item data_2\""" ↵
↵ https://192.168.0.100/restapi/notification/sinks/:sink/data/data_2/"
```

6.2.1 Data item

string	notification/sinks/N/data/S/
Item of sink-type-specific data	

The value is subject to the following constraints: [the value](#) matches [sink types\[type\].data_items\[index of the value\].regexp](#)

Retrieving the value is denied if any of the following is true:

- not [administrative user](#)

- all of the following is true:
 - index of the value is not equal to ""
 - `sink data item groups[sink types[type].data_items[index of the value].group].unreadable`

Changing the value is denied if any of the following is true:

- not `administrative user`
- all of the following is true:
 - index of the value is not equal to ""
 - `sink data item groups[sink types[type].data_items[index of the value].group].immutable`

Using the string as a field for indexing into the grandparent collection is denied if any of the following is true:

- not `administrative user`
- all of the following is true:
 - index of the value is not equal to ""
 - `sink data item groups[sink types[type].data_items[index of the value].group].secret`

This string represents a value in persistent storage.

This string should be displayed in a secure manner if all of the following is true:

- index of the value is not equal to ""
- `sink data item groups[sink types[type].data_items[index of the value].group].secret`

Sample read command (note that `:sink` and `:data_item` are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/notification/sinks/:sink/data/:data_item/"
```

⇒

```
"Sample value"
```

Sample write command (note that `:sink` and `:data_item` are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/notification/sinks/:sink/data/:data_item/"
```

Sample deletion command (note that `:sink` and `:data_item` are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/notification/sinks/:sink/data/:data_item/"
```

6.3 Sink: Name

string	notification/sinks/N/name/
Sink name (can be shared between sinks)	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect notification settings](#)

This string represents a value in persistent storage.

Sample read command (note that :sink is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/notification/sinks/:sink/name/"
```

⇒

"Sample value"

Sample write command (note that :sink is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/notification/sinks/:sink/name/"
```

6.4 Sink: Test

call	notification/sinks/N/test/
Send a test notification using this sink	

Performing the function call is denied if not [administrative user](#)

The call has no arguments (supply empty tuple).

The call returns no results (expect an empty tuple).

Sample invocation (note that :sink is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X POST -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/notification/sinks/:sink/test/"
```

⇒

"Sample value"

6.5 Sink: Type

string	notification/sinks/N/type/
Sink type	

The value is subject to the following constraints: [sink types](#)[the value]

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect notification settings](#)

This string represents a value in persistent storage.

Sample read command (note that :sink is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/notification/sinks/:sink/type/"
```

⇒

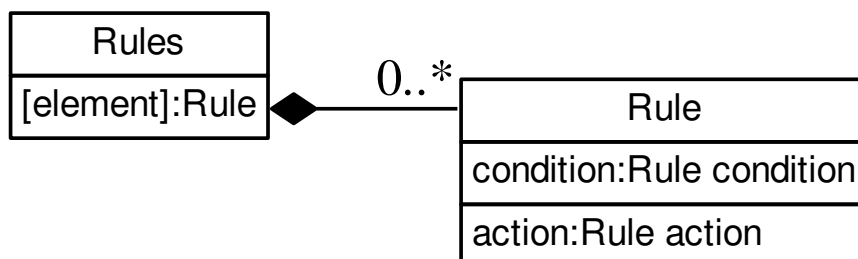
"Sample value"

Sample write command (note that :sink is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵  
↵ : application/json" --data-binary "\"Sample value\"" "https ↵  
↵ ://192.168.0.100/restapi/notification/sinks/:sink/type/"
```

6.6 Rules

array	notification/rules/
Event processing rule list	



Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect notification settings](#)

This array represents a value in persistent storage.

This array contains [Rule](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/notification/rules/"
```

⇒

```
[
  {
    "condition":"Sample value of rule #1 of rule condition",
    "action":"Sample value of rule #1 of rule action"
  },
  {
    "condition":"Sample value of rule #2 of rule condition",
    "action":"Sample value of rule #2 of rule action"
  },
  {
    "condition":"Sample value of rule #3 of rule condition",
    "action":"Sample value of rule #3 of rule action"
  },
  {
    "condition":"Sample value of rule #4 of rule condition",
    "action":"Sample value of rule #4 of rule action"
  }
]
```

Sample write command:

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/notification/rules/"
```

Sample rule creation command:

```
curl --digest -u admin:1234 -H "Content-type: application/json" -H "Accept: ↵
↵ application/json" --data-binary '{"condition\":"Sample value of rule ↵
↵ condition\","action\":"Sample value of rule action\"}' "https ↵
↵ ://192.168.0.100/restapi/notification/rules/"
```

See also [Rules: Rule](#)

6.7 Rules: Rule

object	notification/rules/N/
Event processing rule	

Retrieving the value is denied if not [administrative user](#)

This object represents a value in persistent storage.

This object contains the following items:

condition	Rule condition
action	Rule action

Sample read command (note that :rule is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/notification/rules/:rule/"
```

⇒

```
{
  "condition":"Sample value of rule condition",
  "action":"Sample value of rule action"
}
```

Sample write command (note that :rule is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"condition\":"Sample value of rule condition\","action\":" ↵
↵ Sample value of rule action\"}'\
"https://192.168.0.100/restapi/notification/rules/:rule/"
```

Sample deletion command (note that :rule is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/notification/rules/:rule/"
```

6.7.1 Rule condition

string	notification/rules/N/condition/
Lua expression to evaluate for events to be matched	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect notification settings](#)

This string represents a value in persistent storage.

Sample read command (note that :rule is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/notification/rules/:rule/condition/"
```

⇒

"Sample value"

Sample write command (note that :rule is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/notification/rules/:rule/condition/"
```

6.7.2 Rule action

string	notification/rules/N/action/
Lua code to evaluate for matching events	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect notification settings](#)

This string represents a value in persistent storage.

Sample read command (note that :rule is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/notification/rules/:rule/action/"
```

⇒

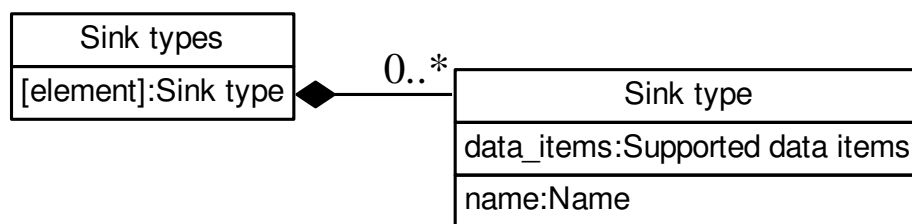
"Sample value"

Sample write command (note that :rule is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/notification/rules/:rule/action/"
```

6.8 Sink types

map	notification/known_sink_types/
Known sink types	



Retrieving the value is denied if not [administrative user](#)

This map does not support direct modification.

This map contains [Sink type](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/notification/known_sink_types/"
```

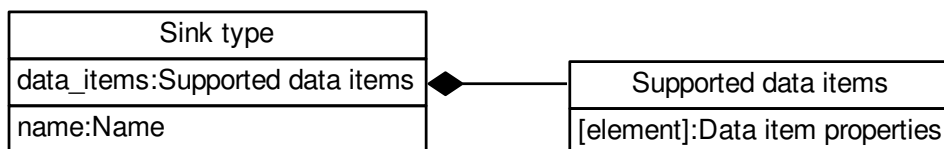
⇒

...

Creating elements in this collection is not supported.

6.8.1 Sink type

object	notification/known_sink_types/S/
Type of sink	



Retrieving the value is denied if not [administrative user](#)

This object contains the following items:

data_items	Supported data items
name	Name

Sample read command (note that :sink_type is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/notification/known_sink_types/:sink_type/"
```

⇒

```
{
  "name": "Sample value of name",
  "data_items": {
    "supported_data_items_1": {
      "group": "Sample value of data item group",
      "name": "Sample value of name",
      "regexp": "Sample value of regular expression"
    },
    "supported_data_items_2": {
      "group": "Sample value of data item group",
      "name": "Sample value of name",
      "regexp": "Sample value of regular expression"
    }
  }
}
```

Sample write command (note that :sink_type is a URL template argument and needs to be replaced before trying):

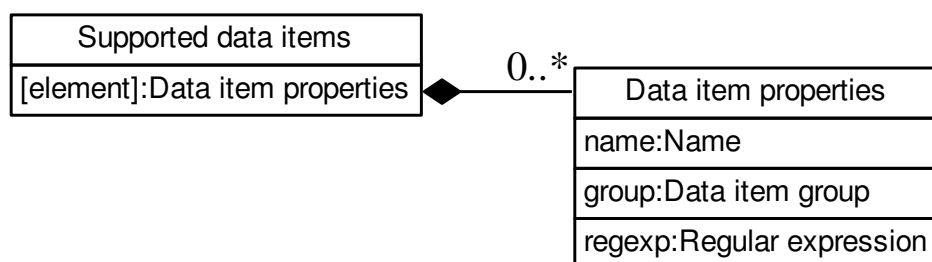
```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/notification/known_sink_types/:sink_type/"
```


See also [Sink type: Supported data items](#)

See also [Sink type: Name](#)

6.9 Sink type: Supported data items

map	notification/known_sink_types/S/data_items/
Properties of supported data items	



Retrieving the value is denied if not [administrative user](#)

This map does not support direct modification.

This map contains [Data item properties](#) elements.

Sample read command (note that :sink_type is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/notification/known_sink_types/:sink_type/data_items/"
```

⇒

...

Creating elements in this collection is not supported.

6.9.1 Data item properties

object	notification/known_sink_types/S/data_items/S/
Properties of data item	

This object contains the following items:

name	Name
group	Data item group
regexp	Regular expression

Sample read command (note that :sink_type and :data_item_properties are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/notification/known_sink_types/:sink_type/data_items/: ↵
↵ data_item_properties/"
```

⇒

```
{
  "group": "Sample value of data item group",
  "name": "Sample value of name",
  "regexp": "Sample value of regular expression"
}
```

Sample write command (note that :sink_type and :data_item_properties are URL template arguments and need to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"group": "Sample value of data item group", "name": "Sample ↵
↵ value of name", "regexp": "Sample value of regular expression"}'\
"https://192.168.0.100/restapi/notification/known_sink_types/:sink_type/ ↵
↵ data_items/:data_item_properties/"
```

6.9.1.1 Name

string	notification/known_sink_types/S/data_items/S/name/
Data item name	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

Sample read command (note that :sink_type and :data_item_properties are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/notification/known_sink_types/:sink_type/data_items/: ↵
↵ data_item_properties/name/"
```

⇒

```
"Sample value"
```

6.9.1.2 Data item group

string	notification/known_sink_types/S/data_items/S/group/
The group of data items to which this one belongs	

The value is subject to the following constraints: [sink data item groups](#)[the value]

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

Sample read command (note that :sink_type and :data_item_properties are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/notification/known_sink_types/:sink_type/data_items/: ↵
↵ data_item_properties/group/"
```

⇒

"Sample value"

6.9.1.3 Regular expression

string	notification/known_sink_types/S/data_items/S/regexp/
Regular expression which the data item must match	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

Sample read command (note that :sink_type and :data_item_properties are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/notification/known_sink_types/:sink_type/data_items/: ↵
↵ data_item_properties/regexp/"
```

⇒

"Sample value"

6.10 Sink type: Name

string	notification/known_sink_types/S/name/
Sink type name	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

Sample read command (note that :sink_type is a URL template argument and needs to be replaced before trying):

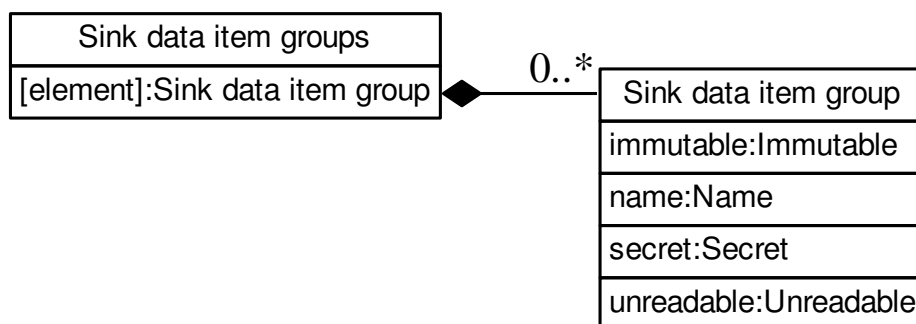
```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/notification/known_sink_types/:sink_type/name/"
```

⇒

"Sample value"

6.11 Sink data item groups

map	notification/sink_data_item_groups/
Properties of groups of sink data items	



Retrieving the value is denied if not [administrative user](#)

This map does not support direct modification.

This map contains [Sink data item group](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/notification/sink_data_item_groups/"
```

⇒

```
{
  "sink_data_item_groups_1":{
    "immutable":true,
    "unreadable":true,
    "name":"Sample value of sink data item group sink_data_item_groups_1 of name",
    "secret":true
  }
}
```

Creating elements in this collection is not supported.

See also [Sink data item groups: Sink data item group](#)

6.12 Sink data item groups: Sink data item group

object	notification/sink_data_item_groups/S/
Properties of a group of sink data items	

Retrieving the value is denied if not [administrative user](#)

This object contains the following items:

immutable	Immutable
name	Name
secret	Secret
unreadable	Unreadable

Sample read command (note that :sink_data_item_group is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/notification/sink_data_item_groups/:sink_data_item_group/"
```

⇒

```
{
  "immutable":false,
  "unreadable":false,
  "name":"Sample value of name",
  "secret":true
}
```

Sample write command (note that :sink_data_item_group is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"immutable\:false,\"unreadable\:true,\"name\:\":\"Sample value ↵
↵ of name\", \"secret\:true}\"\
"https://192.168.0.100/restapi/notification/sink_data_item_groups/: ↵
↵ sink_data_item_group/"
```

6.12.1 Immutable

sum (boolean)	notification/sink_data_item_groups/S/immutable/
Flag indicating whether the data item is not permitted to be changed	

Retrieving the value is denied if not [administrative user](#)

This sum does not support direct modification.

This sum can assume the following values:

constant true	Immutable	The data item is not permitted to be changed
constant false	Not immutable	The data item can be changed

Sample read command (note that :sink_data_item_group is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/notification/sink_data_item_groups/:sink_data_item_group/immutable ↵
↵ /"
```

⇒ (possible variant)

```
true
```

6.12.2 Name

string	notification/sink_data_item_groups/S/name/
Data item group name	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

Sample read command (note that :sink_data_item_group is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/notification/sink_data_item_groups/:sink_data_item_group/name/"
```

⇒

```
"Sample value"
```

6.12.3 Secret

sum (boolean)	notification/sink_data_item_groups/S/secret/
Flag indicating whether the data item can contain private information	

Retrieving the value is denied if not [administrative user](#)

This sum does not support direct modification.

This sum can assume the following values:

constant true	Secret	The data item can contain private information
constant false	Not secret	The data item contains only public information

Sample read command (note that :sink_data_item_group is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/notification/sink_data_item_groups/:sink_data_item_group/secret/"
```

⇒ (possible variant)

true

6.12.4 Unreadable

sum (boolean)	notification/sink_data_item_groups/S/unreadable/
Flag indicating whether the data item is not permitted to be read	

Retrieving the value is denied if not [administrative user](#)

This sum does not support direct modification.

This sum can assume the following values:

constant true	Unreadable	The data item is not permitted to be read
constant false	Not unreadable	The data item can be read

Sample read command (note that :sink_data_item_group is a URL template argument and needs to be replaced before trying):

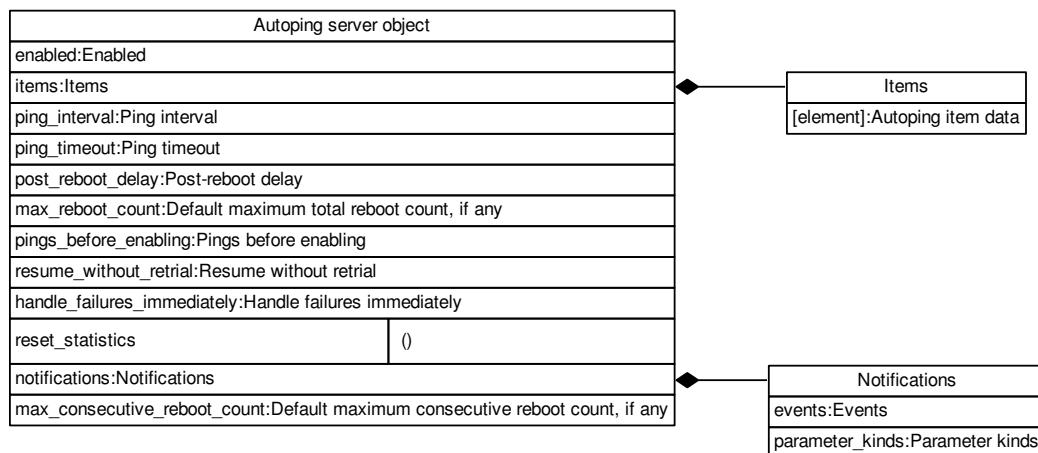
```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/notification/sink_data_item_groups/:sink_data_item_group/unreadable ↵
↵ /"
```

⇒ (possible variant)

false

7 Autoping server object

object	autoping/
Object representing the autoping server state and configuration	



This object contains the following items:

enabled	Enabled
items	Items
ping_interval	Ping interval
ping_timeout	Ping timeout
post_reboot_delay	Post-reboot delay
max_reboot_count	Default maximum total reboot count, if any
pings_before_enabling	Pings before enabling
resume_without_retrial	Resume without retrial
handle_failures_immediately	Handle failures immediately
reset_statistics	Reset statistics
notifications	Notifications
max_consecutive_reboot_count	Default maximum consecutive reboot count, if any

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/"
```

⇒

...

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "... " "https://192.168.0.100/restapi/ ↵
↵ autoping/"
```

7.1 Enabled

sum (boolean)	autoping/enabled/
Autoping global enable status	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/enabled/"
```

⇒ (possible variant)

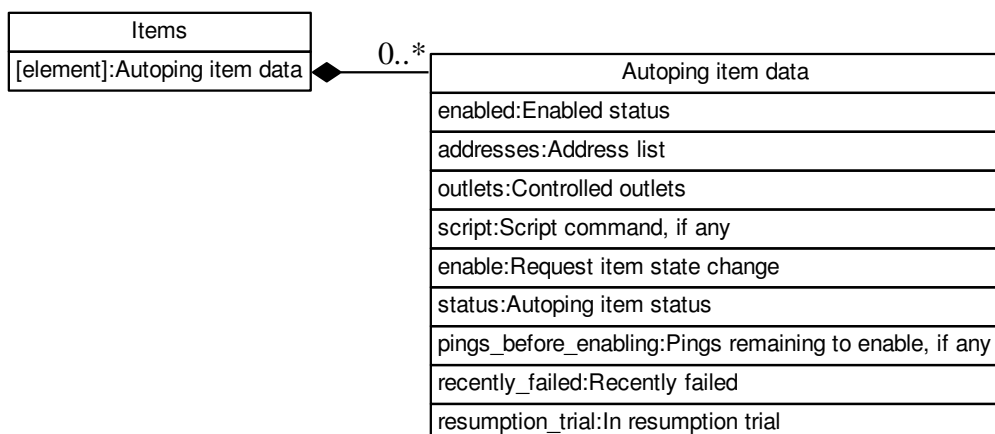
false

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ autoping/enabled/"
```

7.2 Items

array	autoping/items/
Autoping item list	



Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This array represents a value in persistent storage.

This array contains [Autoping item data](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/autoping/items/"
```

⇒

...

Sample write command:

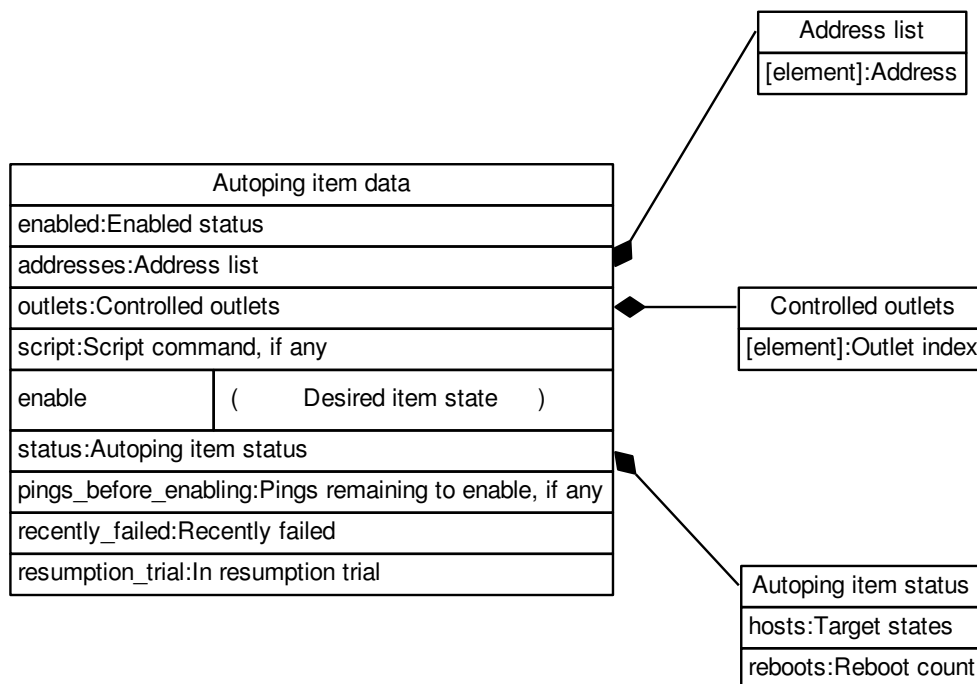
```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: ↵  
↵ : application/json" --data-binary "... " "https://192.168.0.100/restapi/ ↵  
↵ autoping/items/"
```

Sample autoping item data creation command:

```
curl --digest -u admin:1234 -H "Content-type: application/json" -H "Accept: ↵  
↵ application/json" --data-binary "... " "https://192.168.0.100/restapi/ ↵  
↵ autoping/items/"
```

7.2.1 Autoping item data

object	autoping/items/N/
Data related to autoping item state and configuration	



Retrieving the value is denied if not [administrative user](#)

This object contains the following items:

enabled	Enabled status
addresses	Address list
outlets	Controlled outlets
script	Script command, if any
enable	Request item state change
status	Autoping item status
pings_before_enabling	Pings remaining to enable, if any
recently_failed	Recently failed
resumption_trial	In resumption trial

Sample read command (note that :autoping_item_data is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/items/:autoping_item_data/"
```

⇒

...

Sample write command (note that :autoping_item_data is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: application/json" --data-binary "... "https://192.168.0.100/restapi/autoping/items/:autoping_item_data/"
```

Sample deletion command (note that :autoping_item_data is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https://192.168.0.100/restapi/autoping/items/:autoping_item_data/"
```

See also [Autoping item data: Enabled status](#)

See also [Autoping item data: Address list](#)

See also [Autoping item data: Controlled outlets](#)

See also [Autoping item data: Script command, if any](#)

See also [Autoping item data: Request item state change](#)

See also [Autoping item data: Autoping item status](#)

See also [Autoping item data: Pings remaining to enable, if any](#)

See also [Autoping item data: Recently failed](#)

See also [Autoping item data: In resumption trial](#)

7.3 Autoping item data: Enabled status

sum (boolean)	autoping/items/N/enabled/
Whether this item is enabled (can be triggered)	

Retrieving the value is denied if not [administrative user](#)

This sum does not support direct modification.

This sum represents a value in persistent storage.

This sum can change as if by itself or indirectly because of other actions.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command (note that :autoping_item_data is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/restapi/autoping/items/:autoping_item_data/enabled/"
```

⇒ (possible variant)

true

7.4 Autoping item data: Address list

array	autoping/items/N/addresses/
List of addresses to ping	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This array represents a value in persistent storage.

This array represents an unordered set (order of its elements doesn't matter, and each value should not be supplied more than once).

This array contains [Address](#) elements.

Sample read command (note that :autoping_item_data is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/items/:autoping_item_data/addresses/"
```

⇒

```
[
  "Sample value of address #1"
]
```

Sample write command (note that :autoping_item_data is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary "[\"Sample value of address #1\", \"Sample value of address #2\", \" ↵
↵ Sample value of address #3\", \"Sample value of address #4\"]"\
"https://192.168.0.100/restapi/autoping/items/:autoping_item_data/addresses/"
```

Sample address creation command (note that :autoping_item_data is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Content-type: application/json" -H "Accept: ↵
↵ application/json" --data-binary "\"Sample value\"" "https://192.168.0.100/ ↵
↵ restapi/autoping/items/:autoping_item_data/addresses/"
```

7.4.1 Address

string	autoping/items/N/addresses/N/
URL to ping (default schema is icmp)	

The value is subject to the following constraints: [address list](#) are distinct

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Sample read command (note that :autoping_item_data and :address are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/items/:autoping_item_data/addresses/:address/"
```

⇒

```
"Sample value"
```

Sample write command (note that :autoping_item_data and :address are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/autoping/items/:autoping_item_data/addresses/: ↵
↵ address/"
```

Sample deletion command (note that :autoping_item_data and :address are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/autoping/items/:autoping_item_data/addresses/: ↵
↵ address/"
```

7.5 Autoping item data: Controlled outlets

array	autoping/items/N/outlets/
List of outlets to perform specified action on	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This array represents a value in persistent storage.

This array represents an unordered set (order of its elements doesn't matter, and each value should not be supplied more than once).

This array contains [Outlet index](#) elements.

Sample read command (note that :autoping_item_data is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/items/:autoping_item_data/outlets/"
```

⇒

```
[
  4
]
```

Sample write command (note that :autoping_item_data is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: ↩
↩ : application/json" --data-binary "[8,7,6]" "https://192.168.0.100/restapi/ ↩
↩ autoping/items/:autoping_item_data/outlets/"
```

Sample outlet index creation command (note that :autoping_item_data is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Content-type: application/json" -H "Accept: ↩
↩ application/json" --data-binary "5" "https://192.168.0.100/restapi/autoping ↩
↩ /items/:autoping_item_data/outlets/"
```

7.5.1 Outlet index

number	autoping/items/N/outlets/N/
Index of outlet to perform action on	

The value is subject to the following constraints: all of the following is true:

- [outlets\[the value\]](#)
- [controlled outlets](#) are distinct

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

Sample read command (note that :autoping_item_data and :outlet_index are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↩
↩ restapi/autoping/items/:autoping_item_data/outlets/:outlet_index/"
```

⇒

3

Sample write command (note that :autoping_item_data and :outlet_index are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: ↩
↩ : application/json" --data-binary "2" "https://192.168.0.100/restapi/ ↩
↩ autoping/items/:autoping_item_data/outlets/:outlet_index/"
```

Sample deletion command (note that :autoping_item_data and :outlet_index are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↩
↩ ://192.168.0.100/restapi/autoping/items/:autoping_item_data/outlets/: ↩
↩ outlet_index/"
```

7.6 Autoping item data: Script command, if any

sum (string)	autoping/items/N/script/
Action to perform on selected outlets on failure, or cycle them if empty	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

string	Script command	Action to perform on selected outlets on failure	all of the following is true: <ul style="list-style-type: none"> not the value matches $^(.* .*)\\$ user functions[the value]
string	Invalid action placeholder	A placeholder for a failure action that has been deleted or renamed (has no effect other than logging a warning)	the value matches $^autoping_↔deleted:.*\$$
constant ""	Cycle outlets	Selected outlets are to be cycled on failure	

Sample read command (note that :autoping_item_data is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/items/:autoping_item_data/script/"
```

⇒ (possible variant)

```
"Sample value"
```

Sample (possible variant) write command (note that :autoping_item_data is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/autoping/items/:autoping_item_data/script/"
```

7.6.1 Script command

(possibly) string	autoping/items/N/script/
Action to perform on selected outlets on failure	

The value is subject to the following constraints: all of the following is true:

- not [the value](#) matches $^(|.*|.*)\$$
- [user functions](#)[[the value](#)]

Sample write command (note that :autoping_item_data is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/autoping/items/:autoping_item_data/script/"
```

7.6.2 Invalid action placeholder

(possibly) string	autoping/items/N/script/
A placeholder for a failure action that has been deleted or renamed (has no effect other than logging a warning)	

The value is subject to the following constraints: [the value](#) matches `^autoping_deleted:.*$`

Sample write command (note that :autoping_item_data is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/autoping/items/:autoping_item_data/script/"
```

7.7 Autoping item data: Request item state change

call	autoping/items/N/enable/
Request the item to enter enabled or disabled status. Disabled status is entered immediately. If the item is disabled, enabling it is not immediate (takes a trial period).	

Performing the function call is denied if not [administrative user](#)

The call accepts the following arguments:

1. Enabled or Disabled

The call returns no results (expect an empty tuple).

Sample invocation (note that :autoping_item_data is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X POST -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/autoping/items/:autoping_item_data/enable/"
```

⇒

null

7.7.1 Desired item state

sum (boolean)	autoping/items/N/enable/arguments: 1/
The state you request the item to switch to	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

7.8 Target states: Target state

object	autoping/items/N/status/hosts/N/
State of a target subjected to ping	

This object contains the following items:

address	Address
state	State
success_count	Success count
failure_count	Failure count
queue_size	Queue size

Sample read command (note that :autoping_item_data and :target_state are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/items/:autoping_item_data/status/hosts/:target_state/"
```

⇒

```
{
  "state":null,
  "success_count":2,
  "address":"Sample value of address",
  "failure_count":6,
  "queue_size":9
}
```

Sample write command (note that :autoping_item_data and :target_state are URL template arguments and need to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"state":true,"success_count":8,"address":"Sample value of ↵
↵ address","failure_count":1,"queue_size":4}'\
"https://192.168.0.100/restapi/autoping/items/:autoping_item_data/status/hosts/: ↵
↵ target_state/"
```

7.8.1 Address

string	autoping/items/N/status/hosts/N/address/
Address that is being checked (default schema is icmp)	

The value is subject to the following constraints: address members of all values of [target states](#) are distinct

This string does not support direct modification.

This string can change as if by itself or indirectly because of other actions.

Changes to this string cannot be tracked.

Sample read command (note that `:autoping_item_data` and `:target_state` are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/items/:autoping_item_data/status/hosts/:target_state/ ↵
↵ address/"
```

⇒

"Sample value"

7.8.2 State

sum (optional boolean)	autoping/items/N/status/hosts/N/state/
Target perceived state	

Retrieving the value is denied if not [administrative user](#)

This sum does not support direct modification.

This sum can change as if by itself or indirectly because of other actions.

Changes to this sum cannot be tracked.

This sum can assume the following values:

constant true	Online	The target is responding to ping requests
constant false	Offline	The target is not responding to ping requests
constant null	Unknown	Not enough information about target state

Sample read command (note that `:autoping_item_data` and `:target_state` are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/items/:autoping_item_data/status/hosts/:target_state/state ↵
↵ /"
```

⇒ (possible variant)

true

7.8.3 Success count

number	autoping/items/N/status/hosts/N/success_count/
Number of times this target has responded to a ping request in time	

The value is subject to the following constraints: all of the following is true:

- the value is an integer
- the value is greater or equal to 0

Retrieving the value is denied if not [administrative user](#)

This number does not support direct modification.

This number can change as if by itself or indirectly because of other actions.

Changes to this number cannot be tracked.

Sample read command (note that :autoping_item_data and :target_state are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/items/:autoping_item_data/status/hosts/:target_state/ ↵
↵ success_count/"
```

⇒

6

7.8.4 Failure count

number	autoping/items/N/status/hosts/N/failure_count/
Number of times this target has failed to respond to a ping request in time	

The value is subject to the following constraints: all of the following is true:

- the value is an integer
- the value is greater or equal to 0

Retrieving the value is denied if not [administrative user](#)

This number does not support direct modification.

This number can change as if by itself or indirectly because of other actions.

Changes to this number cannot be tracked.

Sample read command (note that :autoping_item_data and :target_state are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/items/:autoping_item_data/status/hosts/:target_state/ ↵
↵ failure_count/"
```

⇒

9

7.8.5 Queue size

number	autoping/items/N/status/hosts/N/queue_size/
Number of ping requests to which no replies have yet been received (0 if the parent ping item is not enabled)	

The value is subject to the following constraints: all of the following is true:

- the value is an integer
- the value is greater or equal to 0

Retrieving the value is denied if not [administrative user](#)

This number does not support direct modification.

This number can change as if by itself or indirectly because of other actions.

Changes to this number cannot be tracked.

Sample read command (note that :autoping_item_data and :target_state are URL template arguments and need to be replaced before trying):

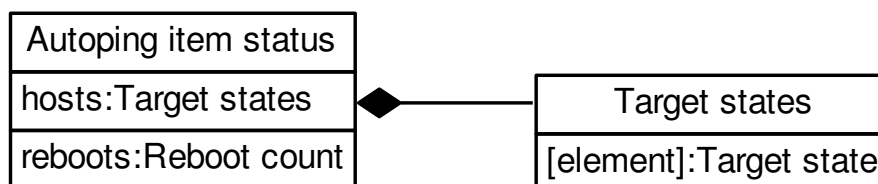
```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/items/:autoping_item_data/status/hosts/:target_state/ ↵
↵ queue_size/"
```

⇒

6

7.9 Autoping item data: Autoping item status

object	autoping/items/N/status/
Information on monitored target status and reboots	



Retrieving the value is denied if not [administrative user](#)

This object contains the following items:

hosts	Target states
reboots	Reboot count

Sample read command (note that :autoping_item_data is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/items/:autoping_item_data/status/"
```

⇒

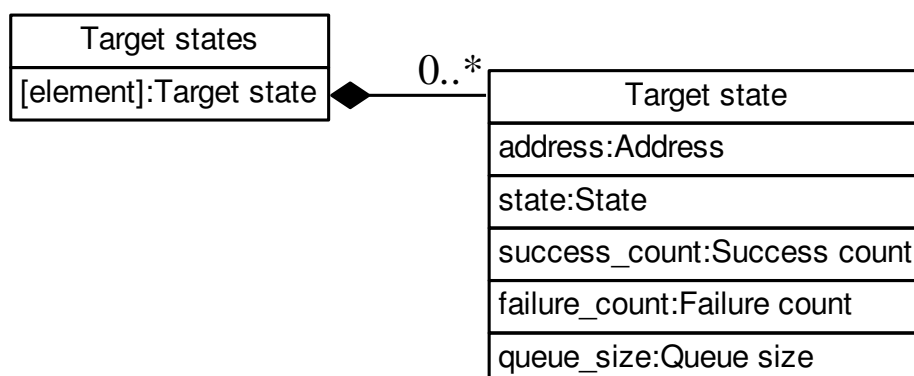
...

Sample write command (note that :autoping_item_data is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary "{ \"reboots\":2, \"hosts\": [{ \"state\":false, \"success_count\":10, \" ↵
↵ address\": \"Sample value of target states of target state #1 of address ↵
↵ \", \"failure_count\":7, \"queue_size\":3} ] }" \
"https://192.168.0.100/restapi/autoping/items/:autoping_item_data/status/"
```

7.9.1 Target states

array	autoping/items/N/status/hosts/
States of targets associated with this item	



Retrieving the value is denied if not [administrative user](#)

This array does not support direct modification.

This array can change as if by itself or indirectly because of other actions.

Changes to this array cannot be tracked.

This array represents an unordered set (order of its elements doesn't matter, and each value should not be supplied more than once).

This array contains [Target state](#) elements.

Sample read command (note that :autoping_item_data is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/items/:autoping_item_data/status/hosts/"
```

⇒

```
[
  {
    "state":false,
    "success_count":3,
    "address":"Sample value of target state #1 of address",
    "failure_count":3,
    "queue_size":9
  },
  {
    "state":false,
    "success_count":4,
    "address":"Sample value of target state #2 of address",
    "failure_count":3,
    "queue_size":9
  },
  {
    "state":false,
    "success_count":3,
    "address":"Sample value of target state #3 of address",
    "failure_count":2,
    "queue_size":8
  },
  {
    "state":null,
    "success_count":9,
    "address":"Sample value of target state #4 of address",
    "failure_count":3,
    "queue_size":5
  },
  {
    "state":false,
    "success_count":3,
    "address":"Sample value of target state #5 of address",
    "failure_count":8,
    "queue_size":2
  },
  {
    "state":true,
    "success_count":3,
    "address":"Sample value of target state #6 of address",
    "failure_count":1,
    "queue_size":3
  },
  {
```



```
"state":null,
"success_count":10,
"address":"Sample value of target state #7 of address",
"failure_count":6,
"queue_size":6
}
]
```

Creating elements in this collection is not supported.

See also [Target states: Target state](#)

7.9.2 Reboot count

number	autoping/items/N/status/reboots/
Number of times this item's action has been triggered	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater or equal to 0

This number does not support direct modification.

This number can change as if by itself or indirectly because of other actions.

Changes to this number cannot be tracked.

Sample read command (note that `:autoping_item_data` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/items/:autoping_item_data/status/reboots/"
```

⇒

10

7.10 Autoping item data: Pings remaining to enable, if any

sum (optional number)	autoping/items/N/pings_before_enabling/
Estimate of number of successful ping replies remaining to enable the item, if any	

Retrieving the value is denied if not [administrative user](#)

This sum does not support direct modification.

This sum can change as if by itself or indirectly because of other actions.

This sum can assume the following values:

constant null	Trial period over	Item is no longer in the trial state (it is either enabled or disabled)	
number	Pings remaining to enable	Estimate of successful ping replies remaining to enable the item (replies from targets which have already reached the enable threshold do not count)	all of the following is true: <ul style="list-style-type: none"> • the value is an integer • the value is greater or equal to 0

Sample read command (note that `:autoping_item_data` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/items/:autoping_item_data/pings_before_enabling/"
```

⇒ (possible variant)

4

7.10.1 Pings remaining to enable

(possibly) number	autoping/items/N/pings_before_enabling/
Estimate of successful ping replies remaining to enable the item (replies from targets which have already reached the enable threshold do not count)	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater or equal to 0

7.11 Autoping item data: Recently failed

sum (boolean)	autoping/items/N/recently_failed/
Flag indicating whether this item has recently failed	

Retrieving the value is denied if not [administrative user](#)

This sum does not support direct modification.

This sum represents a value in persistent storage.

This sum can change as if by itself or indirectly because of other actions.

Changes to this sum cannot be tracked.

This sum can assume the following values:

constant true	Recently failed	The item has failed recently, and a new failure would be counted as consecutive
constant false	Normal operation	The item is in normal operational state

Sample read command (note that :autoping_item_data is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/items/:autoping_item_data/recently_failed/"
```

⇒ (possible variant)

false

7.12 Autoping item data: In resumption trial

sum (boolean)	autoping/items/N/resumption_trial/
Flag indicating whether this item is being tried after service restoration	

Retrieving the value is denied if not [administrative user](#)

This sum does not support direct modification.

This sum represents a value in persistent storage.

This sum can change as if by itself or indirectly because of other actions.

This sum can assume the following values:

constant true	In resumption trial	Item is being tried after service restoration (failures don't cause it to trigger until the required amount of requests succeed)
constant false	Normal operation	The item is in normal operational state, and may be triggered by failures

Sample read command (note that :autoping_item_data is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/items/:autoping_item_data/resumption_trial/"
```

⇒ (possible variant)

false

7.13 Ping interval

number	autoping/ping_interval/
Interval between consecutive pings to the same address	

The value is subject to the following constraints: [the value](#) is greater than 0

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/ping_interval/"
```

⇒

10

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "5" "https://192.168.0.100/restapi/ ↵
↵ autoping/ping_interval/"
```

7.14 Ping timeout

number	autoping/ping_timeout/
Absence of response this long means the ping has timed out	

The value is subject to the following constraints: [the value](#) is greater than 0

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/ping_timeout/"
```

⇒

5

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "9" "https://192.168.0.100/restapi/ ↵
↵ autoping/ping_timeout/"
```

7.15 Post-reboot delay

number	autoping/post_reboot_delay/
Time to wait after triggering the autoping action before pinging again	

The value is subject to the following constraints: [the value](#) is greater than 0

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/post_reboot_delay/"
```

⇒

3

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "6" "https://192.168.0.100/restapi/ ↵
↵ autoping/post_reboot_delay/"
```

7.16 Default maximum total reboot count, if any

sum (number)	autoping/max_reboot_count/
Default maximum total number of times to perform the autoping action on an entry before giving up, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

number	Maximum total reboot count	Maximum total number of times to perform the autoping action on an entry before giving up (counter does not get reset if response is received)	all of the following is true: <ul style="list-style-type: none"> • the value is an integer • the value is greater than 0
constant 0	Retry indefinitely	Perform the autoping action indefinitely no matter how many reboot attempts yielded no response	

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/max_reboot_count/"
```

⇒ (possible variant)

1

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "6" "https://192.168.0.100/restapi/ ↵
↵ autoping/max_reboot_count/"
```

7.16.1 Maximum total reboot count

(possibly) number	autoping/max_reboot_count/
Maximum total number of times to perform the autoping action on an entry before giving up (counter does not get reset if response is received)	

The value is subject to the following constraints: all of the following is true:

- the value is an integer
- the value is greater than 0

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "4" "https://192.168.0.100/restapi/ ↵
↵ autoping/max_reboot_count/"
```

7.17 Pings before enabling

number	autoping/pings_before_enabling/
Minimum number of successful ping responses before enabling an autoping entry	

The value is subject to the following constraints: all of the following is true:

- the value is an integer
- the value is greater or equal to 0

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/pings_before_enabling/"
```

⇒

1

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "2" "https://192.168.0.100/restapi/ ↵
↵ autoping/pings_before_enabling/"
```

7.18 Resume without retrieval

sum (boolean)	autoping/resume_without_retrial/
Activate enabled entries when service is restored without waiting for a certain number of successful ping responses	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/resume_without_retrial/"
```

⇒ (possible variant)

```
false
```

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ autoping/resume_without_retrial/"
```

7.19 Handle failures immediately

sum (boolean)	autoping/handle_failures_immediately/
Detect and act upon explicit failures (e.g. TCP port closed response, HTTP 500, etc.) immediately instead of waiting for timeout	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/handle_failures_immediately/"
```

⇒ (possible variant)

false

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵  
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵  
↵ autoping/handle_failures_immediately/"
```

7.20 Reset statistics

call	autoping/reset_statistics/
Clear the statistics (item success, failure and reboot counters)	

Performing the function call is denied if not [administrative user](#)

The call has no arguments (supply empty tuple).

The call returns no results (expect an empty tuple).

Sample invocation:

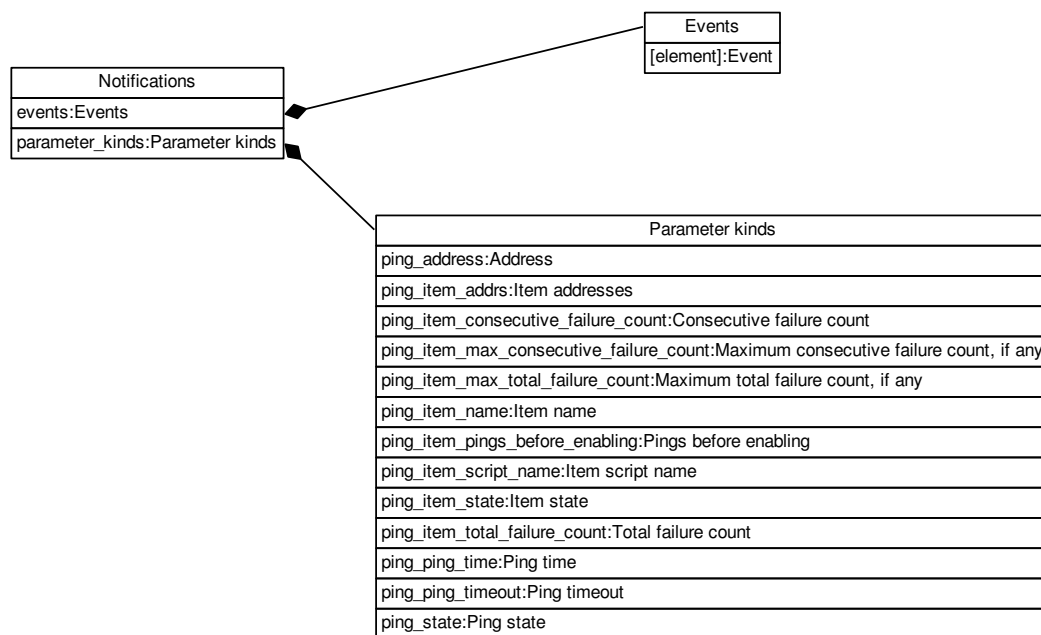
```
curl --digest -u admin:1234 -X POST -H "Accept: application/json" "https ↵  
↵ ://192.168.0.100/restapi/autoping/reset_statistics/"
```

⇒

null

7.21 Notifications

object	autoping/notifications/
Autoping status notifications	



This object does not support direct modification.

This object contains the following items:

events	Events
parameter_kinds	Parameter kinds

Sample read command:

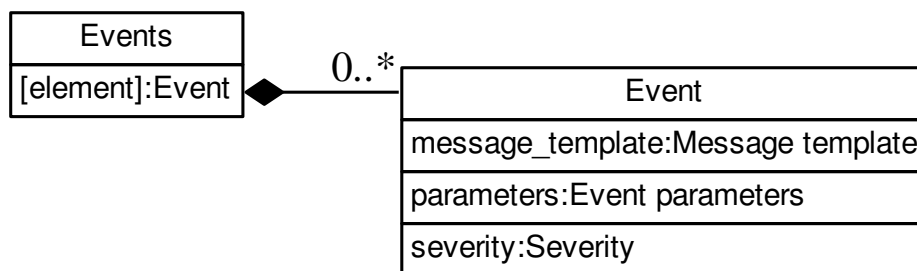
```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/notifications/"
```

⇒

...

7.21.1 Events

map	autoping/notifications/events/
Event templates	



This map does not support direct modification.

This map contains [Event](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/notifications/events/"
```

⇒

...

Creating elements in this collection is not supported.

See also [Events: Event](#)

7.21.2 Parameter kinds

object	autoping/notifications/parameter_kinds/
Kinds of event parameters	

This object does not correspond to an actual resource.

This object contains the following items:

ping_address	Address
ping_item_addrs	Item addresses
ping_item_consecutive_failure_count	Consecutive failure count
ping_item_max_consecutive_failure_count	Maximum consecutive failure count, if any
ping_item_max_total_failure_count	Maximum total failure count, if any
ping_item_name	Item name
ping_item_pings_before_enabling	Pings before enabling
ping_item_script_name	Item script name

ping_item_state	Item state
ping_item_total_failure_count	Total failure count
ping_ping_time	Ping time
ping_ping_timeout	Ping timeout
ping_state	Ping state

See also [Parameter kinds: Address](#)

See also [Parameter kinds: Item addresses](#)

See also [Parameter kinds: Consecutive failure count](#)

See also [Parameter kinds: Maximum consecutive failure count, if any](#)

See also [Parameter kinds: Maximum total failure count, if any](#)

See also [Parameter kinds: Item name](#)

See also [Parameter kinds: Pings before enabling](#)

See also [Parameter kinds: Item script name](#)

See also [Parameter kinds: Item state](#)

See also [Parameter kinds: Total failure count](#)

See also [Parameter kinds: Ping time](#)

See also [Parameter kinds: Ping timeout](#)

See also [Parameter kinds: Ping state](#)

7.22 Message template: Message template element

sum (variant)	autoping/notifications/events/S/message_template/N/
Element of human-readable message template	

This sum does not support direct modification.

This sum can assume the following values:

string	String	Fixed string	
number	Parameter	Index of message parameter to insert	event parameters[the value]

Sample read command (note that :event and :message_template_element are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/notifications/events/:event/message_template/: ↵
↵ message_template_element/"
```

⇒ (possible variant)

7

7.22.1 String

(possibly) string	autoping/notifications/events/S/message_template/N/
Fixed string	

7.22.2 Parameter

(possibly) number	autoping/notifications/events/S/message_template/N/
Index of message parameter to insert	

The value is subject to the following constraints: [event parameters\[the value\]](#)

7.23 Event parameter: Fixed value

sum (variant)	autoping/notifications/events/S/parameters/N/fixed_value/
Fixed parameter value for this particular event	

This sum does not support direct modification.

This sum can assume the following values:

constant null	Null	Null
constant true	True	True
constant false	False	False
string	String	This string
number	Number	This number

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/notifications/events/:event/parameters/:event_parameter/ ↵
↵ fixed_value/"
```

⇒ (possible variant)

false

7.23.1 String

(possibly) string	autoping/notifications/events/S/parameters/N/fixed_value/
This string	

7.23.2 Number

(possibly) number	autoping/notifications/events/S/parameters/N/fixed_value/
This number	

7.24 Event parameter: Fixed value flag

sum (boolean)	autoping/notifications/events/S/parameters/N/has_fixed_value/
Flag indicating that the parameter's value for this event is fixed	

This sum does not support direct modification.

This sum can assume the following values:

constant true	Fixed	The value is fixed
constant false	Variable	The value is variable

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/notifications/events/:event/parameters/:event_parameter/ ↵
↵ has_fixed_value/"
```

⇒ (possible variant)

```
false
```

7.25 Event parameter: Identifier

string	autoping/notifications/events/S/parameters/N/id/
Parameter identifier	

The value is subject to the following constraints: [parameter kinds](#)

This string does not support direct modification.

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

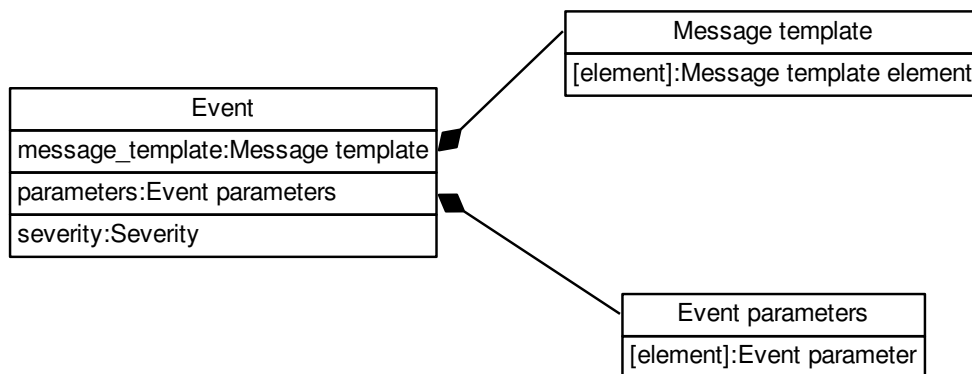
```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/notifications/events/:event/parameters/:event_parameter/id ↵
↵ /"
```

⇒

```
"Sample value"
```

7.26 Events: Event

object	autoping/notifications/events/S/
Event template	



This object contains the following items:

message_template	Message template
parameters	Event parameters
severity	Severity

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/notifications/events/:event/"
```

⇒

```
{
  "severity":4,
  "message_template":[
    7,
    "Sample value of message template of message template element #2",
    6,
    2,
    "Sample value of message template of message template element #5",
    4,
    "Sample value of message template of message template element #7",
    "Sample value of message template of message template element #8",
    5
  ],
  "parameters":[
    {
      "fixed_value":1,
      "has_fixed_value":false,
      "id":"Sample value of event parameters of event parameter #1 of identifier"
    },
    {
```

```

    "fixed_value":true,
    "has_fixed_value":true,
    "id":"Sample value of event parameters of event parameter #2 of identifier"
  }
]
}

```

Sample write command (note that :event is a URL template argument and needs to be replaced before trying):

```

curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: ↵
↵ : application/json" --data-binary "... "https://192.168.0.100/restapi/ ↵
↵ autoping/notifications/events/:event/"

```

7.26.1 Message template

array	autoping/notifications/events/S/message_template/
Template for human-readable message generation	

This array does not support direct modification.

This array contains [Message template element](#) elements.

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```

curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/notifications/events/:event/message_template/"

```

⇒

```

[
  "Sample value of message template element #1",
  10,
  9,
  "Sample value of message template element #4",
  "Sample value of message template element #5",
  7,
  1,
  5
]

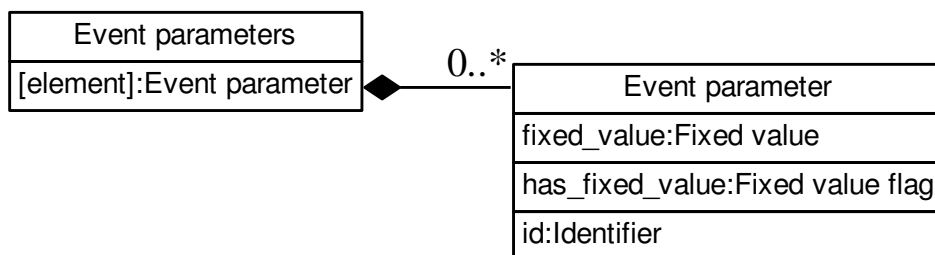
```

Creating elements in this collection is not supported.

See also [Message template: Message template element](#)

7.26.2 Event parameters

array	autoping/notifications/events/S/parameters/
Additional data associated with the event	



This array does not support direct modification.

This array contains [Event parameter](#) elements.

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/notifications/events/:event/parameters/"
```

⇒

...

Creating elements in this collection is not supported.

7.26.2.1 Event parameter

object	autoping/notifications/events/S/parameters/N/
Properties of a parameter associated with the event	

This object contains the following items:

fixed_value	Fixed value
has_fixed_value	Fixed value flag
id	Identifier

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/notifications/events/:event/parameters/:event_parameter/"
```

⇒

```
{
  "fixed_value":"Sample value of fixed value",
  "has_fixed_value":true,
```



```
"id":"Sample value of identifier"
}
```

Sample write command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"fixed_value\:4,\"has_fixed_value\:true,\"id\:\"Sample value ↵
↵ of identifier\"}'\
"https://192.168.0.100/restapi/autoping/notifications/events/:event/parameters/: ↵
↵ event_parameter/"
```

See also [Event parameter: Fixed value](#)

See also [Event parameter: Fixed value flag](#)

See also [Event parameter: Identifier](#)

7.26.3 Severity

sum (enumerated number)	autoping/notifications/events/S/severity/
Severity rating assigned to the event	

This sum does not support direct modification.

This sum can assume the following values:

constant 1	Emergency	Treat the event as an emergency
constant 2	Alert	Treat the event as an alert
constant 3	Critical	Treat the event as critical
constant 4	Error	Treat the event as an error
constant 5	Warning	Treat the event as a warning
constant 6	Notice	Treat the event as a notice
constant 7	Informational	Treat the event as informational
constant 8	Debug	Treat the event as debugging-related

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/notifications/events/:event/severity/"
```

⇒ (possible variant)

2

7.27 Parameter kinds: Address

string	autoping/notifications/parameter_kinds/ping_address/
Address of ping target	

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/notifications/parameter_kinds/ping_address/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/autoping/notifications/parameter_kinds/ ↵
↵ ping_address/"
```

7.28 Parameter kinds: Item addresses

string	autoping/notifications/parameter_kinds/ping_item_addrs/
Comma-separated list of addresses belonging to this item	

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/notifications/parameter_kinds/ping_item_addrs/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/autoping/notifications/parameter_kinds/ ↵
↵ ping_item_addrs/"
```

7.29 Parameter kinds: Consecutive failure count

number	autoping/notifications/parameter_kinds/ping_item_consecutive_failure_count/
Number of times the item has failed consecutively	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater or equal to 0

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/notifications/parameter_kinds/ ↵
↵ ping_item_consecutive_failure_count/"
```

⇒

4

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "8" "https://192.168.0.100/restapi/ ↵
↵ autoping/notifications/parameter_kinds/ping_item_consecutive_failure_count ↵
↵ /"
```

7.30 Parameter kinds: Maximum consecutive failure count, if any

sum (optional number)	autoping/notifications/parameter_kinds/ping_item_max_consecutive_failure_count/
Number of consecutive failures after which the item becomes disabled, if any	

This sum can assume the following values:

constant null	Retry indefinitely	The action will be performed regardless of the number of consecutive failures	
number	Maximum consecutive failure count	Number of consecutive failures after which the item becomes disabled	all of the following is true: <ul style="list-style-type: none"> • the value is an integer • the value is greater or equal to 0

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/notifications/parameter_kinds/ ↵
↵ ping_item_max_consecutive_failure_count/"
```

⇒ (possible variant)

null

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "2" "https://192.168.0.100/restapi/ ↵
↵ autoping/notifications/parameter_kinds/ ↵
↵ ping_item_max_consecutive_failure_count/"
```

7.30.1 Maximum consecutive failure count

(possibly) number	autoping/notifications/parameter_kinds/ping_item_max_consecutive_failure_count/
Number of consecutive failures after which the item becomes disabled	

The value is subject to the following constraints: all of the following is true:

- the value is an integer
- the value is greater or equal to 0

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "10" "https://192.168.0.100/restapi/ ↵
↵ autoping/notifications/parameter_kinds/ ↵
↵ ping_item_max_consecutive_failure_count/"
```

7.31 Parameter kinds: Maximum total failure count, if any

sum (optional number)	autoping/notifications/parameter_kinds/ping_item_max_total_failure_count/
Number of total failures after which the item becomes disabled, if any	

This sum can assume the following values:

constant null	Retry indefinitely	The action will be performed regardless of the number of total failures	
number	Maximum total failure count	Number of total failures after which the item becomes disabled	all of the following is true: <ul style="list-style-type: none"> • the value is an integer • the value is greater or equal to 0

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/notifications/parameter_kinds/ ↵
↵ ping_item_max_total_failure_count/"
```

⇒ (possible variant)

4

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "5" "https://192.168.0.100/restapi/ ↵
↵ autoping/notifications/parameter_kinds/ping_item_max_total_failure_count/"
```

7.31.1 Maximum total failure count

(possibly) number	autoping/notifications/parameter_kinds/ping_item_max_total_failure_count/
Number of total failures after which the item becomes disabled	

The value is subject to the following constraints: all of the following is true:

- the value is an integer
- the value is greater or equal to 0

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: application/json" --data-binary "10" "https://192.168.0.100/restapi/autoping/notifications/parameter_kinds/ping_item_max_total_failure_count/"
```

7.32 Parameter kinds: Item name

string	autoping/notifications/parameter_kinds/ping_item_name/
Name of the autoping item	

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/restapi/autoping/notifications/parameter_kinds/ping_item_name/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: application/json" --data-binary "\"Sample value\"" "https://192.168.0.100/restapi/autoping/notifications/parameter_kinds/ping_item_name/"
```

7.33 Parameter kinds: Pings before enabling

number	autoping/notifications/parameter_kinds/ping_item_pings_before_enabling/
Number of successful pings left to enable the autoping item	

The value is subject to the following constraints: all of the following is true:

- the value is an integer
- the value is greater or equal to 0

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/restapi/autoping/notifications/parameter_kinds/ping_item_pings_before_enabling/"
```

⇒

9

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "6" "https://192.168.0.100/restapi/ ↵
↵ autoping/notifications/parameter_kinds/ping_item_pings_before_enabling/"
```

7.34 Parameter kinds: Item script name

string	autoping/notifications/parameter_kinds/ping_item_script_name/
Name of the scripting function associated with the autoping item	

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/notifications/parameter_kinds/ping_item_script_name/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/autoping/notifications/parameter_kinds/ ↵
↵ ping_item_script_name/"
```

7.35 Parameter kinds: Item state

sum (variant)	autoping/notifications/parameter_kinds/ping_item_state/
State of the autoping item	

This sum can assume the following values:

constant true	Enabled	The autoping item is enabled
constant false	Disabled	The autoping item is disabled
constant "enabling"	Enabling	The autoping item is in trial state

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/notifications/parameter_kinds/ping_item_state/"
```

⇒ (possible variant)

"Sample value"

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ autoping/notifications/parameter_kinds/ping_item_state/"
```

7.36 Parameter kinds: Total failure count

number	autoping/notifications/parameter_kinds/ping_item_total_failure_count/
Total number of times the item has failed	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater or equal to 0

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/notifications/parameter_kinds/ ↵
↵ ping_item_total_failure_count/"
```

⇒

2

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "4" "https://192.168.0.100/restapi/ ↵
↵ autoping/notifications/parameter_kinds/ping_item_total_failure_count/"
```

7.37 Parameter kinds: Ping time

number	autoping/notifications/parameter_kinds/ping_ping_time/
The time it took to arrive at this ping state	

The value is subject to the following constraints: [the value](#) is greater or equal to 0

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/notifications/parameter_kinds/ping_ping_time/"
```

⇒

1

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "9" "https://192.168.0.100/restapi/ ↵
↵ autoping/notifications/parameter_kinds/ping_ping_time/"
```

7.38 Parameter kinds: Ping timeout

number	autoping/notifications/parameter_kinds/ping_ping_timeout/
The time after which the ping is considered unsuccessful if no response seen	

The value is subject to the following constraints: [the value](#) is greater than 0

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/notifications/parameter_kinds/ping_ping_timeout/"
```

⇒

5

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "5" "https://192.168.0.100/restapi/ ↵
↵ autoping/notifications/parameter_kinds/ping_ping_timeout/"
```

7.39 Parameter kinds: Ping state

sum (variant)	autoping/notifications/parameter_kinds/ping_state/
State of the target ping request	

This sum can assume the following values:

constant true	Reachable	The target has responded to the ping
constant false	Unreachable	The ping has timed out
constant "sent"	Sent	The ping has been sent but no response yet seen, and timeout not reached

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/notifications/parameter_kinds/ping_state/"
```

⇒ (possible variant)

true

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/autoping/notifications/parameter_kinds/ping_state ↵
↵ /"
```

7.40 Default maximum consecutive reboot count, if any

sum (number)	autoping/max_consecutive_reboot_count/
Default maximum consecutive number of times to perform the autoping action on an entry before giving up, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

number	Maximum consecutive reboot count	Maximum consecutive number of times to perform the autoping action on an entry before giving up (counter gets reset if response is received)	all of the following is true: <ul style="list-style-type: none"> • the value is an integer • the value is greater than 0
constant 0	Retry indefinitely	Perform the autoping action indefinitely no matter how many consecutive reboot attempts yielded no response	

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/autoping/max_consecutive_reboot_count/"
```

⇒ (possible variant)

1

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "4" "https://192.168.0.100/restapi/ ↵
↵ autoping/max_consecutive_reboot_count/"
```

7.40.1 Maximum consecutive reboot count

(possibly) number	autoping/max_consecutive_reboot_count/
Maximum consecutive number of times to perform the autoping action on an entry before giving up (counter gets reset if response is received)	

The value is subject to the following constraints: all of the following is true:

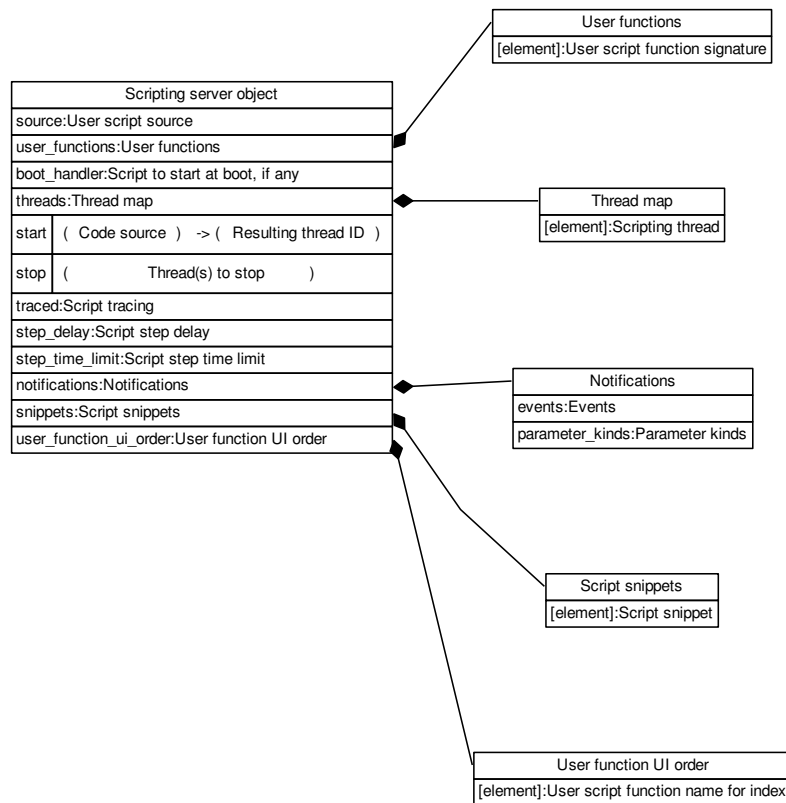
- [the value](#) is an integer
- [the value](#) is greater than 0

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "9" "https://192.168.0.100/restapi/ ↵
↵ autoping/max_consecutive_reboot_count/"
```

8 Scripting server object

object	script/
Object representing the scripting server state and configuration	



This object contains the following items:

source	User script source
user_functions	User functions
boot_handler	Script to start at boot, if any
threads	Thread map
start	Start a script thread
stop	Stop a script thread
traced	Script tracing
step_delay	Script step delay
step_time_limit	Script step time limit
notifications	Notifications
snippets	Script snippets
user_function_ui_order	User function UI order

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/"
```

⇒

...

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "... " "https://192.168.0.100/restapi/ ↵
↵ script/"
```

8.1 User script source

string	script/source/
Source of the user script from which user functions are extracted	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/source/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/script/source/"
```

8.2 User functions

map	script/user_functions/
Mapping of user function names to their signatures	

Retrieving the value is denied if not [administrative user](#)

This map does not support direct modification.

This map can change as if by itself or indirectly because of other actions.

Changes to this map cannot be tracked.

This map contains [User script function signature](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/user_functions/"
```

⇒

```
{
  "user_functions_6": "Sample value of user script function signature ↵
↵ user_functions_6",
  "user_functions_7": "Sample value of user script function signature ↵
↵ user_functions_7",
  "user_functions_4": "Sample value of user script function signature ↵
↵ user_functions_4",
  "user_functions_1": "Sample value of user script function signature ↵
↵ user_functions_1",
  "user_functions_5": "Sample value of user script function signature ↵
↵ user_functions_5",
  "user_functions_10": "Sample value of user script function signature ↵
↵ user_functions_10",
  "user_functions_8": "Sample value of user script function signature ↵
↵ user_functions_8",
  "user_functions_2": "Sample value of user script function signature ↵
↵ user_functions_2",
  "user_functions_3": "Sample value of user script function signature ↵
↵ user_functions_3",
  "user_functions_9": "Sample value of user script function signature ↵
↵ user_functions_9"
}
```

Creating elements in this collection is not supported.

8.2.1 User script function signature

string	script/user_functions/S/
Indicates that the map key is a user script function, and provides a signature which may serve as a hint as to the function content	

The value is subject to the following constraints: not index of the value matches $^(|.|.*|.)$$

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

Sample read command (note that :user_script_function_signature is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/user_functions/:user_script_function_signature/"
```

⇒

```
"Sample value"
```

8.3 Script to start at boot, if any

sum (string)	script/boot_handler/
User scripting function to run at cold boot, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can change as if by itself or indirectly because of other actions.

This sum can assume the following values:

string	Script to start at boot	User scripting function to run at cold boot	user functions[the value]
constant ""	None	Don't run any scripting function at cold boot	

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/boot_handler/"
```

⇒ (possible variant)

```
"Sample value"
```

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/script/boot_handler/"
```

8.3.1 Script to start at boot

(possibly) string	script/boot_handler/
User scripting function to run at cold boot	

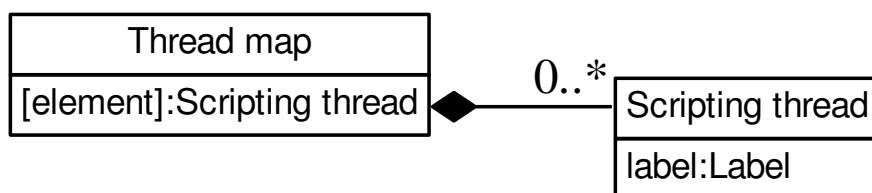
The value is subject to the following constraints: [user functions\[the value\]](#)

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/script/boot_handler/"
```

8.4 Thread map

map	script/threads/
Map of user scripting threads	



Retrieving the value is denied if not [administrative user](#)

This map does not support direct modification.

This map can change as if by itself or indirectly because of other actions.

Changes to this map cannot be tracked.

This map contains [Scripting thread](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/threads/"
```

⇒

```
{
  "thread_map_5":{
    "label":"Sample value of scripting thread thread_map_5 of label"
  },
  "thread_map_3":{
    "label":"Sample value of scripting thread thread_map_3 of label"
  },
  "thread_map_1":{
    "label":"Sample value of scripting thread thread_map_1 of label"
  },
  "thread_map_4":{
    "label":"Sample value of scripting thread thread_map_4 of label"
  },
  "thread_map_6":{
    "label":"Sample value of scripting thread thread_map_6 of label"
  },
  "thread_map_2":{
    "label":"Sample value of scripting thread thread_map_2 of label"
  }
}
```

Creating elements in this collection is not supported.

See also [Thread map: Scripting thread](#)

8.5 Thread map: Scripting thread

object	script/threads/S/
User scripting thread status	

This object contains the following items:

label	Label
-----------------------	-----------------------

Sample read command (note that `:scripting_thread` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/script/threads/:scripting_thread/"
```

⇒

```
{  
  "label": "Sample value of label"  
}
```

Sample write command (note that `:scripting_thread` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵  
↵ : application/json" --data-binary '{"label": "Sample value of label"}' " ↵  
↵ https://192.168.0.100/restapi/script/threads/:scripting_thread/"
```

8.5.1 Label

string	script/threads/S/label/
User thread label	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

Sample read command (note that `:scripting_thread` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/script/threads/:scripting_thread/label/"
```

⇒

```
"Sample value"
```

8.6 Start a script thread

call	script/start/
Start a user scripting thread	

Performing the function call is denied if not [administrative user](#)

The call accepts the following arguments:

1. object "Code source"

The call returns the following results:

1. string

Sample invocation:

```
curl --digest -u admin:1234 -X POST -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/script/start/"
```

⇒

null

8.6.1 Code source

object	script/start/arguments: 1/
Source of the code to run	

This object does not correspond to an actual resource.

This object contains the following items:

user_function	User function, if any
source	User code, if any
displayed_source	Displayed source code, if any

See also [Code source: User function, if any](#)

See also [Code source: User code, if any](#)

See also [Code source: Displayed source code, if any](#)

8.6.2 Resulting thread ID

string	script/start/results: 1/
Identifier of the started thread	

The value is subject to the following constraints: [invalid reference ../../threads][[the value](#)]

This string does not correspond to an actual resource.

8.7 Code source: User function, if any

sum (optional string)	script/start/arguments: 1/user_function/
Name of user function to run, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	No user function is run	The source of code is not a user function	
string	User function	Name of user function to run	user functions[the value]

8.7.1 User function

(possibly) string	script/start/arguments: 1/user_function/
Name of user function to run	

The value is subject to the following constraints: [user functions\[the value\]](#)

This string does not correspond to an actual resource.

8.8 Code source: User code, if any

sum (optional string)	script/start/arguments: 1/source/
Explicit code to run as user script (if user_function is not set or is an existing user script function), if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	User function invocation	The user_function is invoked with no arguments
string	User code	Explicit code to run as user script (if user_function is not set or is an existing user script function)

8.8.1 User code

(possibly) string	script/start/arguments: 1/source/
Explicit code to run as user script (if user_function is not set or is an existing user script function)	

This string does not correspond to an actual resource.

8.9 Code source: Displayed source code, if any

sum (optional string)	script/start/arguments: 1/displayed_source/
Source code describing thread overview (doesn't have to be valid code), if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	Use default	Display source, or user_function name
string	Displayed source code	Source code describing thread overview (doesn't have to be valid code)

8.9.1 Displayed source code

(possibly) string	script/start/arguments: 1/displayed_source/
Source code describing thread overview (doesn't have to be valid code)	

This string does not correspond to an actual resource.

8.10 Stop a script thread

call	script/stop/
Stop a user scripting thread, or all user scripting threads	

Performing the function call is denied if not [administrative user](#)

The call accepts the following arguments:

1. Thread ID or All threads

The call returns no results (expect an empty tuple).

Sample invocation:

```
curl --digest -u admin:1234 -X POST -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/script/stop/"
```

⇒

null

See also [Stop a script thread: Thread\(s\) to stop](#)

8.11 Stop a script thread: Thread(s) to stop

sum (string)	script/stop/arguments: 1/
Identifier of the thread to stop, or "all" to stop all threads	

This sum does not correspond to an actual resource.

This sum can assume the following values:

string	Thread ID	Identifier of the thread to stop	thread map[the value]
constant "all"	All threads	Stop all threads	

8.11.1 Thread ID

(possibly) string	script/stop/arguments: 1/
Identifier of the thread to stop	

The value is subject to the following constraints: [thread map\[the value\]](#)

This string does not correspond to an actual resource.

8.12 Script tracing

sum (boolean)	script/traced/
Perform step-by-step logging of script operation	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/traced/"
```

⇒ (possible variant)

```
true
```

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ script/traced/"
```

8.13 Script step delay

number	script/step_delay/
Delay after executing legacy scripting functions	

The value is subject to the following constraints: [the value](#) is greater than 0

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/step_delay/"
```

⇒

6

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "10" "https://192.168.0.100/restapi/ ↵
↵ script/step_delay/"
```

8.14 Script step time limit

number	script/step_time_limit/
Maximum amount of time a scripting thread is allowed to run uninterrupted	

The value is subject to the following constraints: [the value](#) is greater than 0

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/step_time_limit/"
```

⇒

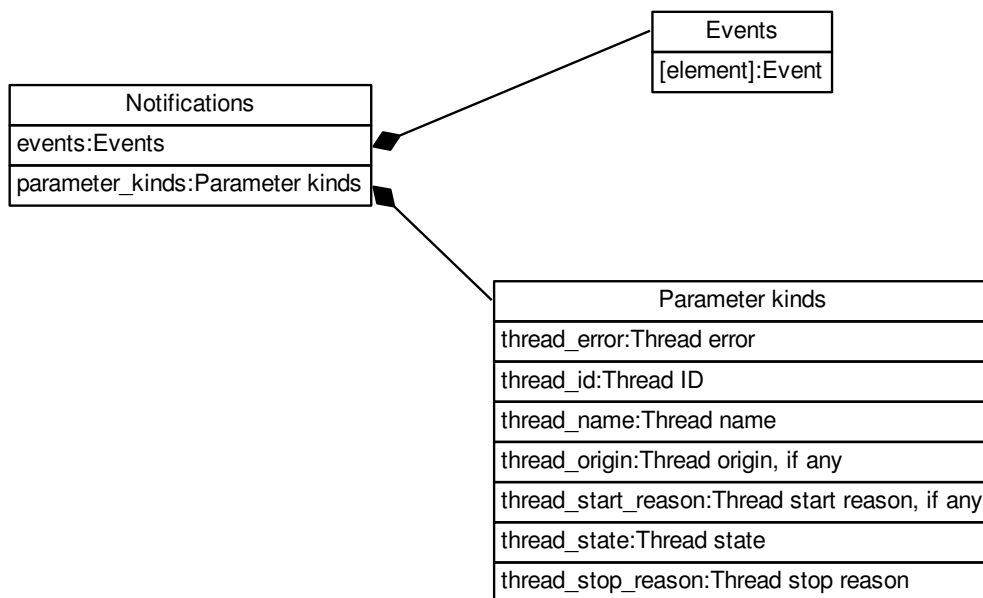
4

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "8" "https://192.168.0.100/restapi/script ↵
↵ /step_time_limit/"
```

8.15 Notifications

object	script/notifications/
Scripting server notifications	



This object does not support direct modification.

This object contains the following items:

events	Events
parameter_kinds	Parameter kinds

Sample read command:

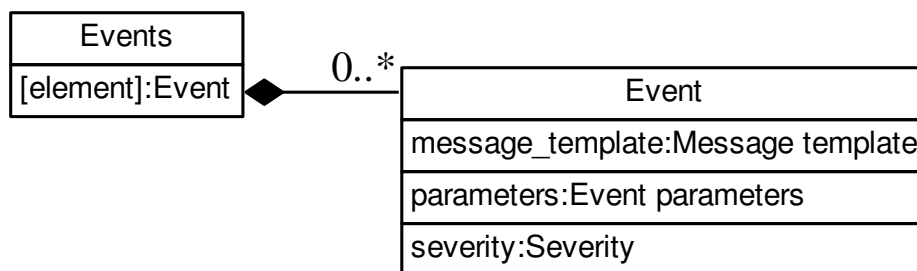
```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/notifications/"
```

⇒

...

8.15.1 Events

map	script/notifications/events/
Event templates	



This map does not support direct modification.

This map contains [Event](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/notifications/events/"
```

⇒

...

Creating elements in this collection is not supported.

See also [Events: Event](#)

8.15.2 Parameter kinds

object	script/notifications/parameter_kinds/
Kinds of event parameters	

This object does not correspond to an actual resource.

This object contains the following items:

thread_error	Thread error
thread_id	Thread ID
thread_name	Thread name
thread_origin	Thread origin, if any
thread_start_reason	Thread start reason, if any
thread_state	Thread state
thread_stop_reason	Thread stop reason

See also [Parameter kinds: Thread error](#)

See also [Parameter kinds: Thread ID](#)

See also [Parameter kinds: Thread name](#)

See also [Parameter kinds: Thread origin, if any](#)

See also [Parameter kinds: Thread start reason, if any](#)

See also [Parameter kinds: Thread state](#)

See also [Parameter kinds: Thread stop reason](#)

8.16 Message template: Message template element

sum (variant)	script/notifications/events/S/message_template/N/
Element of human-readable message template	

This sum does not support direct modification.

This sum can assume the following values:

string	String	Fixed string	
number	Parameter	Index of message parameter to insert	event parameters[the value]

Sample read command (note that :event and :message_template_element are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/notifications/events/:event/message_template/: ↵
↵ message_template_element/"
```

⇒ (possible variant)

"Sample value"

8.16.1 String

(possibly) string	script/notifications/events/S/message_template/N/
Fixed string	

8.16.2 Parameter

(possibly) number	script/notifications/events/S/message_template/N/
Index of message parameter to insert	

The value is subject to the following constraints: [event parameters\[the value\]](#)

8.17 Event parameter: Fixed value

sum (variant)	script/notifications/events/S/parameters/N/fixed_value/
Fixed parameter value for this particular event	

This sum does not support direct modification.

This sum can assume the following values:

constant null	Null	Null
constant true	True	True
constant false	False	False
string	String	This string
number	Number	This number

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
    ↵ restapi/script/notifications/events/:event/parameters/:event_parameter/ ↵
    ↵ fixed_value/"
```

⇒ (possible variant)

5

8.17.1 String

(possibly) string	script/notifications/events/S/parameters/N/fixed_value/
This string	

8.17.2 Number

(possibly) number	script/notifications/events/S/parameters/N/fixed_value/
This number	

8.18 Event parameter: Fixed value flag

sum (boolean)	script/notifications/events/S/parameters/N/has_fixed_value/
Flag indicating that the parameter's value for this event is fixed	

This sum does not support direct modification.

This sum can assume the following values:

constant true	Fixed	The value is fixed
constant false	Variable	The value is variable

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/notifications/events/:event/parameters/:event_parameter/ ↵
↵ has_fixed_value/"
```

⇒ (possible variant)

true

8.19 Event parameter: Identifier

string	script/notifications/events/S/parameters/N/id/
Parameter identifier	

The value is subject to the following constraints: [parameter kinds](#)

This string does not support direct modification.

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

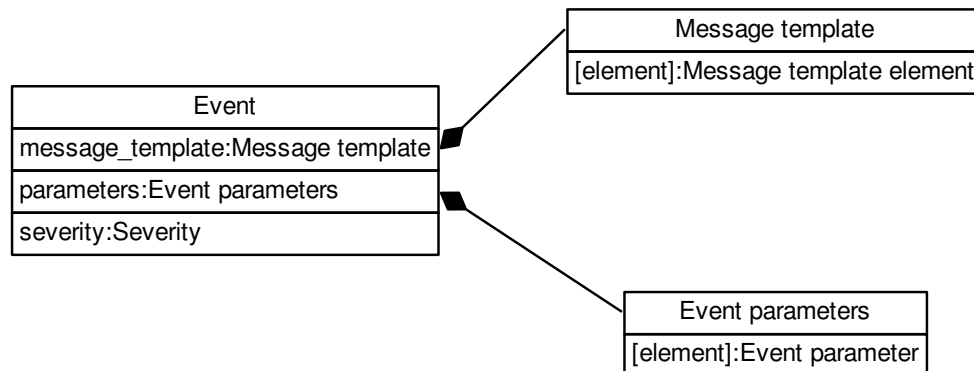
```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/notifications/events/:event/parameters/:event_parameter/id/"
```

⇒

"Sample value"

8.20 Events: Event

object	script/notifications/events/S/
Event template	



This object contains the following items:

message_template	Message template
parameters	Event parameters
severity	Severity

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/notifications/events/:event/"
```

⇒

```
{
  "severity":2,
  "message_template":[
    6,
    "Sample value of message template of message template element #2",
    1,
    6,
    "Sample value of message template of message template element #5"
  ],
  "parameters":[
    {
      "fixed_value":true,
      "has_fixed_value":false,
      "id":"Sample value of event parameters of event parameter #1 of identifier"
    }
  ]
}
```

Sample write command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "..." "https://192.168.0.100/restapi/ ↵
↵ script/notifications/events/:event/"
```

8.20.1 Message template

array	script/notifications/events/S/message_template/
Template for human-readable message generation	

This array does not support direct modification.

This array contains [Message template element](#) elements.

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/notifications/events/:event/message_template/"
```

⇒

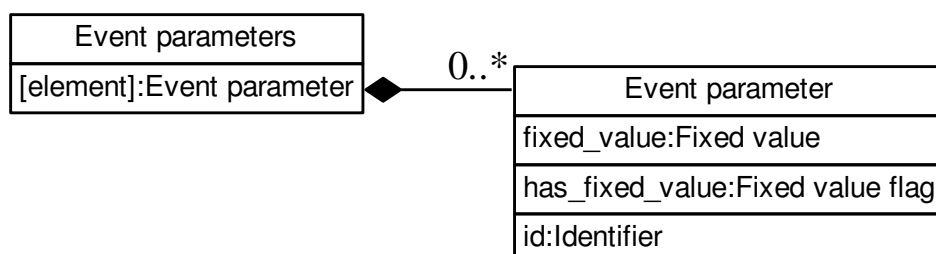
```
[
  2,
  "Sample value of message template element #2",
  4,
  6,
  6,
  1,
  "Sample value of message template element #7",
  "Sample value of message template element #8"
]
```

Creating elements in this collection is not supported.

See also [Message template: Message template element](#)

8.20.2 Event parameters

array	script/notifications/events/S/parameters/
Additional data associated with the event	



This array does not support direct modification.

This array contains [Event parameter](#) elements.

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/notifications/events/:event/parameters/"
```

⇒

```
[
  {
    "fixed_value":null,
    "has_fixed_value":true,
    "id":"Sample value of event parameter #1 of identifier"
  },
  {
    "fixed_value":5,
    "has_fixed_value":false,
    "id":"Sample value of event parameter #2 of identifier"
  },
  {
    "fixed_value":"Sample value of event parameter #3 of fixed value",
    "has_fixed_value":false,
    "id":"Sample value of event parameter #3 of identifier"
  },
  {
    "fixed_value":"Sample value of event parameter #4 of fixed value",
    "has_fixed_value":true,
    "id":"Sample value of event parameter #4 of identifier"
  },
  {
    "fixed_value":false,
    "has_fixed_value":false,
    "id":"Sample value of event parameter #5 of identifier"
  }
]
```

Creating elements in this collection is not supported.

8.20.2.1 Event parameter

object	script/notifications/events/S/parameters/N/
Properties of a parameter associated with the event	

This object contains the following items:

fixed_value	Fixed value
has_fixed_value	Fixed value flag
id	Identifier

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/notifications/events/:event/parameters/:event_parameter/"
```

⇒

```
{
  "fixed_value":"Sample value of fixed value",
  "has_fixed_value":true,
  "id":"Sample value of identifier"
}
```

Sample write command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"fixed_value":null,"has_fixed_value":false,"id":"Sample
↪ value of identifier"}'\
"https://192.168.0.100/restapi/script/notifications/events/:event/parameters/:
↪ event_parameter/"
```

See also [Event parameter: Fixed value](#)

See also [Event parameter: Fixed value flag](#)

See also [Event parameter: Identifier](#)

8.20.3 Severity

sum (enumerated number)	script/notifications/events/S/severity/
Severity rating assigned to the event	

This sum does not support direct modification.

This sum can assume the following values:

constant 1	Emergency	Treat the event as an emergency
constant 2	Alert	Treat the event as an alert
constant 3	Critical	Treat the event as critical
constant 4	Error	Treat the event as an error
constant 5	Warning	Treat the event as a warning
constant 6	Notice	Treat the event as a notice
constant 7	Informational	Treat the event as informational
constant 8	Debug	Treat the event as debugging-related

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/
↪ restapi/script/notifications/events/:event/severity/"
```

⇒ (possible variant)

7

8.21 Parameter kinds: Thread error

string	script/notifications/parameter_kinds/thread_error/
Thread execution error description	

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/notifications/parameter_kinds/thread_error/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/script/notifications/parameter_kinds/thread_error ↵
↵ /"
```

8.22 Parameter kinds: Thread ID

string	script/notifications/parameter_kinds/thread_id/
Thread identifier	

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/notifications/parameter_kinds/thread_id/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/script/notifications/parameter_kinds/thread_id/"
```

8.23 Parameter kinds: Thread name

string	script/notifications/parameter_kinds/thread_name/
Thread human-readable name	

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/notifications/parameter_kinds/thread_name/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: application/json" --data-binary "\"Sample value\"" "https://192.168.0.100/restapi/script/notifications/parameter_kinds/thread_name/"
```

8.24 Parameter kinds: Thread origin, if any

sum (optional string)	script/notifications/parameter_kinds/thread_origin/
Origin of the thread, if any	

This sum can assume the following values:

constant null	Unknown origin	Origin of this thread is not known
string	Thread origin	Origin of the thread

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/restapi/script/notifications/parameter_kinds/thread_origin/"
```

⇒ (possible variant)

null

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: application/json" --data-binary "\"Sample value\"" "https://192.168.0.100/restapi/script/notifications/parameter_kinds/thread_origin/"
```

8.24.1 Thread origin

(possibly) string	script/notifications/parameter_kinds/thread_origin/
Origin of the thread	

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: application/json" --data-binary "\"Sample value\"" "https://192.168.0.100/restapi/script/notifications/parameter_kinds/thread_origin/"
```

8.25 Parameter kinds: Thread start reason, if any

sum (optional string)	script/notifications/parameter_kinds/thread_start_reason/
Reason of the thread start, if any	

This sum can assume the following values:

constant null	Unknown start reason	Reason of the thread start is not known
string	Thread start reason	Reason of the thread start

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/notifications/parameter_kinds/thread_start_reason/"
```

⇒ (possible variant)

"Sample value"

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ script/notifications/parameter_kinds/thread_start_reason/"
```

8.25.1 Thread start reason

(possibly) string	script/notifications/parameter_kinds/thread_start_reason/
Reason of the thread start	

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/script/notifications/parameter_kinds/ ↵
↵ thread_start_reason/"
```

8.26 Parameter kinds: Thread state

sum (boolean)	script/notifications/parameter_kinds/thread_state/
Thread execution state	

This sum can assume the following values:

constant true	Running	The thread is running
constant false	Stopped	The thread is stopped

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/notifications/parameter_kinds/thread_state/"
```

⇒ (possible variant)

true

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ script/notifications/parameter_kinds/thread_state/"
```

8.27 Parameter kinds: Thread stop reason

string	script/notifications/parameter_kinds/thread_stop_reason/
Reason of the thread stop	

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/notifications/parameter_kinds/thread_stop_reason/"
```

⇒

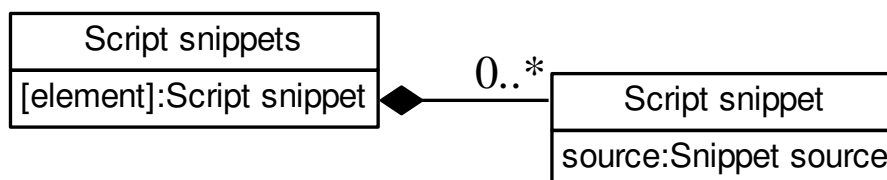
"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/script/notifications/parameter_kinds/ ↵
↵ thread_stop_reason/"
```

8.28 Script snippets

map	script/snippets/
Fragments of Lua code provided initially as samples or saved for later use	



Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This map represents a value in persistent storage.

Changes to this map cannot be tracked.

This map contains [Script snippet](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/snippets/"
```

⇒

```
{
  "script_snippets_3":{
    "source":"Sample value of script snippet script_snippets_3 of snippet source"
  },
  "script_snippets_4":{
    "source":"Sample value of script snippet script_snippets_4 of snippet source"
  },
  "script_snippets_1":{
    "source":"Sample value of script snippet script_snippets_1 of snippet source"
  },
  "script_snippets_2":{
    "source":"Sample value of script snippet script_snippets_2 of snippet source"
  }
}
```

Sample write command:

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/script/snippets/"
```

Sample script snippet creation command:

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary "{ \"source\": \"Sample value of script snippet script_snippets_4 of ↵
↵ snippet source\" }" \
"https://192.168.0.100/restapi/script/snippets/script_snippets_4/"
```

See also [Script snippets: Script snippet](#)

8.29 Script snippets: Script snippet

object	script/snippets/S/
User script snippet	

This object contains the following items:

source	Snippet source
------------------------	--------------------------------

Sample read command (note that :script_snippet is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/snippets/:script_snippet/"
```

⇒

```
{
  "source": "Sample value of snippet source"
}
```

Sample write command (note that :script_snippet is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary '{"source\":"Sample value of snippet ↵
↵ source\} "' "https://192.168.0.100/restapi/script/snippets/:script_snippet/"
```

Sample deletion command (note that :script_snippet is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/script/snippets/:script_snippet/"
```

8.29.1 Snippet source

string	script/snippets/S/source/
Source of the snippet	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Changes to this string cannot be tracked.

Sample read command (note that :script_snippet is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/snippets/:script_snippet/source/"
```

⇒

```
"Sample value"
```

Sample write command (note that :script_snippet is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/script/snippets/:script_snippet/source/"
```

8.30 User function UI order

array	script/user_function_ui_order/
Preferred order of user functions when displayed to user	

Retrieving the value is denied if not [administrative user](#)

This array does not support direct modification.

This array can change as if by itself or indirectly because of other actions.

Changes to this array cannot be tracked.

This array contains [User script function name for index](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/user_function_ui_order/"
```

⇒

```
[
  "Sample value of user script function name for index #1",
  "Sample value of user script function name for index #2",
  "Sample value of user script function name for index #3"
]
```

Creating elements in this collection is not supported.

8.30.1 User script function name for index

string	script/user_function_ui_order/N/
Indicates that the preferred location of this user function in a list is the index in the array; may specify a nonexistent function	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

Sample read command (note that :user_script_function_name_for_index is a URL template argument and needs to be replaced before trying):

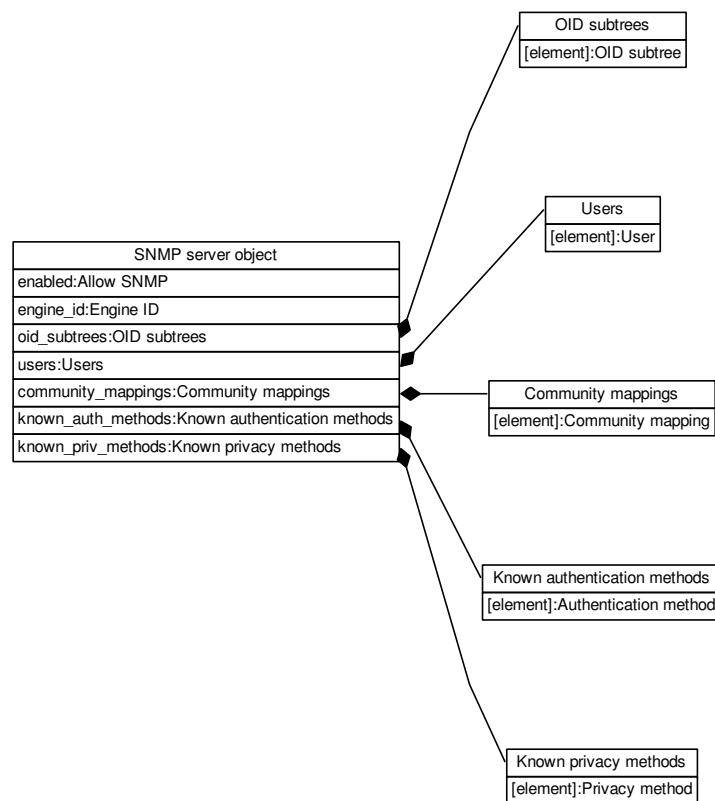
```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/script/user_function_ui_order/:user_script_function_name_for_index ↵
↵ /"
```

⇒

```
"Sample value"
```

9 SNMP server object

object	snmp/
Object representing SNMP server configuration	



This object contains the following items:

enabled	Allow SNMP
engine_id	Engine ID
oid_subtrees	OID subtrees
users	Users
community_mappings	Community mappings
known_auth_methods	Known authentication methods
known_priv_methods	Known privacy methods

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/snmp/"
```

⇒

...

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "... " "https://192.168.0.100/restapi/snmp ↵
↵ /"
```

9.1 Allow SNMP

sum (boolean)	snmp/enabled/
Enable SNMP server operation	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/snmp/enabled/"
```

⇒ (possible variant)

```
true
```

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ snmp/enabled/"
```

9.2 Engine ID

string	snmp/engine_id/
The engine ID, in hexadecimal, to which all user authentication and privacy keys are localized	

The value is subject to the following constraints: [the value](#) matches `([0-9A-F]{2})*`

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/snmp/engine_id/"
```

⇒

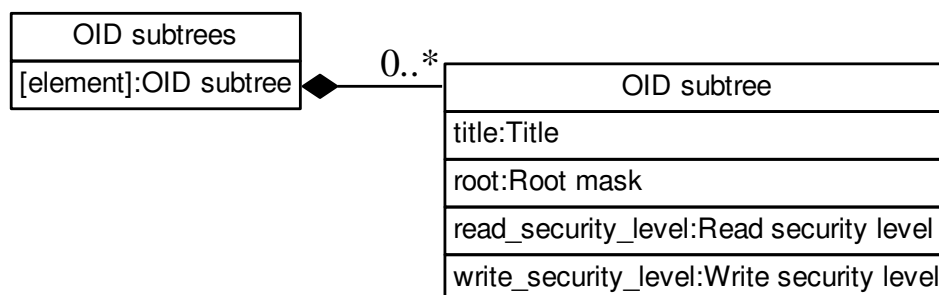
"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/snmp/engine_id/"
```

9.3 OID subtrees

map	snmp/oid_subtrees/
OID subtrees exposed by SNMP server	



Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This map represents a value in persistent storage.

This map contains [OID subtree](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/snmp/oid_subtrees/"
```

⇒

...

Sample write command:

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/snmp/oid_subtrees/"
```

Sample oid subtree creation command:

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/snmp/oid_subtrees/oid_subtrees_4/"
```

See also [OID subtrees: OID subtree](#)

9.4 OID subtrees: OID subtree

object	snmp/oid_subtrees/S/
Properties of an OID subtree	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This object represents a value in persistent storage.

This object contains the following items:

title	Title
root	Root mask
read_security_level	Read security level
write_security_level	Write security level

Sample read command (note that :oid_subtree is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/snmp/oid_subtrees/:oid_subtree/"
```

⇒

```
{
  "root": "Sample value of root mask",
  "read_security_level": "Sample value of read security level",
  "title": "Sample value of title",
  "write_security_level": "Sample value of write security level"
}
```

Sample write command (note that :oid_subtree is a URL template argument and needs to be replaced before trying):

```
curl \
--digest \
-u admin:1234 \
-X PUT \
-H "Content-type: application/json" \
-H "Accept: application/json" \
--data-binary '{"root": "Sample value of root mask", "read_security_level": " ↵
↵ Sample value of read security level", "title": "Sample value of title ↵
↵ \", "write_security_level": "Sample value of write security level"}' \
"https://192.168.0.100/restapi/snmp/oid_subtrees/:oid_subtree/"
```

Sample deletion command (note that :oid_subtree is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/snmp/oid_subtrees/:oid_subtree/"
```

9.4.1 Title

string	snmp/oid_subtrees/S/title/
The title of this subtree	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :oid_subtree is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/snmp/oid_subtrees/:oid_subtree/title/"
```

⇒

"Sample value"

Sample write command (note that :oid_subtree is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/snmp/oid_subtrees/:oid_subtree/title/"
```

9.4.2 Root mask

string	snmp/oid_subtrees/S/root/
The root OID mask of this subtree (for all but the first two arcs, '*' can be used for "don't care" parts, and inclusive ranges can be specified like '1,2,4-7')	

The value is subject to the following constraints: the value matches $^(0|1|(01|2)(.*|(0|[1-9][0-9]*)-(0|[1-9][0-9]*)?)?(0|[1-9][0-9]*)-(0|[1-9][0-9]*)?)$$

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :oid_subtree is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/snmp/oid_subtrees/:oid_subtree/root/"
```

⇒

"Sample value"

Sample write command (note that :oid_subtree is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/snmp/oid_subtrees/:oid_subtree/root/"
```

9.4.3 Read security level

sum (enumerated string)	snmp/oid_subtrees/S/read_security_level/
Required security level for reading from this subtree	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant "deny"	Forbidden	Nobody can read from this OID subtree
constant "priv"	Authenticated and encrypted	SNMPv3 authentication and encryption must be used to read from this OID subtree
constant "auth"	Authenticated	SNMPv3 authentication must be used to read from this OID subtree (encryption is optional)
constant "noauth"	Minimal	Any protocol, including SNMPv1 and SNMPv2c, can be used to read from this OID subtree (authentication and encryption are optional)

Sample read command (note that :oid_subtree is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/snmp/oid_subtrees/:oid_subtree/read_security_level/"
```

⇒ (possible variant)

"Sample value"

Sample (possible variant) write command (note that :oid_subtree is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/snmp/oid_subtrees/:oid_subtree/read_security_level ↵
↵ /"
```

9.4.4 Write security level

sum (enumerated string)	snmp/oid_subtrees/S/write_security_level/
Required security level for writing to this subtree	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant "deny"	Forbidden	Nobody can write to this OID subtree
constant "priv"	Authenticated and encrypted	SNMPv3 authentication and encryption must be used to write to this OID subtree
constant "auth"	Authenticated	SNMPv3 authentication must be used to write to this OID subtree (encryption is optional)
constant "noauth"	Minimal	Any protocol, including SNMPv1 and SNMPv2c, can be used to write to this OID subtree (authentication and encryption are optional)

Sample read command (note that :oid_subtree is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/snmp/oid_subtrees/:oid_subtree/write_security_level/"
```

⇒ (possible variant)

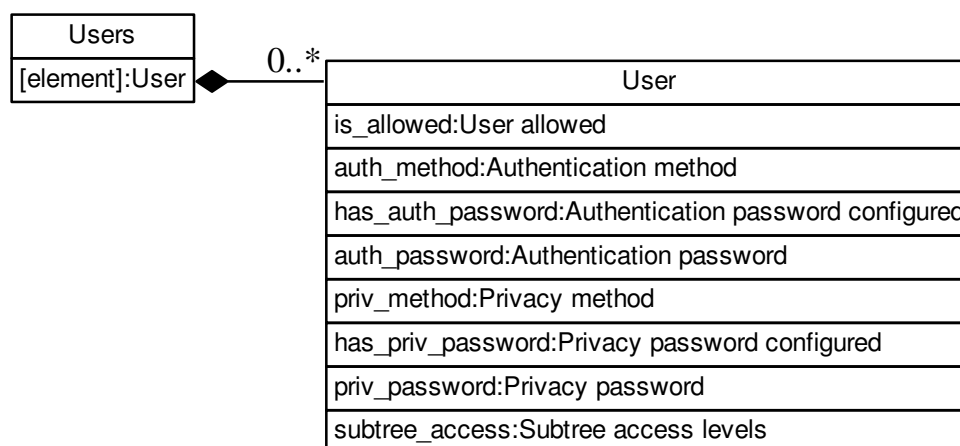
"Sample value"

Sample (possible variant) write command (note that :oid_subtree is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/snmp/oid_subtrees/:oid_subtree/ ↵
↵ write_security_level/"
```

9.5 Users

map	snmp/users/
SNMP user accounts	



Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This map represents a value in persistent storage.

This map contains [User](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/snmp/users/"
```

⇒

...

Sample write command:

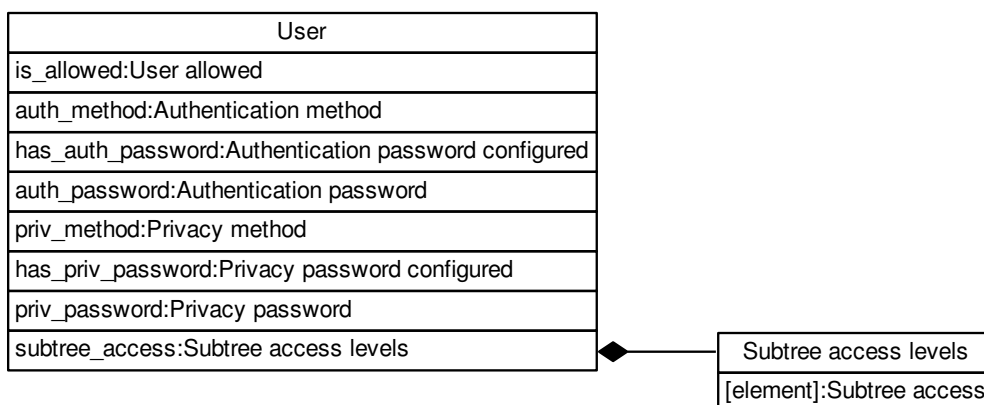
```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵  
↵ : application/json" --data-binary "... " "https://192.168.0.100/restapi/snmp ↵  
↵ /users/"
```

Sample user creation command:

```
curl\  
--digest\  
-u admin:1234\  
-X PUT\  
-H "Content-type: application/json\  
-H "Accept: application/json\  
\  
"https://192.168.0.100/restapi/snmp/users/users_1/"
```

9.5.1 User

object	snmp/users/S/
Properties of an SNMP user	



The value is subject to the following constraints: index of the value matches $^{\wedge}[a-zA-Z0-9]*\$$

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This object represents a value in persistent storage.

This object contains the following items:

is_allowed	User allowed
auth_method	Authentication method
has_auth_password	Authentication password configured
auth_password	Authentication password
priv_method	Privacy method
has_priv_password	Privacy password configured
priv_password	Privacy password
subtree_access	Subtree access levels

Sample read command (note that :user is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/snmp/users/:user/"
```

⇒

```
{
  "priv_password": "Sample value of privacy password",
  "has_auth_password": false,
  "subtree_access": {
    "subtree_access_levels_5": false,
```

```

"subtree_access_levels_6":false,
"subtree_access_levels_3":false,
"subtree_access_levels_1":"Sample value of subtree access levels of subtree ↵
↵ access subtree_access_levels_1",
"subtree_access_levels_4":true,
"subtree_access_levels_2":true
},
"auth_password":"Sample value of authentication password",
"is_allowed":false,
"priv_method":"Sample value of privacy method",
"auth_method":"Sample value of authentication method",
"has_priv_password":true
}

```

Sample write command (note that :user is a URL template argument and needs to be replaced before trying):

```

curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/snmp/users/:user/"

```

Sample deletion command (note that :user is a URL template argument and needs to be replaced before trying):

```

curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/snmp/users/:user/"

```

See also [User: User allowed](#)

See also [User: Authentication method](#)

See also [User: Authentication password configured](#)

See also [User: Authentication password](#)

See also [User: Privacy method](#)

See also [User: Privacy password configured](#)

See also [User: Privacy password](#)

See also [User: Subtree access levels](#)

9.6 User: User allowed

sum (boolean)	snmp/users/S/is_allowed/
Flag indicating whether user is allowed or denied	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)

- [protect network settings](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Allowed	The user is allowed to log in
constant false	Denied	The user is denied login

Sample read command (note that :user is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/snmp/users/:user/is_allowed/"
```

⇒ (possible variant)

```
true
```

Sample (possible variant) write command (note that :user is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ snmp/users/:user/is_allowed/"
```

9.7 User: Authentication method

string	snmp/users/S/auth_method/
User authentication method	

The value is subject to the following constraints: [known authentication methods](#)[the value]

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :user is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/snmp/users/:user/auth_method/"
```

⇒

```
"Sample value"
```

Sample write command (note that :user is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/snmp/users/:user/auth_method/"
```


9.8 User: Authentication password configured

sum (boolean)	snmp/users/S/has_auth_password/
Flag indicating if the authentication password has been configured for the user (cleared if engine ID or authentication method changes)	

Retrieving the value is denied if not [administrative user](#)

This sum does not support direct modification.

This sum can change as if by itself or indirectly because of other actions.

Changes to this sum cannot be tracked.

This sum can assume the following values:

constant true	Configured	The authentication password has been configured
constant false	Not configured	The authentication password hasn't been configured, the user won't be able to log in

Sample read command (note that :user is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/snmp/users/:user/has_auth_password/"
```

⇒ (possible variant)

```
true
```

9.9 User: Authentication password

string	snmp/users/S/auth_password/
User authentication password (cannot be read as it is stored localized to the engine ID), empty if not set	

The value is subject to the following constraints: any of the following is true:

- [the value](#) is equal to ""
- length of [the value](#) is greater or equal to 8

Retrieving the value is denied

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

Using the string as a field for indexing into the grandparent collection is denied

This string represents a value in persistent storage.

This string can change as if by itself or indirectly because of other actions.

This string should be displayed in a secure manner.

Representation of the resource cannot be obtained. Attempts to do so will succeed but return JSON `{"$ref":""}` which means "the value of this resource".

Sample write command (note that :user is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/snmp/users/:user/auth_password/"
```

9.10 User: Privacy method

string	snmp/users/S/priv_method/
User privacy method	

The value is subject to the following constraints: [known privacy methods](#)[the value]

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :user is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/snmp/users/:user/priv_method/"
```

⇒

"Sample value"

Sample write command (note that :user is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/snmp/users/:user/priv_method/"
```

9.11 User: Privacy password configured

sum (boolean)	snmp/users/S/has_priv_password/
Flag indicating if the privacy password has been configured for the user (cleared if engine ID or authentication or privacy method changes)	

Retrieving the value is denied if not [administrative user](#)

This sum does not support direct modification.

This sum can change as if by itself or indirectly because of other actions.

Changes to this sum cannot be tracked.

This sum can assume the following values:

constant true	Configured	The privacy password has been configured
constant false	Not configured	The privacy password hasn't been configured, the user won't be able to log in

Sample read command (note that :user is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/snmp/users/:user/has_priv_password/"
```

⇒ (possible variant)

```
false
```

9.12 User: Privacy password

string	snmp/users/S/priv_password/
User privacy password (cannot be read as it is stored localized to the engine ID), empty if not set	

The value is subject to the following constraints: any of the following is true:

- [the value](#) is equal to ""
- length of [the value](#) is greater or equal to 8

Retrieving the value is denied

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

Using the string as a field for indexing into the grandparent collection is denied

This string represents a value in persistent storage.

This string can change as if by itself or indirectly because of other actions.

This string should be displayed in a secure manner.

Representation of the resource cannot be obtained. Attempts to do so will succeed but return JSON '{"\$ref":""}' which means "the value of this resource".

Sample write command (note that :user is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/snmp/users/:user/priv_password/"
```

9.13 User: Subtree access levels

map	snmp/users/S/subtree_access/
OID subtree access levels	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This map represents a value in persistent storage.

This map contains [Subtree access](#) elements.

Sample read command (note that :user is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/snmp/users/:user/subtree_access/"
```

⇒

```
{
  "subtree_access_levels_2":false,
  "subtree_access_levels_1":true
}
```

Sample write command (note that :user is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"subtree_access_levels_3\":"Sample value of subtree access ↵
↵ subtree_access_levels_3\","\subtree_access_levels_1\":false,\ " ↵
↵ subtree_access_levels_4\":true,\subtree_access_levels_2\":true}'\
"https://192.168.0.100/restapi/snmp/users/:user/subtree_access/"
```

Sample subtree access creation command (note that :user is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary "\"Sample value of subtree access subtree_access_levels_5\""\
"https://192.168.0.100/restapi/snmp/users/:user/subtree_access/ ↵
↵ subtree_access_levels_5/"
```

9.13.1 Subtree access

sum (optional variant)	snmp/users/S/subtree_access/S/
OID subtree access level	

The value is subject to the following constraints: [oid subtrees](#)[index of the value]

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Full	OIDs can be read and written by the user
constant "readonly"	Read-only	OIDs can only be read, not written, by the user
constant false	None	OIDs can neither be read nor written by the user
constant null	Default	No access rule present (permissions are determined by parent OID access levels, or denied)

Sample read command (note that :user and :subtree_access are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/snmp/users/:user/subtree_access/:subtree_access/"
```

⇒ (possible variant)

```
true
```

Sample (possible variant) write command (note that :user and :subtree_access are URL template arguments and need to be replaced before trying):

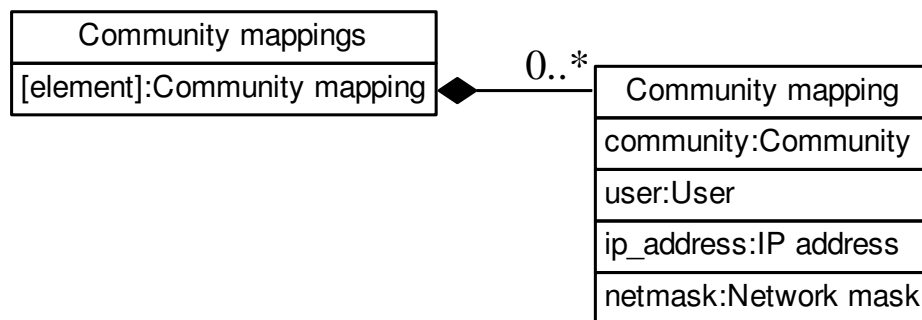
```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ snmp/users/:user/subtree_access/:subtree_access/"
```

Sample deletion command (note that :user and :subtree_access are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/snmp/users/:user/subtree_access/:subtree_access/"
```

9.14 Community mappings

array	snmp/community_mappings/
Mappings of SNMP v1/v2c communities to user names	



Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This array represents a value in persistent storage.

This array contains [Community mapping](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/snmp/community_mappings/"
```

⇒

...

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "... " "https://192.168.0.100/restapi/snmp ↵
↵ /community_mappings/"
```

Sample community mapping creation command:

```
curl\
--digest\
-u admin:1234\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"ip_address\":"Sample value of ip address\","netmask\":" ↵
↵ Sample value of network mask\","user\":"Sample value of user\"," ↵
↵ community\":"Sample value of community\"}'\
"https://192.168.0.100/restapi/snmp/community_mappings/"
```

See also [Community mappings: Community mapping](#)

9.15 Community mappings: Community mapping

object	snmp/community_mappings/N/
Properties of a community mapping	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This object represents a value in persistent storage.

This object contains the following items:

community	Community
user	User
ip_address	IP address
netmask	Network mask

Sample read command (note that :community_mapping is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/snmp/community_mappings/:community_mapping/"
```

⇒

```
{
  "ip_address": "Sample value of ip address",
  "netmask": "Sample value of network mask",
  "user": "Sample value of user",
  "community": "Sample value of community"
}
```

Sample write command (note that :community_mapping is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"ip_address\":"Sample value of ip address\","netmask\":" ↵
↵ Sample value of network mask\","user\":"Sample value of user\"," ↵
↵ community\":"Sample value of community\"}'\
"https://192.168.0.100/restapi/snmp/community_mappings/:community_mapping/"
```

Sample deletion command (note that :community_mapping is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/snmp/community_mappings/:community_mapping/"
```

9.15.1 Community

string	snmp/community_mappings/N/community/
The community identifier	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :community_mapping is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/snmp/community_mappings/:community_mapping/community/"
```

⇒

"Sample value"

Sample write command (note that :community_mapping is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵  
↵ : application/json" --data-binary "\"Sample value\"" "https ↵  
↵ ://192.168.0.100/restapi/snmp/community_mappings/:community_mapping/ ↵  
↵ community/"
```

9.15.2 User

string	snmp/community_mappings/N/user/
The user identifier	

The value is subject to the following constraints: [users\[the value\]](#)

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :community_mapping is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/snmp/community_mappings/:community_mapping/user/"
```

⇒

"Sample value"

Sample write command (note that :community_mapping is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/snmp/community_mappings/:community_mapping/user/"
```

9.15.3 IP address

string	snmp/community_mappings/N/ip_address/
IP address allowed to connect	

The value is subject to the following constraints: the value matches $^{\wedge}([0-9][1-9][0-9]|1[0-9]\{2\}|2[0-4][0-9]|25[0-5]).\{3\}([0-9][1-9][0-9]|1[0-9]\{2\}|2[0-4][0-9]|25[0-5])\$$

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :community_mapping is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/snmp/community_mappings/:community_mapping/ip_address/"
```

⇒

"Sample value"

Sample write command (note that :community_mapping is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/snmp/community_mappings/:community_mapping/ ↵
↵ ip_address/"
```

9.15.4 Network mask

string	snmp/community_mappings/N/netmask/
Network mask allowed to connect	

The value is subject to the following constraints: **the value** matches ^((2(5[42]|4[80]|24)|192|128|0).0.0.0|255.(2(5[42]|4[80]|24)|192|128|0)).0.0.0\$

Retrieving the value is denied if not **administrative user**

Changing the value is denied if any of the following is true:

- not administrative user
- protect network settings

This string represents a value in persistent storage.

Sample read command (note that `:community_mapping` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/snmp/community_mappings/:community_mapping/netmask/"
```


"Sample value"

Sample write command (note that `:community_mapping` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: application/json" --data-binary "\"Sample value\"" "https://192.168.0.100/restapi/snmp/community_mappings/:community_mapping/netmask/"
```

9.16 Known authentication methods

map	snmp/known_auth_methods/
Map of known authentication methods	

Retrieving the value is denied if not **administrative user**

This map does not support direct modification.

This map represents a value in persistent storage.

This map contains **Authentication method** elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/snmp/known_auth_methods/"
```

 \Rightarrow

```
{
  "known_authentication_methods_8": "Sample value of authentication method ↵
    ↵ known_authentication_methods_8",
  "known_authentication_methods_7": "Sample value of authentication method ↵
    ↵ known_authentication_methods_7",
}
```

```

"known_authentication_methods_1":"Sample value of authentication method ↵
↵ known_authentication_methods_1",
"known_authentication_methods_6":"Sample value of authentication method ↵
↵ known_authentication_methods_6",
"known_authentication_methods_5":"Sample value of authentication method ↵
↵ known_authentication_methods_5",
"known_authentication_methods_2":"Sample value of authentication method ↵
↵ known_authentication_methods_2",
"known_authentication_methods_4":"Sample value of authentication method ↵
↵ known_authentication_methods_4",
"known_authentication_methods_3":"Sample value of authentication method ↵
↵ known_authentication_methods_3"
}

```

Creating elements in this collection is not supported.

9.16.1 Authentication method

string	snmp/known_auth_methods/S/
Authentication method name	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

This string represents a value in persistent storage.

Sample read command (note that :authentication_method is a URL template argument and needs to be replaced before trying):

```

curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/snmp/known_auth_methods/:authentication_method/"

```

⇒

"Sample value"

9.17 Known privacy methods

map	snmp/known_priv_methods/
Map of known privacy methods	

Retrieving the value is denied if not [administrative user](#)

This map does not support direct modification.

This map represents a value in persistent storage.

This map contains [Privacy method](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/snmp/known_priv_methods/"
```

⇒

```
{
  "known_privacy_methods_8": "Sample value of privacy method ↵
↵ known_privacy_methods_8",
  "known_privacy_methods_5": "Sample value of privacy method ↵
↵ known_privacy_methods_5",
  "known_privacy_methods_1": "Sample value of privacy method ↵
↵ known_privacy_methods_1",
  "known_privacy_methods_7": "Sample value of privacy method ↵
↵ known_privacy_methods_7",
  "known_privacy_methods_3": "Sample value of privacy method ↵
↵ known_privacy_methods_3",
  "known_privacy_methods_2": "Sample value of privacy method ↵
↵ known_privacy_methods_2",
  "known_privacy_methods_6": "Sample value of privacy method ↵
↵ known_privacy_methods_6",
  "known_privacy_methods_9": "Sample value of privacy method ↵
↵ known_privacy_methods_9",
  "known_privacy_methods_4": "Sample value of privacy method ↵
↵ known_privacy_methods_4"
}
```

Creating elements in this collection is not supported.

9.17.1 Privacy method

string	snmp/known_priv_methods/S/
Privacy method name	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

This string represents a value in persistent storage.

Sample read command (note that :privacy_method is a URL template argument and needs to be replaced before trying):

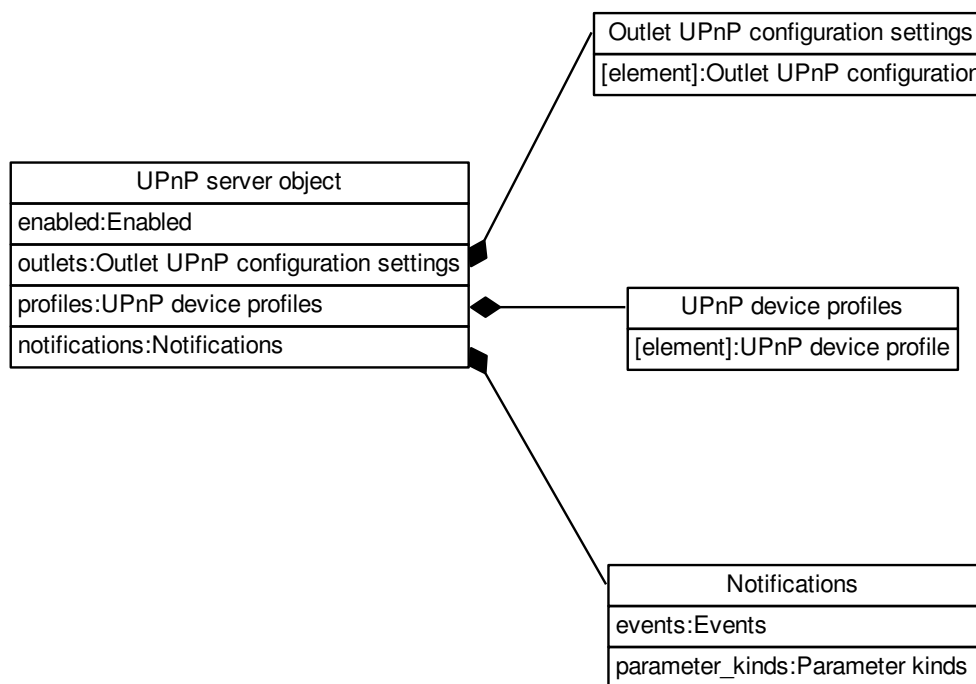
```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/snmp/known_priv_methods/:privacy_method/"
```

⇒

```
"Sample value"
```

10 UPnP server object

object	upnp/
Object representing the UPnP server configuration	



This object contains the following items:

enabled	Enabled
outlets	Outlet UPnP configuration settings
profiles	UPnP device profiles
notifications	Notifications

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/"
```

⇒

...

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "... " "https://192.168.0.100/restapi/upnp ↵
↵ /"
```

10.1 Enabled

sum (boolean)	upnp/enabled/
UPnP enable status	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/enabled/"
```

⇒ (possible variant)

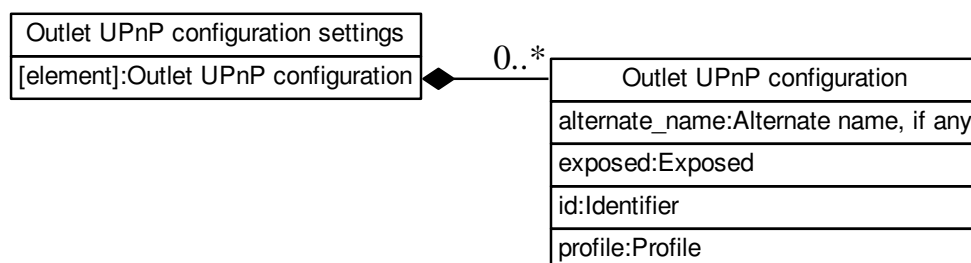
true

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ upnp/enabled/"
```

10.2 Outlet UPnP configuration settings

array	upnp/outlets/
Properties related to exposing outlets via UPnP	



The value is subject to the following constraints: length of [the value](#) is equal to length of [outlets](#)

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This array represents a value in persistent storage.

This array contains [Outlet UPnP configuration](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/outlets/"
```

⇒

...

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "... "https://192.168.0.100/restapi/upnp ↵
↵ /outlets/"
```

Sample outlet upnp configuration creation command:

```
curl\
--digest\
-u admin:1234\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"exposed":true,"profile\":"Sample value of profile\","id ↵
↵ \":"Sample value of identifier\","alternate_name\":"null"}'\
"https://192.168.0.100/restapi/upnp/outlets/"
```

10.2.1 Outlet UPnP configuration

object	upnp/outlets/N/
Properties related to exposing the outlet via UPnP	

The value is subject to the following constraints: [outlets](#)[index of the value]

This object contains the following items:

alternate_name	Alternate name, if any
exposed	Exposed
id	Identifier
profile	Profile

Sample read command (note that :outlet_upnp_configuration is a URL template argument and needs to be replaced before trying):


```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/outlets/:outlet_upnp_configuration/"
```

⇒

```
{
  "exposed":false,
  "profile":"Sample value of profile",
  "id":"Sample value of identifier",
  "alternate_name":null
}
```

Sample write command (note that :outlet_upnp_configuration is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"exposed":false,"profile":"Sample value of profile","id ↵
↵ ":"Sample value of identifier","alternate_name":"Sample value of ↵
↵ alternate name, if any"}'\
"https://192.168.0.100/restapi/upnp/outlets/:outlet_upnp_configuration/"
```

Sample deletion command (note that :outlet_upnp_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/upnp/outlets/:outlet_upnp_configuration/"
```

See also [Outlet UPnP configuration: Alternate name, if any](#)

See also [Outlet UPnP configuration: Exposed](#)

See also [Outlet UPnP configuration: Identifier](#)

See also [Outlet UPnP configuration: Profile](#)

10.3 Outlet UPnP configuration: Alternate name, if any

sum (optional string)	upnp/outlets/N/alternate_name/
Alternate name for the same outlet to be used instead of the configured name, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Configured outlet name	Use the outlet's configured name
string	Alternate name	Alternate name for the same outlet to be used instead of the configured name

Sample read command (note that :outlet_upnp_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/outlets/:outlet_upnp_configuration/alternate_name/"
```

⇒ (possible variant)

"Sample value"

Sample (possible variant) write command (note that :outlet_upnp_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ upnp/outlets/:outlet_upnp_configuration/alternate_name/"
```

10.3.1 Alternate name

(possibly) string	upnp/outlets/N/alternate_name/
Alternate name for the same outlet to be used instead of the configured name	

Sample write command (note that :outlet_upnp_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/upnp/outlets/:outlet_upnp_configuration/ ↵
↵ alternate_name/"
```

10.4 Outlet UPnP configuration: Exposed

sum (boolean)	upnp/outlets/N/exposed/
Outlet is exposed via UPnP	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command (note that :outlet_upnp_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/outlets/:outlet_upnp_configuration/exposed/"
```

⇒ (possible variant)

```
false
```

Sample (possible variant) write command (note that :outlet_upnp_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ upnp/outlets/:outlet_upnp_configuration/exposed/"
```

10.5 Outlet UPnP configuration: Identifier

string	upnp/outlets/N/id/
Outlet device identifier seed	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :outlet_upnp_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/outlets/:outlet_upnp_configuration/id/"
```

⇒

```
"Sample value"
```

Sample write command (note that :outlet_upnp_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/upnp/outlets/:outlet_upnp_configuration/id/"
```

10.6 Outlet UPnP configuration: Profile

string	upnp/outlets/N/profile/
Outlet device profile	

The value is subject to the following constraints: [upnp device profiles](#)[the value]

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :outlet_upnp_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/outlets/:outlet_upnp_configuration/profile/"
```

⇒

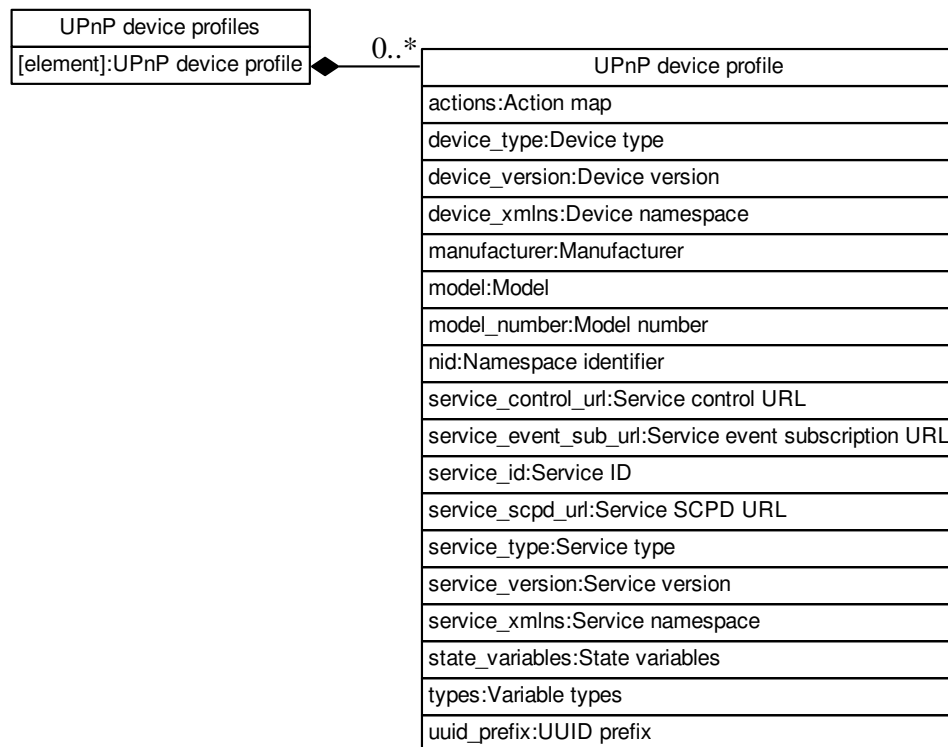
"Sample value"

Sample write command (note that :outlet_upnp_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/upnp/outlets/:outlet_upnp_configuration/profile/"
```

10.7 UPnP device profiles

map	upnp/profiles/
Map of UPnP device exposure settings	



Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This map represents a value in persistent storage.

This map contains [UPnP device profile](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/"
```

⇒

...

Sample write command:

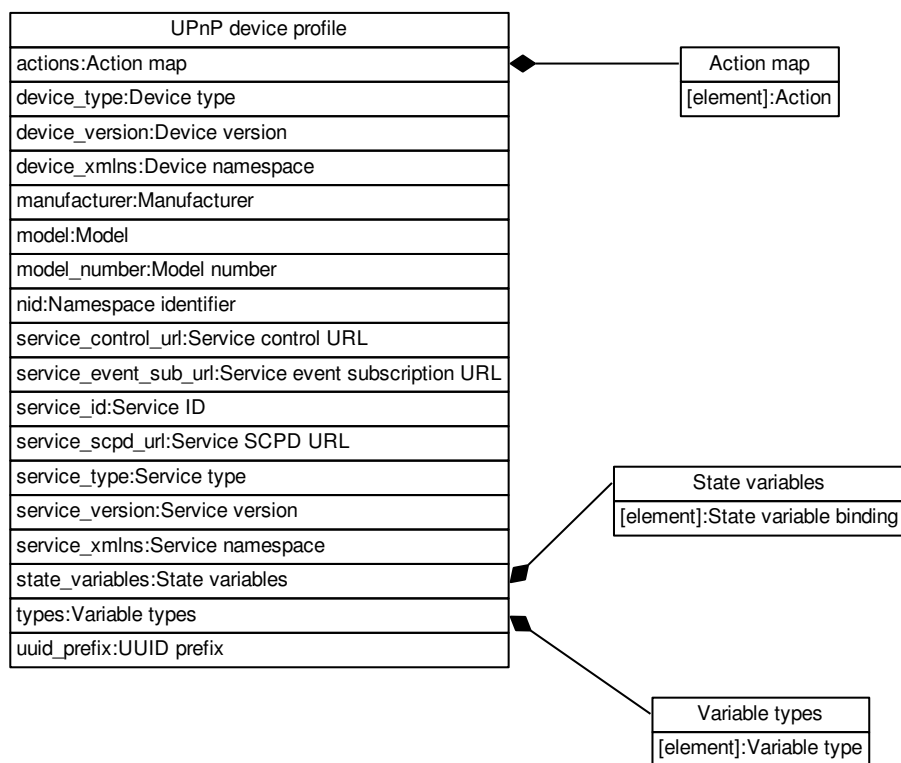
```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "... " "https://192.168.0.100/restapi/upnp ↵
↵ /profiles/"
```

Sample upnp device profile creation command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "... " "https://192.168.0.100/restapi/upnp ↵
↵ /profiles/upnp_device_profiles_2/"
```

10.7.1 UPnP device profile

object	upnp/profiles/S/
UPnP device exposure settings	



This object contains the following items:

actions	Action map
device_type	Device type
device_version	Device version
device_xmlns	Device namespace
manufacturer	Manufacturer
model	Model
model_number	Model number
nid	Namespace identifier
service_control_url	Service control URL
service_event_sub_url	Service event subscription URL
service_id	Service ID
service_scpd_url	Service SCPD URL
service_type	Service type
service_version	Service version
service_xmlns	Service namespace
state_variables	State variables
types	Variable types
uuid_prefix	UUID prefix

Sample read command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/upnp/profiles/:upnp_device_profile/"
```

⇒

...

Sample write command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵  
↵ : application/json" --data-binary "... " "https://192.168.0.100/restapi/upnp ↵  
↵ /profiles/:upnp_device_profile/"
```

Sample deletion command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵  
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/"
```

See also [UPnP device profile: Action map](#)

See also [UPnP device profile: Device type](#)

See also [UPnP device profile: Device version](#)

See also [UPnP device profile: Device namespace](#)

See also [UPnP device profile: Manufacturer](#)

See also [UPnP device profile: Model](#)

See also [UPnP device profile: Model number](#)

See also [UPnP device profile: Namespace identifier](#)

See also [UPnP device profile: Service control URL](#)

See also [UPnP device profile: Service event subscription URL](#)

See also [UPnP device profile: Service ID](#)

See also [UPnP device profile: Service SCPD URL](#)

See also [UPnP device profile: Service type](#)

See also [UPnP device profile: Service version](#)

See also [UPnP device profile: Service namespace](#)

See also [UPnP device profile: State variables](#)

See also [UPnP device profile: Variable types](#)

See also [UPnP device profile: UUID prefix](#)

10.8 Arguments: Argument

object	upnp/profiles/S/actions/S/arguments/N/
Action input or output argument properties	

This object contains the following items:

is_output	Output/return value flag
name	Argument name
state_id	Related state variable identifier, if any
type	Argument type

Sample read command (note that :upnp_device_profile, :action and :argument are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/actions/:action/arguments/: ↵
↵ argument/"
```

⇒

```
{
  "type":"Sample value of argument type",
  "is_output":false,
  "name":"Sample value of argument name",
  "state_id":null
}
```

Sample write command (note that :upnp_device_profile, :action and :argument are URL template arguments and need to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"type\":"Sample value of argument type\","is_output\":true,\" ↵
↵ name\":"Sample value of argument name\","state_id\":null}'\
"https://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/actions/:action ↵
↵ /arguments/:argument/"
```

Sample deletion command (note that :upnp_device_profile, :action and :argument are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/actions/:action ↵
↵ /arguments/:argument/"
```

10.8.1 Output/return value flag

sum (boolean)	upnp/profiles/S/actions/S/arguments/N/is_output/
Flag indicating that the argument is output/return instead of input	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Output/return	The argument is output, and also the return value if it's the first output argument
constant false	Input	The argument is input

Sample read command (note that :upnp_device_profile, :action and :argument are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/actions/:action/arguments/: ↵
↵ argument/is_output/"
```

⇒ (possible variant)

```
true
```

Sample (possible variant) write command (note that :upnp_device_profile, :action and :argument are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ upnp/profiles/:upnp_device_profile/actions/:action/arguments/:argument/ ↵
↵ is_output/"
```

10.8.2 Argument name

string	upnp/profiles/S/actions/S/arguments/N/name/
The name of the argument as seen by clients	

The value is subject to the following constraints: [the value](#) matches `^[a-zA-Z_][a-zA-Z_0-9]*$`

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :upnp_device_profile, :action and :argument are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/actions/:action/arguments/: ↵
↵ argument/name/"
```

⇒

"Sample value"

Sample write command (note that :upnp_device_profile, :action and :argument are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/actions/:action ↵
↵ /arguments/:argument/name/"
```

10.8.3 Related state variable identifier, if any

sum (optional string)	upnp/profiles/S/actions/S/arguments/N/state_id/
The identifier of the state variable to which the argument is related, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	No related state variable	The argument isn't related to a state variable	
string	Related state variable identifier	The identifier of the state variable to which the argument is related	state variables[the value]

Sample read command (note that :upnp_device_profile, :action and :argument are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/actions/:action/arguments/: ↵
↵ argument/state_id/"
```

⇒ (possible variant)

"Sample value"

Sample (possible variant) write command (note that :upnp_device_profile, :action and :argument are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ upnp/profiles/:upnp_device_profile/actions/:action/arguments/:argument/ ↵
↵ state_id/"
```

10.8.3.1 Related state variable identifier

(possibly) string	upnp/profiles/S/actions/S/arguments/N/state_id/
The identifier of the state variable to which the argument is related	

The value is subject to the following constraints: [state variables](#)[the value]

Sample write command (note that :upnp_device_profile, :action and :argument are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/actions/:action ↵
↵ /arguments/:argument/state_id/"
```

10.8.4 Argument type

string	upnp/profiles/S/actions/S/arguments/N/type/
The type of the argument	

The value is subject to the following constraints: [variable types](#)[the value]

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :upnp_device_profile, :action and :argument are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/actions/:action/arguments/: ↵
↵ argument/type/"
```

⇒

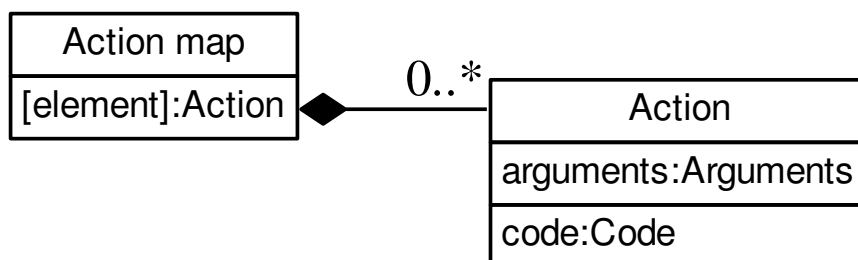
"Sample value"

Sample write command (note that :upnp_device_profile, :action and :argument are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/actions/:action ↵
↵ /arguments/:argument/type/"
```

10.9 UPnP device profile: Action map

map	upnp/profiles/S/actions/
Map of actions that can be performed on the outlet	



Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This map represents a value in persistent storage.

This map contains [Action](#) elements.

Sample read command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/actions/"
```

⇒

...

Sample write command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

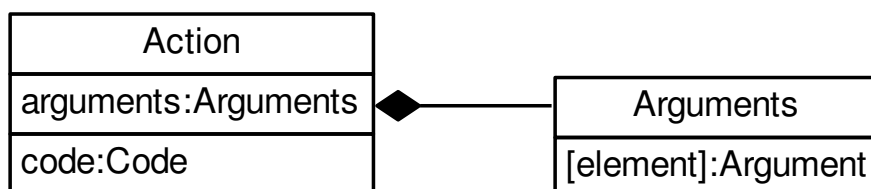
```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "..." "https://192.168.0.100/restapi/upnp ↵
↵ /profiles/:upnp_device_profile/actions/"
```

Sample action creation command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "..." "https://192.168.0.100/restapi/upnp ↵
↵ /profiles/:upnp_device_profile/actions/action_map_2/"
```

10.9.1 Action

object	upnp/profiles/S/actions/S/
Action properties	



The value is subject to the following constraints: index of the value matches `^[a-zA-Z][a-zA-Z_0-9]*$`

This object contains the following items:

arguments	Arguments
code	Code

Sample read command (note that `:upnp_device_profile` and `:action` are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/actions/:action/"
```

⇒

...

Sample write command (note that `:upnp_device_profile` and `:action` are URL template arguments and need to be replaced before trying):

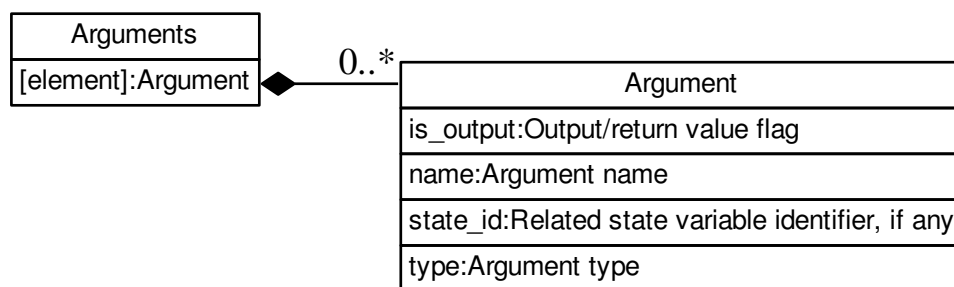
```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "... " "https://192.168.0.100/restapi/upnp ↵
↵ /profiles/:upnp_device_profile/actions/:action/"
```

Sample deletion command (note that `:upnp_device_profile` and `:action` are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/actions/:action ↵
↵ /"
```

10.9.1.1 Arguments

array	upnp/profiles/S/actions/S/arguments/
Action input and output arguments	



Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This array represents a value in persistent storage.

This array contains [Argument](#) elements.

Sample read command (note that :upnp_device_profile and :action are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/actions/:action/arguments/"
```

⇒

```
[
  {
    "type":"Sample value of argument #1 of argument type",
    "is_output":true,
    "name":"Sample value of argument #1 of argument name",
    "state_id":null
  }
]
```

Sample write command (note that :upnp_device_profile and :action are URL template arguments and need to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/actions/:action ↵
↵ /arguments/"
```

Sample argument creation command (note that :upnp_device_profile and :action are URL template arguments and need to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"type":"Sample value of argument type","is_output":false," ↵
↵ name":"Sample value of argument name","state_id":null}'\
"https://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/actions/:action ↵
↵ /arguments/"
```

See also [Arguments: Argument](#)

10.9.1.2 Code

string	upnp/profiles/S/actions/S/code/
Code of Lua function to perform the action	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :upnp_device_profile and :action are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/actions/:action/code/"
```

⇒

"Sample value"

Sample write command (note that :upnp_device_profile and :action are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/actions/:action ↵
↵ /code/"
```

10.10 UPnP device profile: Device type

string	upnp/profiles/S/device_type/
Device type identifier	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/device_type/"
```

⇒

"Sample value"

Sample write command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/device_type/"
```

10.11 UPnP device profile: Device version

string	upnp/profiles/S/device_version/
Device version string	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/device_version/"
```

⇒

"Sample value"

Sample write command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/device_version ↵
↵ /"
```

10.12 UPnP device profile: Device namespace

string	upnp/profiles/S/device_xmlns/
Device description XML namespace	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/device_xmlns/"
```

⇒

"Sample value"

Sample write command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/device_xmlns/"
```

10.13 UPnP device profile: Manufacturer

string	upnp/profiles/S/manufacturer/
Manufacturer name	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/upnp/profiles/:upnp_device_profile/manufacturer/"
```

⇒

"Sample value"

Sample write command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵  
↵ : application/json" --data-binary "\"Sample value\"" "https ↵  
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/manufacturer/"
```

10.14 UPnP device profile: Model

string	upnp/profiles/S/model/
Model name	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/upnp/profiles/:upnp_device_profile/model/"
```

⇒

"Sample value"

Sample write command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵  
↵ : application/json" --data-binary "\"Sample value\"" "https ↵  
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/model/"
```

10.15 UPnP device profile: Model number

string	upnp/profiles/S/model_number/
Model number string	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/model_number/"
```

⇒

"Sample value"

Sample write command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/model_number/"
```

10.16 UPnP device profile: Namespace identifier

string	upnp/profiles/S/nid/
URN namespace identifier	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/nid/"
```

⇒

"Sample value"

Sample write command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/nid/"
```

10.17 UPnP device profile: Service control URL

string	upnp/profiles/S/service_control_url/
URL to send service control requests to	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/service_control_url/"
```

⇒

"Sample value"

Sample write command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/ ↵
↵ service_control_url/"
```

10.18 UPnP device profile: Service event subscription URL

string	upnp/profiles/S/service_event_sub_url/
URL to send service subscription management requests to	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/service_event_sub_url/"
```

⇒

"Sample value"

Sample write command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/ ↵
↵ service_event_sub_url/"
```

10.19 UPnP device profile: Service ID

string	upnp/profiles/S/service_id/
Service identifier	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/service_id/"
```

⇒

"Sample value"

Sample write command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/service_id/"
```

10.20 UPnP device profile: Service SCPD URL

string	upnp/profiles/S/service_scpd_url/
Service control protocol document URL	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/upnp/profiles/:upnp_device_profile/service_scpd_url/"
```

⇒

"Sample value"

Sample write command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: ↵  
↵ : application/json" --data-binary "\"Sample value\"" "https ↵  
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/ ↵  
↵ service_scpd_url/"
```

10.21 UPnP device profile: Service type

string	upnp/profiles/S/service_type/
Service type identifier	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/upnp/profiles/:upnp_device_profile/service_type/"
```

⇒

`"Sample value"`

Sample write command (note that `:upnp_device_profile` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/service_type/"
```

10.22 UPnP device profile: Service version

string	upnp/profiles/S/service_version/
Service version string	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that `:upnp_device_profile` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/service_version/"
```

⇒

`"Sample value"`

Sample write command (note that `:upnp_device_profile` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/service_version ↵
↵ /"
```

10.23 UPnP device profile: Service namespace

string	upnp/profiles/S/service_xmlns/
Service description XML namespace	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/service_xmlns/"
```

⇒

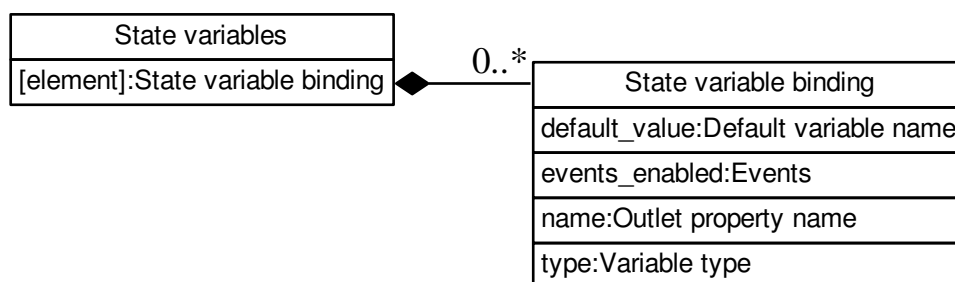
"Sample value"

Sample write command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/service_xmlns/"
```

10.24 UPnP device profile: State variables

map	upnp/profiles/S/state_variables/
Map of state variable bindings	



Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This map represents a value in persistent storage.

This map contains [State variable binding](#) elements.

Sample read command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/state_variables/"
```

⇒

```
{
  "state_variables_2":{
    "default_value":"Sample value of state variable binding state_variables_2 of ↵
↵ default variable name",
    "events_enabled":false,
    "name":"Sample value of state variable binding state_variables_2 of outlet ↵
↵ property name",
    "type":"Sample value of state variable binding state_variables_2 of variable ↵
↵ type"
  },
  "state_variables_1":{
    "default_value":"Sample value of state variable binding state_variables_1 of ↵
↵ default variable name",
    "events_enabled":false,
    "name":"Sample value of state variable binding state_variables_1 of outlet ↵
↵ property name",
    "type":"Sample value of state variable binding state_variables_1 of variable ↵
↵ type"
  }
}
```

Sample write command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/state_variables ↵
↵ /"
```

Sample state variable binding creation command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/state_variables ↵
↵ /state_variables_4/"
```

10.24.1 State variable binding

object	upnp/profiles/S/state_variables/S/
Properties of a state variable binding	

The value is subject to the following constraints: index of the value matches `^[a-zA-Z][a-zA-Z_0-9]*$`

This object contains the following items:

default_value	Default variable name
events_enabled	Events
name	Outlet property name
type	Variable type

Sample read command (note that `:upnp_device_profile` and `:state_variable_binding` are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/state_variables/: ↵
↵ state_variable_binding/"
```

⇒

```
{
  "default_value": "Sample value of default variable name",
  "events_enabled": false,
  "name": "Sample value of outlet property name",
  "type": "Sample value of variable type"
}
```

Sample write command (note that `:upnp_device_profile` and `:state_variable_binding` are URL template arguments and need to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"default_value": "Sample value of default variable name", ↵
↵ events_enabled": true, "name": "Sample value of outlet property name", ↵
↵ type": "Sample value of variable type"}'\
"https://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/state_variables ↵
↵ /:state_variable_binding/"
```

Sample deletion command (note that `:upnp_device_profile` and `:state_variable_binding` are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/state_variables ↵
↵ /:state_variable_binding/"
```

10.24.1.1 Default variable name

string	upnp/profiles/S/state_variables/S/default_value/
The string-encoded default value of the state variable	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :upnp_device_profile and :state_variable_binding are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/state_variables/: ↵
↵ state_variable_binding/default_value/"
```

⇒

"Sample value"

Sample write command (note that :upnp_device_profile and :state_variable_binding are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/state_variables ↵
↵ /:state_variable_binding/default_value/"
```

10.24.1.2 Events

sum (boolean)	upnp/profiles/S/state_variables/S/events_enabled/
Send events on property change	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command (note that :upnp_device_profile and :state_variable_binding are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/state_variables/: ↵
```

```
↪ state_variable_binding/events_enabled/"
```

⇒ (possible variant)

```
true
```

Sample (possible variant) write command (note that :upnp_device_profile and :state_variable_binding are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↪
↪ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↪
↪ upnp/profiles/:upnp_device_profile/state_variables/:state_variable_binding/ ↪
↪ events_enabled/"
```

10.24.1.3 Outlet property name

string	upnp/profiles/S/state_variables/S/name/
The outlet property to which the variable is bound	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :upnp_device_profile and :state_variable_binding are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↪
↪ restapi/upnp/profiles/:upnp_device_profile/state_variables/: ↪
↪ state_variable_binding/name/"
```

⇒

```
"Sample value"
```

Sample write command (note that :upnp_device_profile and :state_variable_binding are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↪
↪ : application/json" --data-binary "\"Sample value\"" "https ↪
↪ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/state_variables ↪
↪ /:state_variable_binding/name/"
```

10.24.1.4 Variable type

string	upnp/profiles/S/state_variables/S/type/
The type of the variable	

The value is subject to the following constraints: [variable types](#)[[the value](#)]

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :upnp_device_profile and :state_variable_binding are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/state_variables/: ↵
↵ state_variable_binding/type/"
```

⇒

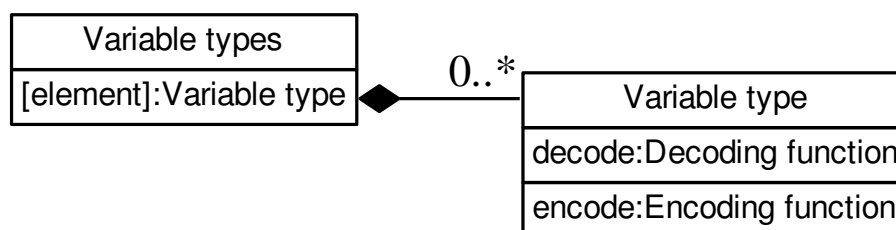
"Sample value"

Sample write command (note that :upnp_device_profile and :state_variable_binding are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/state_variables ↵
↵ /:state_variable_binding/type/"
```

10.25 UPnP device profile: Variable types

map	upnp/profiles/S/types/
Map of supported variable types	



Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This map represents a value in persistent storage.

This map contains [Variable type](#) elements.

Sample read command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/types/"
```

⇒

...

Sample write command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/types/"
```

Sample variable type creation command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"decode\":"Sample value of variable type variable_types_1 of ↵
↵ decoding function\","encode\":"Sample value of variable type ↵
↵ variable_types_1 of encoding function\"}'\
"https://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/types/ ↵
↵ variable_types_1/"
```

10.25.1 Variable type

object	upnp/profiles/S/types/S/
Variable type properties	

The value is subject to the following constraints: index of the value matches `^[a-zA-Z_][a-zA-Z_0-9]*$`

This object contains the following items:

decode	Decoding function
encode	Encoding function

Sample read command (note that :upnp_device_profile and :variable_type are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/types/:variable_type/"
```

⇒

```
{
  "decode": "Sample value of decoding function",
  "encode": "Sample value of encoding function"
}
```

Sample write command (note that :upnp_device_profile and :variable_type are URL template arguments and need to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"decode\":"Sample value of decoding function\","encode\":" ↵
↵ Sample value of encoding function\"}'\
"https://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/types/: ↵
↵ variable_type/"
```

Sample deletion command (note that :upnp_device_profile and :variable_type are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/types/: ↵
↵ variable_type/"
```

10.25.1.1 Decoding function

string	upnp/profiles/S/types/S/decode/
Code of Lua function to decode and validate the value's string representation	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :upnp_device_profile and :variable_type are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/types/:variable_type/decode/"
```

⇒

```
"Sample value"
```


Sample write command (note that :upnp_device_profile and :variable_type are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/types/: ↵
↵ variable_type/decode/"
```

10.25.1.2 Encoding function

string	upnp/profiles/S/types/S/encode/
Code of Lua function to check and encode the value to string representation	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :upnp_device_profile and :variable_type are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/types/:variable_type/encode/"
```

⇒

```
"Sample value"
```

Sample write command (note that :upnp_device_profile and :variable_type are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/types/: ↵
↵ variable_type/encode/"
```

10.26 UPnP device profile: UUID prefix

string	upnp/profiles/S/uuid_prefix/
Outlet device identifier prefix	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)

- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/profiles/:upnp_device_profile/uuid_prefix/"
```

⇒

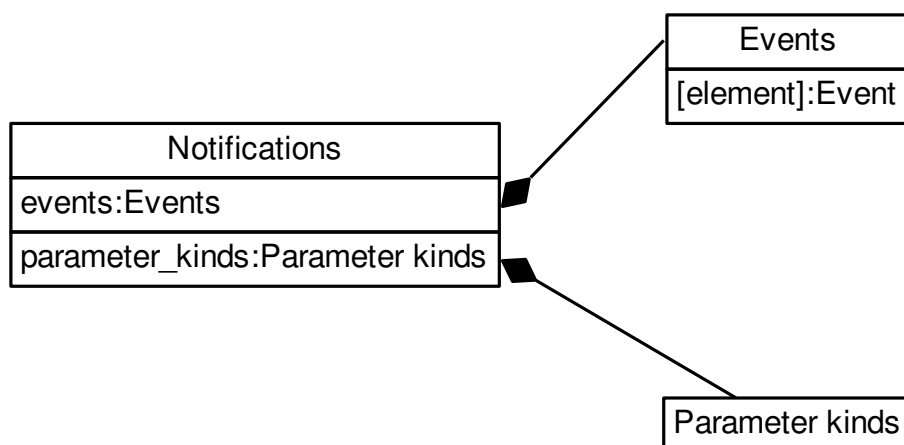
"Sample value"

Sample write command (note that :upnp_device_profile is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/upnp/profiles/:upnp_device_profile/uuid_prefix/"
```

10.27 Notifications

object	upnp/notifications/
UPnP-related notifications	



This object does not support direct modification.

This object contains the following items:

events	Events
parameter_kinds	Parameter kinds

Sample read command:

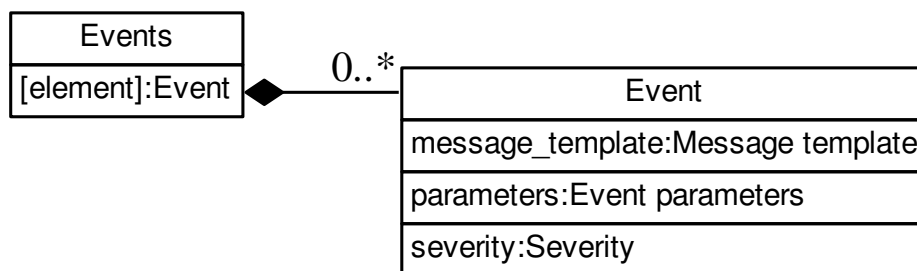
```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/notifications/"
```

⇒

...

10.27.1 Events

map	upnp/notifications/events/
Event templates	



This map does not support direct modification.

This map contains [Event](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/notifications/events/"
```

⇒

...

Creating elements in this collection is not supported.

See also [Events: Event](#)

10.27.2 Parameter kinds

object	upnp/notifications/parameter_kinds/
Kinds of event parameters	

This object does not correspond to an actual resource.

This object is empty.

10.28 Message template: Message template element

sum (variant)	upnp/notifications/events/S/message_template/N/
Element of human-readable message template	

This sum does not support direct modification.

This sum can assume the following values:

string	String	Fixed string	
number	Parameter	Index of message parameter to insert	event parameters[the value]

Sample read command (note that :event and :message_template_element are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/notifications/events/:event/message_template/: ↵
↵ message_template_element/"
```

⇒ (possible variant)

9

10.28.1 String

(possibly) string	upnp/notifications/events/S/message_template/N/
Fixed string	

10.28.2 Parameter

(possibly) number	upnp/notifications/events/S/message_template/N/
Index of message parameter to insert	

The value is subject to the following constraints: [event parameters\[the value\]](#)

10.29 Event parameter: Fixed value

sum (variant)	upnp/notifications/events/S/parameters/N/fixed_value/
Fixed parameter value for this particular event	

This sum does not support direct modification.

This sum can assume the following values:

constant null	Null	Null
constant true	True	True
constant false	False	False
string	String	This string
number	Number	This number

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/notifications/events/:event/parameters/:event_parameter/ ↵
↵ fixed_value/"
```

⇒ (possible variant)

9

10.29.1 String

(possibly) string	upnp/notifications/events/S/parameters/N/fixed_value/
This string	

10.29.2 Number

(possibly) number	upnp/notifications/events/S/parameters/N/fixed_value/
This number	

10.30 Event parameter: Fixed value flag

sum (boolean)	upnp/notifications/events/S/parameters/N/has_fixed_value/
Flag indicating that the parameter's value for this event is fixed	

This sum does not support direct modification.

This sum can assume the following values:

constant true	Fixed	The value is fixed
constant false	Variable	The value is variable

Sample read command (note that :event and :event_parameter are URL template arguments and need to be re-

placed before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/notifications/events/:event/parameters/:event_parameter/ ↵
↵ has_fixed_value/"
```

⇒ (possible variant)

false

10.31 Event parameter: Identifier

string	upnp/notifications/events/S/parameters/N/id/
Parameter identifier	

The value is subject to the following constraints: [parameter kinds](#)

This string does not support direct modification.

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

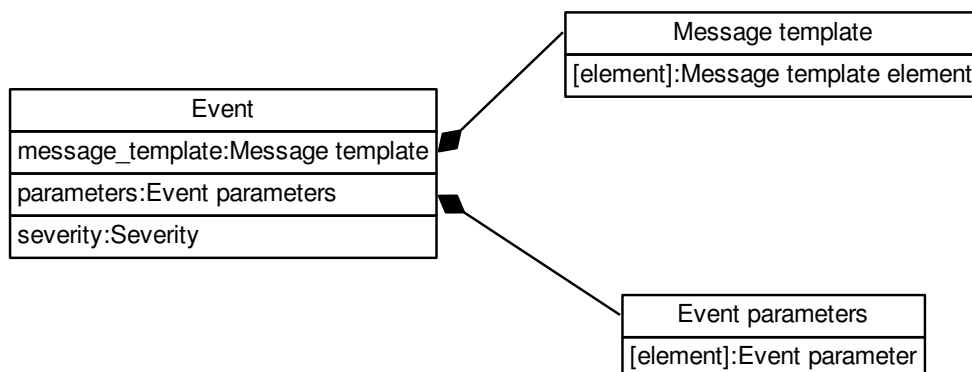
```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/notifications/events/:event/parameters/:event_parameter/id/"
```

⇒

"Sample value"

10.32 Events: Event

object	upnp/notifications/events/S/
Event template	



This object contains the following items:

message_template	Message template
parameters	Event parameters
severity	Severity

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/notifications/events/:event/"
```

⇒

...

Sample write command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/upnp/notifications/events/:event/"
```

10.32.1 Message template

array	upnp/notifications/events/S/message_template/
Template for human-readable message generation	

This array does not support direct modification.

This array contains [Message template element](#) elements.

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/notifications/events/:event/message_template/"
```

⇒

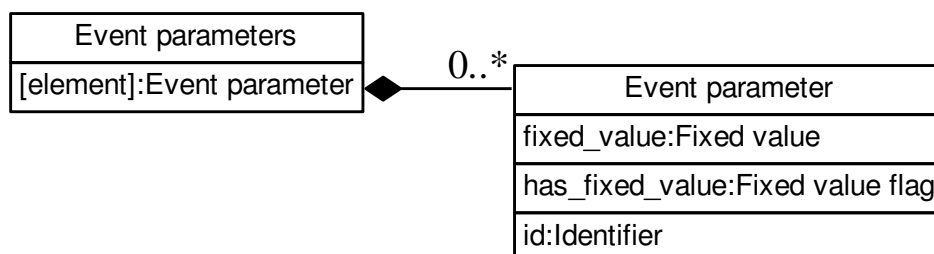
```
[
  "Sample value of message template element #1",
  "Sample value of message template element #2",
  "Sample value of message template element #3",
  "Sample value of message template element #4"
]
```

Creating elements in this collection is not supported.

See also [Message template: Message template element](#)

10.32.2 Event parameters

array	upnp/notifications/events/S/parameters/
Additional data associated with the event	



This array does not support direct modification.

This array contains [Event parameter](#) elements.

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/notifications/events/:event/parameters/"
```

⇒

```
[
  {
    "fixed_value":"Sample value of event parameter #1 of fixed value",
    "has_fixed_value":true,
  }
]
```



```

    "id":"Sample value of event parameter #1 of identifier"
  },
  {
    "fixed_value":null,
    "has_fixed_value":true,
    "id":"Sample value of event parameter #2 of identifier"
  },
  {
    "fixed_value":null,
    "has_fixed_value":true,
    "id":"Sample value of event parameter #3 of identifier"
  },
  {
    "fixed_value":null,
    "has_fixed_value":false,
    "id":"Sample value of event parameter #4 of identifier"
  },
  {
    "fixed_value":6,
    "has_fixed_value":false,
    "id":"Sample value of event parameter #5 of identifier"
  }
]

```

Creating elements in this collection is not supported.

10.32.2.1 Event parameter

object	upnp/notifications/events/S/parameters/N/
Properties of a parameter associated with the event	

This object contains the following items:

fixed_value	Fixed value
has_fixed_value	Fixed value flag
id	Identifier

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```

curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/upnp/notifications/events/:event/parameters/:event_parameter/"

```

⇒

```

{
  "fixed_value":null,
  "has_fixed_value":true,
  "id":"Sample value of identifier"
}

```

Sample write command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```

curl\
--digest\
-u admin:1234\

```

```
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"fixed_value\":"Sample value of fixed value\","has_fixed_value"
↪ \":true,\"id\":"Sample value of identifier\"}'\
"https://192.168.0.100/restapi/upnp/notifications/events/:event/parameters/:
↪ event_parameter/"
```

See also [Event parameter: Fixed value](#)

See also [Event parameter: Fixed value flag](#)

See also [Event parameter: Identifier](#)

10.32.3 Severity

sum (enumerated number)	upnp/notifications/events/S/severity/
Severity rating assigned to the event	

This sum does not support direct modification.

This sum can assume the following values:

constant 1	Emergency	Treat the event as an emergency
constant 2	Alert	Treat the event as an alert
constant 3	Critical	Treat the event as critical
constant 4	Error	Treat the event as an error
constant 5	Warning	Treat the event as a warning
constant 6	Notice	Treat the event as a notice
constant 7	Informational	Treat the event as informational
constant 8	Debug	Treat the event as debugging-related

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

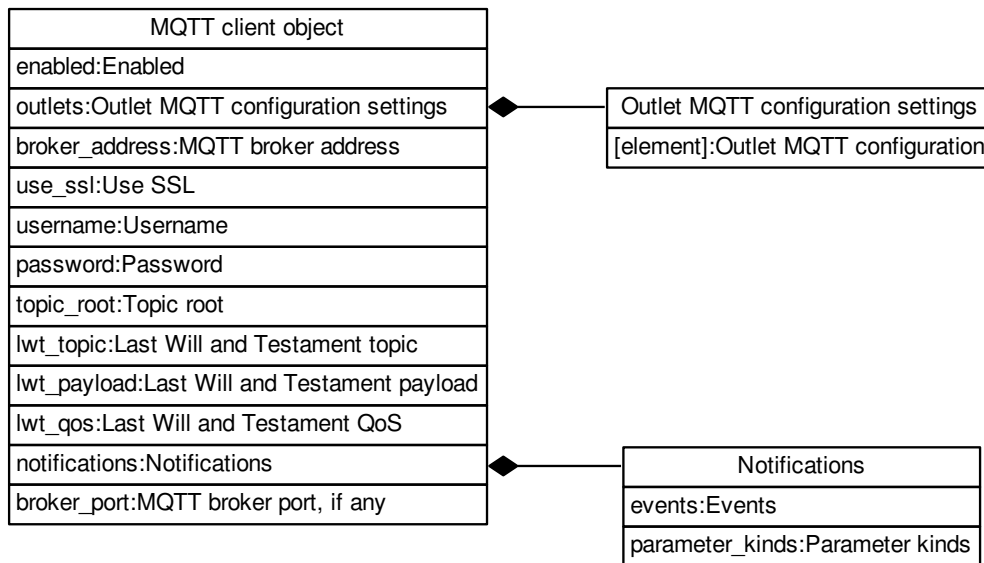
```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/
↪ restapi/upnp/notifications/events/:event/severity/"
```

⇒ (possible variant)

9

11 MQTT client object

object	mqtt/
Object representing the MQTT client configuration	



This object contains the following items:

enabled	Enabled
outlets	Outlet MQTT configuration settings
broker_address	MQTT broker address
use_ssl	Use SSL
username	Username
password	Password
topic_root	Topic root
lwt_topic	Last Will and Testament topic
lwt_payload	Last Will and Testament payload
lwt_qos	Last Will and Testament QoS
notifications	Notifications
broker_port	MQTT broker port, if any

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/mqtt/"
```

⇒

...

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "... " "https://192.168.0.100/restapi/mqtt ↵
↵ /"
```

11.1 Enabled

sum (boolean)	mqtt/enabled/
MQTT client enable status	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/mqtt/enabled/"
```

⇒ (possible variant)

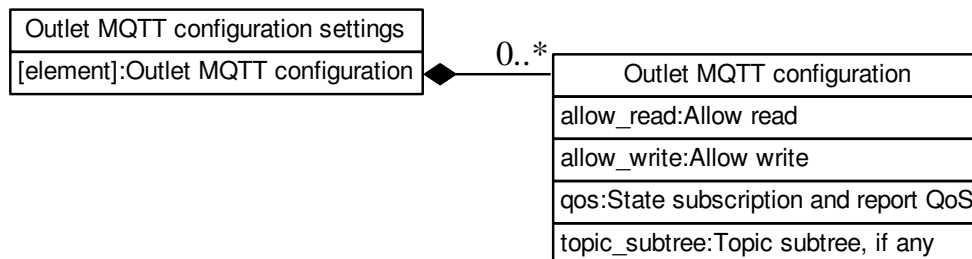
```
false
```

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ mqtt/enabled/"
```

11.2 Outlet MQTT configuration settings

array	mqtt/outlets/
Properties related to exposing outlets via MQTT	



The value is subject to the following constraints: length of [the value](#) is equal to length of [outlets](#)

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This array represents a value in persistent storage.

This array contains [Outlet MQTT configuration](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/mqtt/outlets/"
```

⇒

```
[
  {
    "topic_subtree":null,
    "allow_read":true,
    "allow_write":true,
    "qos":6
  }
]
```

Sample write command:

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/mqtt/outlets/"
```

Sample outlet mqtt configuration creation command:

```
curl\
--digest\
-u admin:1234\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"topic_subtree\":"Sample value of topic subtree, if any\","↔
↔ allow_read\":false,\"allow_write\":true,\"qos\":9}{"\
"https://192.168.0.100/restapi/mqtt/outlets/"
```

11.2.1 Outlet MQTT configuration

object	mqtt/outlets/N/
Properties related to exposing the outlet via MQTT	

The value is subject to the following constraints: [outlets](#)[index of the value]

This object contains the following items:

allow_read	Allow read
allow_write	Allow write
qos	State subscription and report QoS
topic_subtree	Topic subtree, if any

Sample read command (note that :outlet_mqtt_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/↔
↔ restapi/mqtt/outlets/:outlet_mqtt_configuration/"
```

⇒

```
{
  "topic_subtree":null,
  "allow_read":false,
  "allow_write":true,
  "qos":5
}
```

Sample write command (note that :outlet_mqtt_configuration is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"topic_subtree\":null,\"allow_read\":true,\"allow_write\":false↔
↔ ,\"qos\":2}{"\
"https://192.168.0.100/restapi/mqtt/outlets/:outlet_mqtt_configuration/"
```

Sample deletion command (note that :outlet_mqtt_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https↔
↔ ://192.168.0.100/restapi/mqtt/outlets/:outlet_mqtt_configuration/"
```

See also [Outlet MQTT configuration: Allow read](#)

See also [Outlet MQTT configuration: Allow write](#)

See also [Outlet MQTT configuration: State subscription and report QoS](#)

See also [Outlet MQTT configuration: Topic subtree, if any](#)

11.3 Outlet MQTT configuration: Allow read

sum (boolean)	mqtt/outlets/N/allow_read/
Outlet state is broadcasted via MQTT	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command (note that `:outlet_mqtt_configuration` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/mqtt/outlets/:outlet_mqtt_configuration/allow_read/"
```

⇒ (possible variant)

```
false
```

Sample (possible variant) write command (note that `:outlet_mqtt_configuration` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ mqtt/outlets/:outlet_mqtt_configuration/allow_read/"
```

11.4 Outlet MQTT configuration: Allow write

sum (boolean)	mqtt/outlets/N/allow_write/
Outlet state can be changed via MQTT	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command (note that `:outlet_mqtt_configuration` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/mqtt/outlets/:outlet_mqtt_configuration/allow_write/"
```

⇒ (possible variant)

```
false
```

Sample (possible variant) write command (note that `:outlet_mqtt_configuration` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ mqtt/outlets/:outlet_mqtt_configuration/allow_write/"
```

11.5 Outlet MQTT configuration: State subscription and report QoS

sum (enumerated number)	mqtt/outlets/N/qos/
Quality of service when subscribing to and broadcasting outlet state	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant 0	At most once	Message should be delivered at most once
constant 1	At least once	Message should be delivered at least once
constant 2	Exactly once	Message should be delivered exactly once

Sample read command (note that :outlet_mqtt_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/mqtt/outlets/:outlet_mqtt_configuration/qos/"
```

⇒ (possible variant)

3

Sample (possible variant) write command (note that :outlet_mqtt_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "7" "https://192.168.0.100/restapi/mqtt/ ↵
↵ outlets/:outlet_mqtt_configuration/qos/"
```

11.6 Outlet MQTT configuration: Topic subtree, if any

sum (optional string)	mqtt/outlets/N/topic_subtree/
MQTT topic subtree (relative to the topic root), if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Outlet index-based	Use 'outlets/'+the 0-based outlet index as topic subtree
string	Topic subtree	MQTT topic subtree (relative to the topic root)

Sample read command (note that :outlet_mqtt_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/mqtt/outlets/:outlet_mqtt_configuration/topic_subtree/"
```

⇒ (possible variant)

"Sample value"

Sample (possible variant) write command (note that :outlet_mqtt_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/mqtt/outlets/:outlet_mqtt_configuration/ ↵
↵ topic_subtree/"
```

11.6.1 Topic subtree

(possibly) string	mqtt/outlets/N/topic_subtree/
MQTT topic subtree (relative to the topic root)	

Sample write command (note that :outlet_mqtt_configuration is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/mqtt/outlets/:outlet_mqtt_configuration/ ↵
↵ topic_subtree/"
```

11.7 MQTT broker address

sum (string)	mqtt/broker_address/
Host name or IPv4 address of the MQTT broker to connect to	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

string	Hostname	Hostname	the value matches <code>^(([a-zA-Z0-9] [a-zA-Z0-9][a-zA-Z0-9-]*[a-zA-Z0-9]).)*([A-Za-z]([A-Za-z0-9-]*[A-Za-z0-9])? [A-Za-z0-9][A-Za-z0-9-]*[A-Za-z]([A-Za-z0-9-]*[A-Za-z0-9])?)\$</code>
string	IPv4 address	IPv4 address in dotted quad notation	the value matches <code>^(([0-9] [0-9][0-9] 1[0-9]{2} 2[0-4][0-9] 25[0-5]).){3}([0-9] [0-9][0-9] 1[0-9]{2} 2[0-4][0-9] 25[0-5])\$</code>

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/mqtt/broker_address/"
```

⇒ (possible variant)

"Sample value"

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/mqtt/broker_address/"
```

11.7.1 Hostname

(possibly) string	mqtt/broker_address/
Hostname	

The value is subject to the following constraints: [the value](#) matches `^([a-zA-Z0-9]|[a-zA-Z0-9][a-zA-Z0-9]*[a-zA-Z0-9]).)*([A-Za-z]([A-Za-z0-9]*[A-Za-z0-9])?[A-Za-z0-9][A-Za-z0-9]*[A-Za-z]([A-Za-z0-9]*[A-Za-z0-9])?)$`

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/mqtt/broker_address/"
```

11.7.2 IPv4 address

(possibly) string	mqtt/broker_address/
IPv4 address in dotted quad notation	

The value is subject to the following constraints: [the value](#) matches `^(([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5]).){3}([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5])$`

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/mqtt/broker_address/"
```

11.8 Use SSL

sum (boolean)	mqtt/use_ssl/
Use SSL when connecting to the MQTT broker	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/mqtt/use_ssl/"
```

⇒ (possible variant)

true

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ mqtt/use_ssl/"
```

11.9 Username

string	mqtt/username/
Username to use when connecting to the MQTT broker	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/mqtt/username/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/mqtt/username/"
```

11.10 Password

string	mqtt/password/
Password to use when connecting to the MQTT broker	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

This string should be displayed in a secure manner.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/mqtt/password/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/mqtt/password/"
```

11.11 Topic root

string	mqtt/topic_root/
Topic root to use for all messages	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/mqtt/topic_root/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/mqtt/topic_root/"
```

11.12 Last Will and Testament topic

string	mqtt/lwt_topic/
Topic of the message for the broker to send if the unit goes offline unexpectedly (not relative to the topic root)	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/mqtt/lwt_topic/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/mqtt/lwt_topic/"
```

11.13 Last Will and Testament payload

string	mqtt/lwt_payload/
Payload of the message for the broker to send if the unit goes offline unexpectedly	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This string represents a value in persistent storage.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/mqtt/lwt_payload/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/mqtt/lwt_payload/"
```

11.14 Last Will and Testament QoS

sum (enumerated number)	mqtt/lwt_qos/
Quality of service for the message for the broker to send if the unit goes offline unexpectedly	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant 0	At most once	Message should be delivered at most once
constant 1	At least once	Message should be delivered at least once
constant 2	Exactly once	Message should be delivered exactly once

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/mqtt/lwt_qos/"
```

⇒ (possible variant)

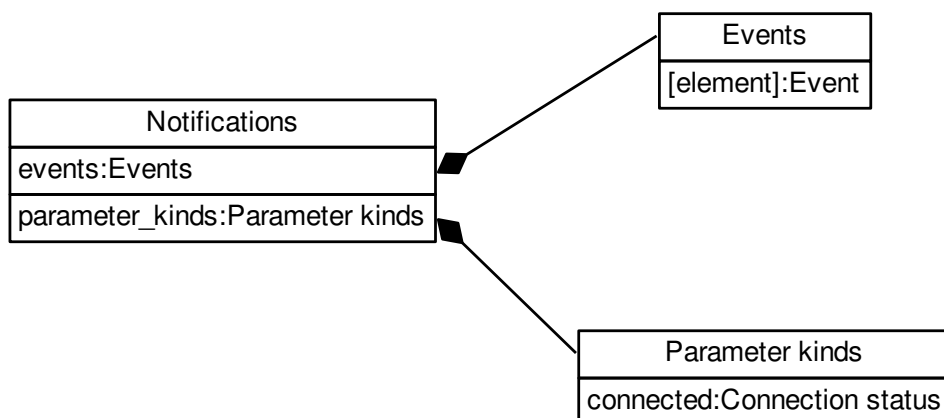
5

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "4" "https://192.168.0.100/restapi/mqtt/ ↵
↵ lwt_qos/"
```

11.15 Notifications

object	mqtt/notifications/
MQTT-related notifications	



This object does not support direct modification.

This object contains the following items:

events	Events
parameter_kinds	Parameter kinds

Sample read command:

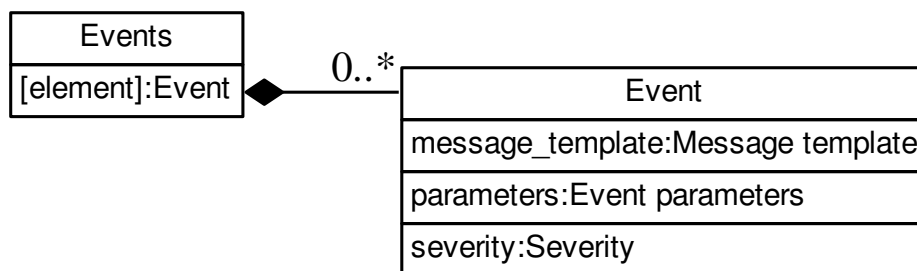
```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/mqtt/notifications/"
```

⇒

...

11.15.1 Events

map	mqtt/notifications/events/
Event templates	



This map does not support direct modification.

This map contains [Event](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/mqtt/notifications/events/"
```

⇒

...

Creating elements in this collection is not supported.

See also [Events: Event](#)

See also [Notifications: Parameter kinds](#)

11.16 Message template: Message template element

sum (variant)	mqtt/notifications/events/S/message_template/N/
Element of human-readable message template	

This sum does not support direct modification.

This sum can assume the following values:

string	String	Fixed string	
number	Parameter	Index of message parameter to insert	event parameters[the value]

Sample read command (note that :event and :message_template_element are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
    ↵ restapi/mqtt/notifications/events/:event/message_template/: ↵
    ↵ message_template_element/"
```

⇒ (possible variant)

10

11.16.1 String

(possibly) string	mqtt/notifications/events/S/message_template/N/
Fixed string	

11.16.2 Parameter

(possibly) number	mqtt/notifications/events/S/message_template/N/
Index of message parameter to insert	

The value is subject to the following constraints: [event parameters\[the value\]](#)

11.17 Event parameter: Fixed value

sum (variant)	mqtt/notifications/events/S/parameters/N/fixed_value/
Fixed parameter value for this particular event	

This sum does not support direct modification.

This sum can assume the following values:

constant null	Null	Null
constant true	True	True
constant false	False	False
string	String	This string
number	Number	This number

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
    ↵ restapi/mqtt/notifications/events/:event/parameters/:event_parameter/ ↵
    ↵ fixed_value/"
```

⇒ (possible variant)

"Sample value"

11.17.1 String

(possibly) string	mqtt/notifications/events/S/parameters/N/fixed_value/
This string	

11.17.2 Number

(possibly) number	mqtt/notifications/events/S/parameters/N/fixed_value/
This number	

11.18 Event parameter: Fixed value flag

sum (boolean)	mqtt/notifications/events/S/parameters/N/has_fixed_value/
Flag indicating that the parameter's value for this event is fixed	

This sum does not support direct modification.

This sum can assume the following values:

constant true	Fixed	The value is fixed
constant false	Variable	The value is variable

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
    ↵ restapi/mqtt/notifications/events/:event/parameters/:event_parameter/ ↵
    ↵ has_fixed_value/"
```

⇒ (possible variant)

true

11.19 Event parameter: Identifier

string	mqtt/notifications/events/S/parameters/N/id/
Parameter identifier	

The value is subject to the following constraints: [parameter kinds](#)

This string does not support direct modification.

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

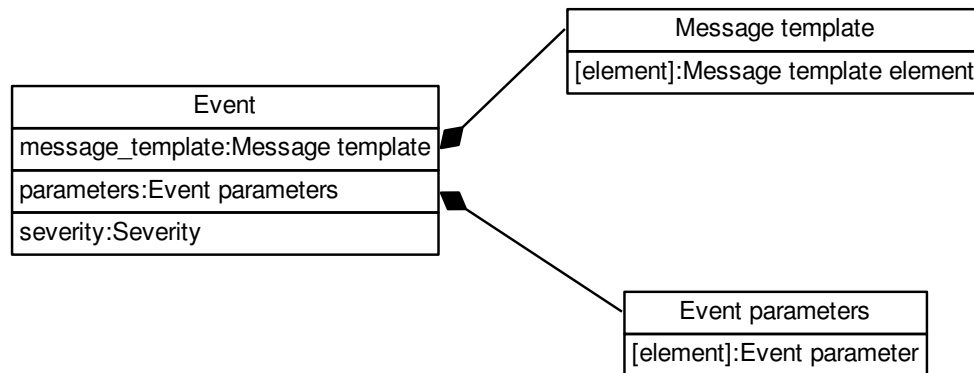
```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
    ↵ restapi/mqtt/notifications/events/:event/parameters/:event_parameter/id/"
```

⇒

"Sample value"

11.20 Events: Event

object	mqtt/notifications/events/S/
Event template	



This object contains the following items:

message_template	Message template
parameters	Event parameters
severity	Severity

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/mqtt/notifications/events/:event/"
```

⇒

```
{
  "severity":2,
  "message_template":[
    10,
    "Sample value of message template of message template element #2"
  ],
  "parameters":[
    {
      "fixed_value":6,
      "has_fixed_value":false,
      "id":"Sample value of event parameters of event parameter #1 of identifier"
    },
    {
      "fixed_value":false,
      "has_fixed_value":false,
      "id":"Sample value of event parameters of event parameter #2 of identifier"
    }
  ]
}
```

Sample write command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "... "https://192.168.0.100/restapi/mqtt ↵
↵ /notifications/events/:event/"
```

11.20.1 Message template

array	mqtt/notifications/events/S/message_template/
Template for human-readable message generation	

This array does not support direct modification.

This array contains [Message template element](#) elements.

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/mqtt/notifications/events/:event/message_template/"
```

⇒

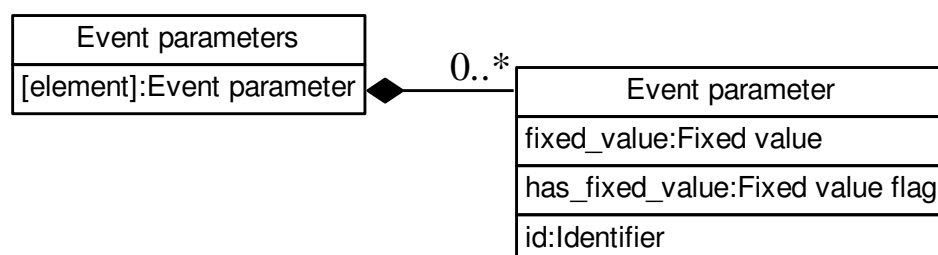
```
[
  "Sample value of message template element #1"
]
```

Creating elements in this collection is not supported.

See also [Message template: Message template element](#)

11.20.2 Event parameters

array	mqtt/notifications/events/S/parameters/
Additional data associated with the event	



This array does not support direct modification.

This array contains [Event parameter](#) elements.

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/mqtt/notifications/events/:event/parameters/"
```

⇒

```
[
  {
    "fixed_value":true,
    "has_fixed_value":true,
    "id":"Sample value of event parameter #1 of identifier"
  },
  {
    "fixed_value":"Sample value of event parameter #2 of fixed value",
    "has_fixed_value":false,
    "id":"Sample value of event parameter #2 of identifier"
  },
  {
    "fixed_value":null,
    "has_fixed_value":true,
    "id":"Sample value of event parameter #3 of identifier"
  },
  {
    "fixed_value":8,
    "has_fixed_value":true,
    "id":"Sample value of event parameter #4 of identifier"
  },
  {
    "fixed_value":7,
    "has_fixed_value":true,
    "id":"Sample value of event parameter #5 of identifier"
  },
  {
    "fixed_value":null,
    "has_fixed_value":false,
    "id":"Sample value of event parameter #6 of identifier"
  }
]
```

Creating elements in this collection is not supported.

11.20.2.1 Event parameter

object	mqtt/notifications/events/S/parameters/N/
Properties of a parameter associated with the event	

This object contains the following items:

fixed_value	Fixed value
has_fixed_value	Fixed value flag
id	Identifier

Sample read command (note that :event and :event_parameter are URL template arguments and need to be re-

placed before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/mqtt/notifications/events/:event/parameters/:event_parameter/"
```

⇒

```
{
  "fixed_value":true,
  "has_fixed_value":false,
  "id":"Sample value of identifier"
}
```

Sample write command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary "{ \"fixed_value\": \"Sample value of fixed value\", \"has_fixed_value ↵
↵ \":false, \"id\": \"Sample value of identifier\" }" \
"https://192.168.0.100/restapi/mqtt/notifications/events/:event/parameters/: ↵
↵ event_parameter/"
```

See also [Event parameter: Fixed value](#)

See also [Event parameter: Fixed value flag](#)

See also [Event parameter: Identifier](#)

11.20.3 Severity

sum (enumerated number)	mqtt/notifications/events/S/severity/
Severity rating assigned to the event	

This sum does not support direct modification.

This sum can assume the following values:

constant 1	Emergency	Treat the event as an emergency
constant 2	Alert	Treat the event as an alert
constant 3	Critical	Treat the event as critical
constant 4	Error	Treat the event as an error
constant 5	Warning	Treat the event as a warning
constant 6	Notice	Treat the event as a notice
constant 7	Informational	Treat the event as informational
constant 8	Debug	Treat the event as debugging-related

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/mqtt/notifications/events/:event/severity/"
```


⇒ (possible variant)

9

11.21 Notifications: Parameter kinds

object	mqtt/notifications/parameter_kinds/
Kinds of event parameters	

This object does not correspond to an actual resource.

This object contains the following items:

connected	Connection status
---------------------------	-----------------------------------

11.21.1 Connection status

sum (boolean)	mqtt/notifications/parameter_kinds/connected/
Broker connection status	

This sum can assume the following values:

constant true	Connected	Broker connection successful
constant false	Failed to connect	Broker connection failed

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/mqtt/notifications/parameter_kinds/connected/"
```

⇒ (possible variant)

false

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ mqtt/notifications/parameter_kinds/connected/"
```

11.22 MQTT broker port, if any

sum (optional number)	mqtt/broker_port/
Port of the MQTT broker to connect to, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if any of the following is true:

- not [administrative user](#)
- [protect network settings](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Use default port	Connect to port 1883 when SSL is not used, port 8883 if SSL is used	
number	MQTT broker port	Port of the MQTT broker to connect to	all of the following is true: <ul style="list-style-type: none"> • the value is an integer • the value is greater than 0 • the value is less than 65535

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/mqtt/broker_port/"
```

⇒ (possible variant)

4

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ mqtt/broker_port/"
```

11.22.1 MQTT broker port

(possibly) number	mqtt/broker_port/
Port of the MQTT broker to connect to	

The value is subject to the following constraints: all of the following is true:

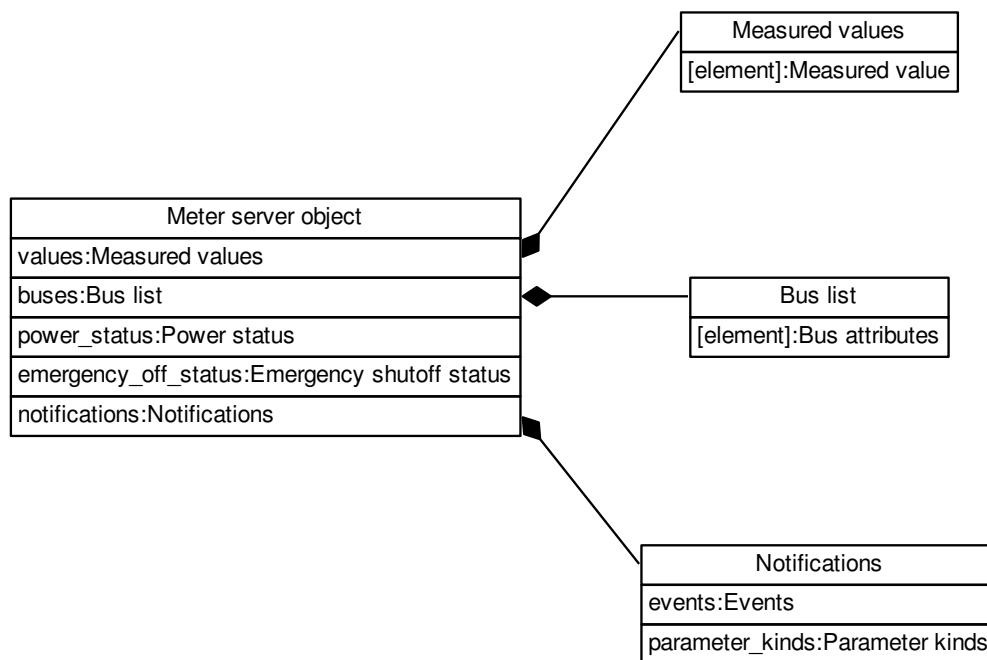
- [the value](#) is an integer
- [the value](#) is greater than 0
- [the value](#) is less than 65535

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "2" "https://192.168.0.100/restapi/mqtt/ ↵
↵ broker_port/"
```

12 Meter server object

object	meter/
Object representing the meter server state and configuration	



Retrieving the value is denied if not [administrative user](#)

This object contains the following items:

values	Measured values
buses	Bus list
power_status	Power status
emergency_off_status	Emergency shutoff status
notifications	Notifications

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/"
```

⇒

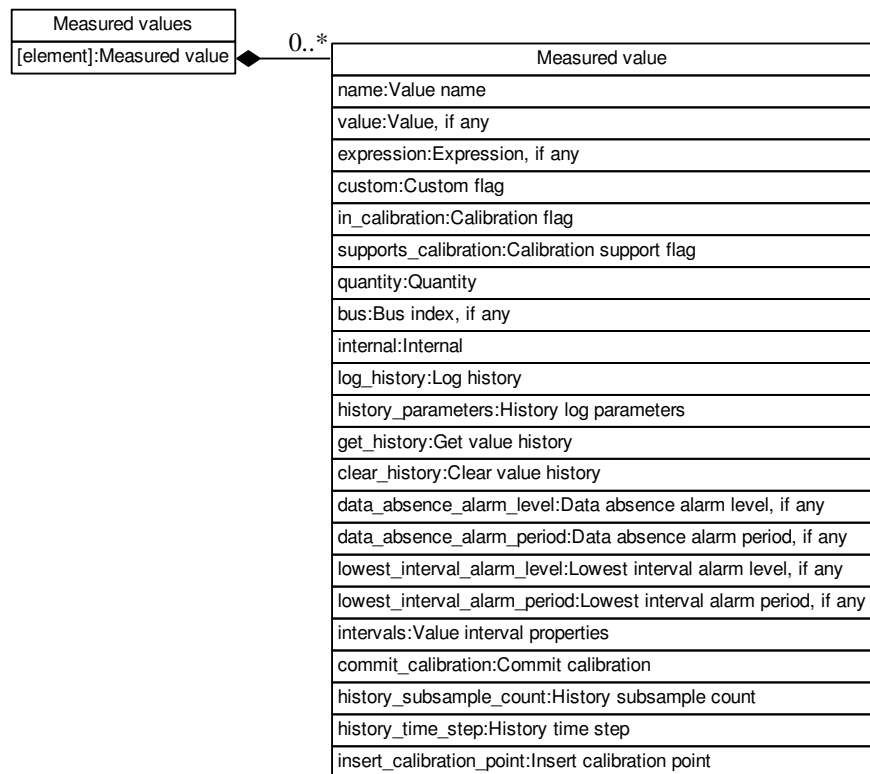
...

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "... " "https://192.168.0.100/restapi/ ↵
↵ meter/"
```

12.1 Measured values

map	meter/values/
Values measured by meters	



This map contains [Measured value](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/values/"
```

⇒

...

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "... " "https://192.168.0.100/restapi/ ↵
↵ meter/values/"
```

Sample measured value creation command:

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/meter/values/measured_values_3/"
```

12.1.1 Measured value

object	meter/values/S/
Value measured by meter	

Measured value	
name:Value name	
value:Value, if any	
expression:Expression, if any	
custom:Custom flag	
in_calibration:Calibration flag	
supports_calibration:Calibration support flag	
quantity:Quantity	
bus:Bus index, if any	
internal:Internal	
log_history:Log history	
history_parameters:History log parameters	
get_history	(Data start time Data end time Data time step) -> (Value history record)
clear_history	()
data_absence_alarm_level:Data absence alarm level, if any	
data_absence_alarm_period:Data absence alarm period, if any	
lowest_interval_alarm_level:Lowest interval alarm level, if any	
lowest_interval_alarm_period:Lowest interval alarm period, if any	
intervals:Value interval properties	
commit_calibration	()
history_subsample_count:History subsample count	
history_time_step:History time step	
insert_calibration_point	(Kind Value Weight Derivative Derivative weight)

History log parameters
[element]:History log

Value interval properties
[element]:Interval configuration

The value is subject to the following constraints: not index of the value matches $^{\wedge}(|.|.*|.*)\$$

Removing the object from its parent collection is denied if not [custom flag](#)

This object contains the following items:

name	Value name
value	Value, if any
expression	Expression, if any
custom	Custom flag
in_calibration	Calibration flag
supports_calibration	Calibration support flag
quantity	Quantity
bus	Bus index, if any
internal	Internal
log_history	Log history
history_parameters	History log parameters
get_history	Get value history
clear_history	Clear value history
data_absence_alarm_level	Data absence alarm level, if any
data_absence_alarm_period	Data absence alarm period, if any

lowest_interval_alarm_level	Lowest interval alarm level, if any
lowest_interval_alarm_period	Lowest interval alarm period, if any
intervals	Value interval properties
commit_calibration	Commit calibration
history_subsample_count	History subsample count
history_time_step	History time step
insert_calibration_point	Insert calibration point

Sample read command (note that `:measured_value` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/values/:measured_value/"
```

⇒

...

Sample write command (note that `:measured_value` is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
\
"https://192.168.0.100/restapi/meter/values/:measured_value/"
```

Sample deletion command (note that `:measured_value` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/meter/values/:measured_value/"
```

See also [Measured value: Value name](#)

See also [Measured value: Value, if any](#)

See also [Measured value: Expression, if any](#)

See also [Measured value: Custom flag](#)

See also [Measured value: Calibration flag](#)

See also [Measured value: Calibration support flag](#)

See also [Measured value: Quantity](#)

See also [Measured value: Bus index, if any](#)

See also [Measured value: Internal](#)

See also [Measured value: Log history](#)

See also [Measured value: History log parameters](#)

See also [Measured value: Get value history](#)

See also [Measured value: Clear value history](#)

See also [Measured value: Data absence alarm level, if any](#)

See also [Measured value: Data absence alarm period, if any](#)

See also [Measured value: Lowest interval alarm level, if any](#)

See also [Measured value: Lowest interval alarm period, if any](#)

See also [Measured value: Value interval properties](#)

See also [Measured value: Commit calibration](#)

See also [Measured value: History subsample count](#)

See also [Measured value: History time step](#)

See also [Measured value: Insert calibration point](#)

12.2 Measured value: Value name

string	meter/values/S/name/
Name of the measured value	

This string does not support direct modification if not [custom flag](#).

This string represents a value in persistent storage.

Sample read command (note that `:measured_value` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/meter/values/:measured_value/name/"
```

⇒

```
"Sample value"
```

Sample write command (note that `:measured_value` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵  
↵ : application/json" --data-binary "\"Sample value\"" "https ↵  
↵ ://192.168.0.100/restapi/meter/values/:measured_value/name/"
```

12.3 Measured value: Value, if any

sum (variant)	meter/values/S/value/
Current value measured by meter, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum does not support direct modification if all of the following is true:

- not [custom flag](#)
- [agent identifier](#) is not equal to relay

This sum can change as if by itself or indirectly because of other actions.

Changes to this sum may have an effect besides setting value.

This sum can assume the following values:

number	Value	Current value measured by meter
constant false	No value	Indication that measurement is currently not being carried out

Sample read command (note that `:measured_value` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/values/:measured_value/value/"
```

⇒ (possible variant)

```
false
```

Sample (possible variant) write command (note that `:measured_value` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ meter/values/:measured_value/value/"
```

12.3.1 Value

(possibly) number	meter/values/S/value/
Current value measured by meter	

Sample write command (note that `:measured_value` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "3" "https://192.168.0.100/restapi/meter/ ↵
↵ values/:measured_value/value/"
```

12.4 Measured value: Expression, if any

sum (optional string)	meter/values/S/expression/
Expression governing the value, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum does not support direct modification if not [custom flag](#).

This sum represents a value in persistent storage.

This sum can change as if by itself or indirectly because of other actions.

This sum can assume the following values:

constant null	Variable	The value can be modified arbitrarily
string	Expression	Expression governing the value

Sample read command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/values/:measured_value/expression/"
```

⇒ (possible variant)

null

Sample (possible variant) write command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/meter/values/:measured_value/expression/"
```

12.4.1 Expression

(possibly) string	meter/values/S/expression/
Expression governing the value	

Sample write command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/meter/values/:measured_value/expression/"
```

12.5 Measured value: Custom flag

sum (boolean)	meter/values/S/custom/
Flag indicating whether the value is custom	

Retrieving the value is denied if not [administrative user](#)

This sum does not support direct modification.

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Custom	The value is custom and can be modified freely
constant false	Built-in	The value is built-in and only the hardware can modify it

Sample read command (note that `:measured_value` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/values/:measured_value/custom/"
```

⇒ (possible variant)

```
false
```

12.6 Measured value: Calibration flag

sum (boolean)	meter/values/S/in_calibration/
Flag indicating whether the value is being calibrated	

The value is subject to the following constraints: any of the following is true:

- [calibration support flag](#)
- not [the value](#)

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum does not support direct modification if not [calibration support flag](#).

This sum can change as if by itself or indirectly because of other actions if [calibration support flag](#).

This sum can assume the following values:

constant true	Calibration	The value is being calibrated (it can be updated to match external reference)
constant false	Measurement	The value is being measured

Sample read command (note that `:measured_value` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/values/:measured_value/in_calibration/"
```

⇒ (possible variant)

false

Sample (possible variant) write command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ meter/values/:measured_value/in_calibration/"
```

12.7 Measured value: Calibration support flag

sum (boolean)	meter/values/S/supports_calibration/
Flag indicating whether calibrating the value is supported	

Retrieving the value is denied if not [administrative user](#)

This sum does not support direct modification.

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Supported	The value can be calibrated
constant false	Not supported	There is no support for calibrating the value, or it does not make sense to

Sample read command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/values/:measured_value/supports_calibration/"
```

⇒ (possible variant)

false

12.8 Measured value: Quantity

string	meter/values/S/quantity/
Quantity of the value	

The value is subject to the following constraints: [known quantities\[the value\]](#)

This string does not support direct modification if not [custom flag](#).

This string represents a value in persistent storage.

Sample read command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/values/:measured_value/quantity/"
```

⇒

"Sample value"

Sample write command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/meter/values/:measured_value/quantity/"
```

12.9 Measured value: Bus index, if any

sum (optional number)	meter/values/S/bus/
Index of bus being measured, if any	

This sum does not support direct modification if not [custom flag](#).

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	Unspecified	The value is not related to a bus	
number	Bus index	Index of bus being measured	buses[the value]

Sample read command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/values/:measured_value/bus/"
```

⇒ (possible variant)

5

Sample (possible variant) write command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ meter/values/:measured_value/bus/"
```

12.9.1 Bus index

(possibly) number	meter/values/S/bus/
Index of bus being measured	

The value is subject to the following constraints: [buses\[the value\]](#)

Sample write command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "3" "https://192.168.0.100/restapi/meter/ ↵
↵ values/:measured_value/bus/"
```

12.10 Measured value: Internal

sum (boolean)	meter/values/S/internal/
Flag indicating whether this value is internal	

This sum does not support direct modification if not [custom flag](#).

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Internal	The value is internal and should not matter to users
constant false	Visible	The value should be visible to users

Sample read command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/values/:measured_value/internal/"
```

⇒ (possible variant)

```
true
```

Sample (possible variant) write command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ meter/values/:measured_value/internal/"
```

12.11 Measured value: Log history

sum (boolean)	meter/values/S/log_history/
Flag indicating whether the value should be logged to the history	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant true	Enabled	The feature is enabled
constant false	Disabled	The feature is disabled

Sample read command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/values/:measured_value/log_history/"
```

⇒ (possible variant)

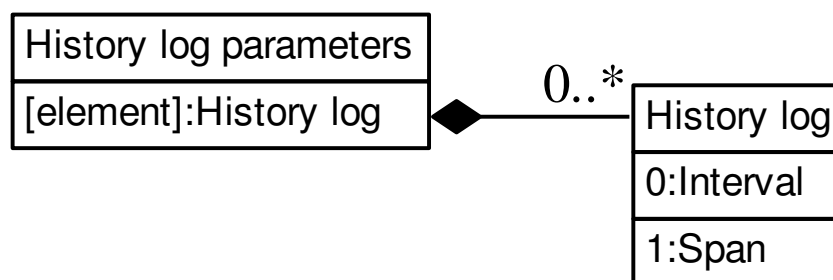
```
true
```

Sample (possible variant) write command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ meter/values/:measured_value/log_history/"
```

12.12 Measured value: History log parameters

array	meter/values/S/history_parameters/
Configuration of history logs sampling intervals and timespans	



Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This array represents a value in persistent storage.

This array can change as if by itself or indirectly because of other actions.

This array contains [History log](#) elements.

Sample read command (note that `:measured_value` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/values/:measured_value/history_parameters/"
```

⇒

```
[
  [
    6,
    2
  ],
  [
    4,
    9
  ],
  [
    3,
    7
  ],
  [
    4,
    2
  ],
  [
    1,
    10
  ]
]
```

Sample write command (note that `:measured_value` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary ↵
↵ "[[7,1],[5,10],[7,9],[2,10],[4,6],[1,4],[4,5],[5,9]]" "https ↵
↵ ://192.168.0.100/restapi/meter/values/:measured_value/history_parameters/"
```

Sample history log creation command (note that `:measured_value` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Content-type: application/json" -H "Accept: ↵
↵ application/json" --data-binary "[8,3]" "https://192.168.0.100/restapi/ ↵
↵ meter/values/:measured_value/history_parameters/"
```

12.12.1 History log

tuple	meter/values/S/history_parameters/N/
History log settings	

This tuple contains the following items:

1	Interval
2	Span

Sample read command (note that :measured_value and :history_log are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/values/:measured_value/history_parameters/:history_log/"
```

⇒

```
[
  6,
  4
]
```

Sample write command (note that :measured_value and :history_log are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "[8,6]" "https://192.168.0.100/restapi/ ↵
↵ meter/values/:measured_value/history_parameters/:history_log/"
```

Sample deletion command (note that :measured_value and :history_log are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/meter/values/:measured_value/history_parameters/: ↵
↵ history_log/"
```

12.12.1.1 Interval

number	meter/values/S/history_parameters/N/1/
Time interval between two consecutive history samples (changes will trigger history rebuilding and may cause adjustments to time span)	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is greater than 0
- [the value](#) modulo [history time step](#) is equal to 0

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

This number can change as if by itself or indirectly because of other actions.

Sample read command (note that :measured_value and :history_log are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/values/:measured_value/history_parameters/:history_log/1/"
```

⇒

```
1
```

Sample write command (note that :measured_value and :history_log are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "8" "https://192.168.0.100/restapi/meter/ ↵
↵ values/:measured_value/history_parameters/:history_log/1/"
```


12.12.1.2 Span

number	meter/values/S/history_parameters/N/2/
Time span covered by history fragment (changes will trigger history rebuilding)	

The value is subject to the following constraints: all of the following is true:

- the value is greater than 0
- the value modulo interval is equal to 0

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

This number can change as if by itself or indirectly because of other actions.

Sample read command (note that :measured_value and :history_log are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/values/:measured_value/history_parameters/:history_log/2/"
```

⇒

4

Sample write command (note that :measured_value and :history_log are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "2" "https://192.168.0.100/restapi/meter/ ↵
↵ values/:measured_value/history_parameters/:history_log/2/"
```

12.13 Value history: Data point, if any

sum (variant)	meter/values/S/get_history/results: 1/3/N/
Historical data point, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

number	Data point	Historical data point, whose corresponding time is determined by array position
constant false	Missing data	Indication that data for the time determined by array position could not be found

12.13.1 Data point

(possibly) number	meter/values/S/get_history/results: 1/3/N/
Historical data point, whose corresponding time is determined by array position	

This number does not correspond to an actual resource.

12.14 Measured value: Get value history

call	meter/values/S/get_history/
Get history of values over a specific time range	

Performing the function call is denied if not [administrative user](#)

The call accepts the following arguments:

1. number
2. number
3. number

The call returns the following results:

1. (number,number,array of "Data point or Missing data")

Sample invocation (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X POST -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/meter/values/:measured_value/get_history/"
```

⇒

null

12.14.1 Data start time

number	meter/values/S/get_history/arguments: 1/
Requested timestamp of the first data point to retrieve	

This number does not correspond to an actual resource.

12.14.2 Data end time

number	meter/values/S/get_history/arguments: 2/
Requested timestamp of the last data point to retrieve	

This number does not correspond to an actual resource.

12.14.3 Data time step

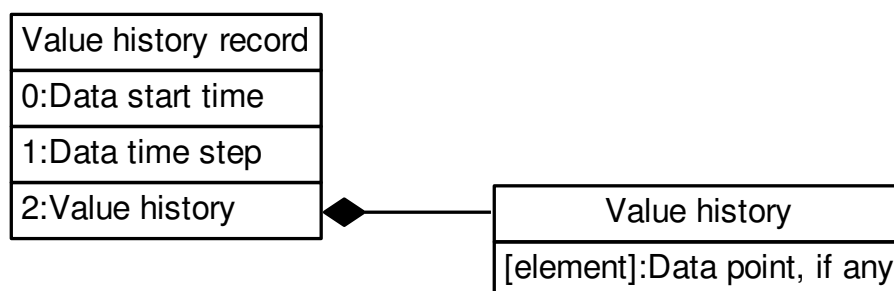
number	meter/values/S/get_history/arguments: 3/
Requested time step between succeeding data points	

The value is subject to the following constraints: [the value](#) is greater or equal to 0

This number does not correspond to an actual resource.

12.14.4 Value history record

tuple	meter/values/S/get_history/results: 1/
Historical measured values	



This tuple does not correspond to an actual resource.

This tuple contains the following items:

1	Data start time
2	Data time step
3	Value history

12.14.4.1 Data start time

number	meter/values/S/get_history/results: 1/1/
Timestamp of the first retrieved historical data point (may differ from requested start timestamp)	

This number does not correspond to an actual resource.

12.14.4.2 Data time step

number	meter/values/S/get_history/results: 1/2/
Time step between succeeding retrieved historical data points (may differ from requested time step)	

The value is subject to the following constraints: [the value](#) is greater or equal to 0

This number does not correspond to an actual resource.

12.14.4.3 Value history

array	meter/values/S/get_history/results: 1/3/
Historical data points	

This array does not correspond to an actual resource.

This array contains [Data point, if any](#) elements.

See also [Value history: Data point, if any](#)

12.15 Measured value: Clear value history

call	meter/values/S/clear_history/
Clear the complete history of values, and reset value to zero	

Performing the function call is denied if not [administrative user](#)

The call has no arguments (supply empty tuple).

The call returns no results (expect an empty tuple).

Sample invocation (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X POST -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/meter/values/:measured_value/clear_history/"
```

⇒

null

12.16 Measured value: Data absence alarm level, if any

sum (optional number)	meter/values/S/data_absence_alarm_level/
Alarm level for absence of data, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	None	No alarm is generated on absence of data
number	Data absence alarm level	Alarm level for absence of data

Sample read command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/values/:measured_value/data_absence_alarm_level/"
```

⇒ (possible variant)

null

Sample (possible variant) write command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "5" "https://192.168.0.100/restapi/meter/ ↵
↵ values/:measured_value/data_absence_alarm_level/"
```

12.16.1 Data absence alarm level

(possibly) number	meter/values/S/data_absence_alarm_level/
Alarm level for absence of data	

Sample write command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "4" "https://192.168.0.100/restapi/meter/ ↵
↵ values/:measured_value/data_absence_alarm_level/"
```

12.17 Measured value: Data absence alarm period, if any

sum (optional number)	meter/values/S/data_absence_alarm_period/
The time interval after which data absence alarm events should be repeated, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	None	The data absence alarm event is generated only once on data loss and is not repeated	
number	Data absence alarm period	The time interval after which data absence alarm events should be repeated	the value is greater than 0

Sample read command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/values/:measured_value/data_absence_alarm_period/"
```

⇒ (possible variant)

8

Sample (possible variant) write command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ meter/values/:measured_value/data_absence_alarm_period/"
```

12.17.1 Data absence alarm period

(possibly) number	meter/values/S/data_absence_alarm_period/
The time interval after which data absence alarm events should be repeated	

The value is subject to the following constraints: [the value](#) is greater than 0

Sample write command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "6" "https://192.168.0.100/restapi/meter/ ↵
↵ values/:measured_value/data_absence_alarm_period/"
```

12.18 Measured value: Lowest interval alarm level, if any

sum (optional number)	meter/values/S/lowest_interval_alarm_level/
Alarm level for the lowest value interval, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	None	No alarm is generated for the lowest value interval
number	Lowest interval alarm level	Alarm level for the lowest value interval

Sample read command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/values/:measured_value/lowest_interval_alarm_level/"
```

⇒ (possible variant)

3

Sample (possible variant) write command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ meter/values/:measured_value/lowest_interval_alarm_level/"
```

12.18.1 Lowest interval alarm level

(possibly) number	meter/values/S/lowest_interval_alarm_level/
Alarm level for the lowest value interval	

Sample write command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "1" "https://192.168.0.100/restapi/meter/ ↵
↵ values/:measured_value/lowest_interval_alarm_level/"
```

12.19 Measured value: Lowest interval alarm period, if any

sum (optional number)	meter/values/S/lowest_interval_alarm_period/
The time interval after which lowest interval alarm events should be repeated, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	None	The alarm event is generated only once at lowest interval entry and is not repeated while the value is in the interval
number	Lowest interval alarm period	The time interval after which lowest interval alarm events should be repeated the value is greater than 0

Sample read command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/values/:measured_value/lowest_interval_alarm_period/"
```

⇒ (possible variant)

2

Sample (possible variant) write command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ meter/values/:measured_value/lowest_interval_alarm_period/"
```

12.19.1 Lowest interval alarm period

(possibly) number	meter/values/S/lowest_interval_alarm_period/
The time interval after which lowest interval alarm events should be repeated	

The value is subject to the following constraints: [the value](#) is greater than 0

Sample write command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "6" "https://192.168.0.100/restapi/meter/ ↵
↵ values/:measured_value/lowest_interval_alarm_period/"
```

12.20 Interval configuration: Alarm level, if any

sum (optional number)	meter/values/S/intervals/N/alarm_level/
The level of importance assigned to this interval, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	None	No alarm is generated for this value interval
number	Alarm level	The level of importance assigned to this interval

Sample read command (note that :measured_value and :interval_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/values/:measured_value/intervals/:interval_configuration/ ↵
↵ alarm_level/"
```

⇒ (possible variant)

null

Sample (possible variant) write command (note that :measured_value and :interval_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "9" "https://192.168.0.100/restapi/meter/ ↵
↵ values/:measured_value/intervals/:interval_configuration/alarm_level/"
```

12.20.1 Alarm level

(possibly) number	meter/values/S/intervals/N/alarm_level/
The level of importance assigned to this interval	

Sample write command (note that :measured_value and :interval_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "8" "https://192.168.0.100/restapi/meter/ ↵
↵ values/:measured_value/intervals/:interval_configuration/alarm_level/"
```

12.21 Interval configuration: Alarm period, if any

sum (optional number)	meter/values/S/intervals/N/alarm_period/
The time interval after which alarm events should be repeated, if any	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum represents a value in persistent storage.

This sum can assume the following values:

constant null	None	The alarm event is generated only once at interval entry and is not repeated while the value is in the interval	
number	Alarm period	The time interval after which alarm events should be repeated	the value is greater than 0

Sample read command (note that :measured_value and :interval_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/values/:measured_value/intervals/:interval_configuration/ ↵
↵ alarm_period/"
```

⇒ (possible variant)

3

Sample (possible variant) write command (note that :measured_value and :interval_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "null" "https://192.168.0.100/restapi/ ↵
↵ meter/values/:measured_value/intervals/:interval_configuration/alarm_period ↵
↵ /"
```

12.21.1 Alarm period

(possibly) number	meter/values/S/intervals/N/alarm_period/
The time interval after which alarm events should be repeated	

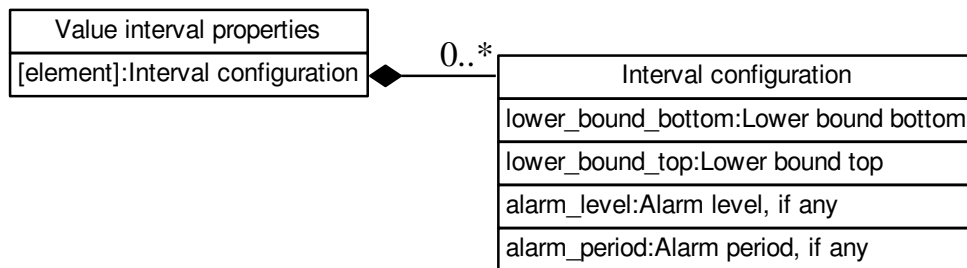
The value is subject to the following constraints: [the value](#) is greater than 0

Sample write command (note that :measured_value and :interval_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "7" "https://192.168.0.100/restapi/meter/ ↵
↵ values/:measured_value/intervals/:interval_configuration/alarm_period/"
```

12.22 Measured value: Value interval properties

array	meter/values/S/intervals/
Properties defining intervals of the value and their alarm levels	



This array contains [Interval configuration](#) elements.

Sample read command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/values/:measured_value/intervals/"
```

⇒

```
[
{
  "lower_bound_top":3,
  "alarm_level":null,
  "lower_bound_bottom":10,
  "alarm_period":9
}
]
```

Sample write command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary "[{"lower_bound_top":9,"alarm_level":9,"lower_bound_bottom ↵
↵ ":1,"alarm_period":1},{"lower_bound_top":1,"alarm_level":5," ↵
↵ lower_bound_bottom":6,"alarm_period":7}]"
"https://192.168.0.100/restapi/meter/values/:measured_value/intervals/"
```

Sample interval configuration creation command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary [{"lower_bound_top":8,"alarm_level":null,"lower_bound_bottom ↵
↵ ":8,"alarm_period":2}]
"https://192.168.0.100/restapi/meter/values/:measured_value/intervals/"
```

12.22.1 Interval configuration

object	meter/values/S/intervals/N/
Configuration of a value interval	

This object contains the following items:

lower_bound_bottom	Lower bound bottom
lower_bound_top	Lower bound top
alarm_level	Alarm level, if any
alarm_period	Alarm period, if any

Sample read command (note that :measured_value and :interval_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/values/:measured_value/intervals/:interval_configuration/"
```

⇒

```
{
  "lower_bound_top":1,
  "alarm_level":null,
  "lower_bound_bottom":8,
  "alarm_period":null
}
```

Sample write command (note that :measured_value and :interval_configuration are URL template arguments and need to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"lower_bound_top":3,"alarm_level":9,"lower_bound_bottom ↵
↵ ":3,"alarm_period":4}'\
"https://192.168.0.100/restapi/meter/values/:measured_value/intervals/: ↵
↵ interval_configuration/"
```

Sample deletion command (note that :measured_value and :interval_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X DELETE -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/meter/values/:measured_value/intervals/: ↵
↵ interval_configuration/"
```

12.22.1.1 Lower bound bottom

number	meter/values/S/intervals/N/lower_bound_bottom/
The bottom of the lower bound of this interval; value must be lower to be considered outside this interval	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

Sample read command (note that :measured_value and :interval_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/values/:measured_value/intervals/:interval_configuration/ ↵
↵ lower_bound_bottom/"
```

⇒

9

Sample write command (note that :measured_value and :interval_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "8" "https://192.168.0.100/restapi/meter/ ↵
↵ values/:measured_value/intervals/:interval_configuration/lower_bound_bottom ↵
↵ /"
```

12.22.1.2 Lower bound top

number	meter/values/S/intervals/N/lower_bound_top/
The top of the lower bound of this interval; value must be higher to be considered inside this interval	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

Sample read command (note that :measured_value and :interval_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/values/:measured_value/intervals/:interval_configuration/ ↵
↵ lower_bound_top/"
```

⇒

10

Sample write command (note that :measured_value and :interval_configuration are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "1" "https://192.168.0.100/restapi/meter/ ↵
↵ values/:measured_value/intervals/:interval_configuration/lower_bound_top/"
```

See also [Interval configuration: Alarm level, if any](#)

See also [Interval configuration: Alarm period, if any](#)

12.23 Measured value: Commit calibration

call	meter/values/S/commit_calibration/
Save calibration data to persistent storage	

Performing the function call is denied if any of the following is true:

- not [administrative user](#)
- not `../in_calibration`

The call has no arguments (supply empty tuple).

The call returns no results (expect an empty tuple).

Sample invocation (note that `:measured_value` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X POST -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/meter/values/:measured_value/commit_calibration/"
```

⇒

null

12.24 Measured value: History subsample count

number	meter/values/S/history_subsample_count/
Number of measurements per history sample	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater or equal to 0

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

Sample read command (note that `:measured_value` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/values/:measured_value/history_subsample_count/"
```

⇒

6

Sample write command (note that `:measured_value` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "1" "https://192.168.0.100/restapi/meter/ ↵
↵ values/:measured_value/history_subsample_count/"
```

12.25 Measured value: History time step

number	meter/values/S/history_time_step/
Minimal amount of time between saved history samples (changes will trigger history rebuilding and may cause adjustments to history_parameters)	

The value is subject to the following constraints: [the value](#) is greater than 0

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

Sample read command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/values/:measured_value/history_time_step/"
```

⇒

4

Sample write command (note that :measured_value is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "2" "https://192.168.0.100/restapi/meter/ ↵
↵ values/:measured_value/history_time_step/"
```

12.26 Measured value: Insert calibration point

call	meter/values/S/insert_calibration_point/
Specify custom calibration point, possibly overriding measurements	

Performing the function call is denied if any of the following is true:

- not [administrative user](#)
- not `../in_calibration`

The call accepts the following arguments:

1. Standard, Identity or Current
2. number
3. number
4. number
5. number

The call returns no results (expect an empty tuple).

Sample invocation (note that `:measured_value` is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X POST -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/meter/values/:measured_value/ ↵
↵ insert_calibration_point/"
```

⇒

null

12.26.1 Kind

sum (enumerated string)	meter/values/S/insert_calibration_point/arguments: 1/
Kind of calibration point	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant "standard"	Standard	The point supplies the calibrated value
constant "identity"	Identity	Assume the calibration function is the identity in point
constant "current"	Current	Assume the calibration function keeps current value in point

12.26.2 Value

number	meter/values/S/insert_calibration_point/arguments: 2/
Calibrated value	

This number does not correspond to an actual resource.

12.26.3 Weight

number	meter/values/S/insert_calibration_point/arguments: 3/
Weight of the calibration point	

The value is subject to the following constraints: [the value](#) is greater or equal to 0

This number does not correspond to an actual resource.

12.26.4 Derivative

number	meter/values/S/insert_calibration_point/arguments: 4/
Derivative value in the calibration point	

This number does not correspond to an actual resource.

12.26.5 Derivative weight

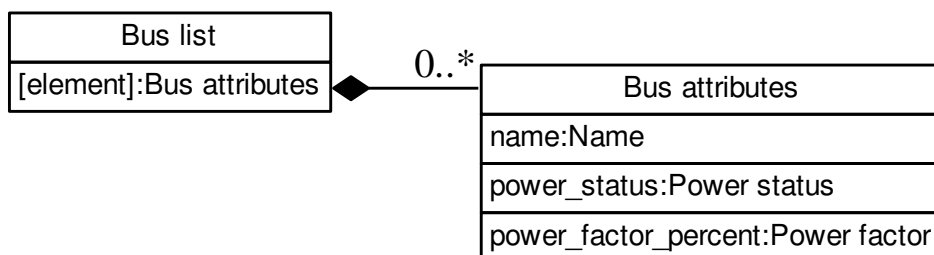
number	meter/values/S/insert_calibration_point/arguments: 5/
Weight of derivative value in the calibration point	

The value is subject to the following constraints: [the value](#) is greater or equal to 0

This number does not correspond to an actual resource.

12.27 Bus list

array	meter/buses/
Attributes for buses	



This array does not support direct modification.

This array contains [Bus attributes](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/buses/"
```

⇒

```
[
{
  "power_status":false,
  "name":"Sample value of bus attributes #1 of name",
  "power_factor_percent":8
},
{
```

```

    "power_status":false,
    "name":"Sample value of bus attributes #2 of name",
    "power_factor_percent":9
  },
  {
    "power_status":false,
    "name":"Sample value of bus attributes #3 of name",
    "power_factor_percent":9
  },
  {
    "power_status":false,
    "name":"Sample value of bus attributes #4 of name",
    "power_factor_percent":3
  },
  {
    "power_status":true,
    "name":"Sample value of bus attributes #5 of name",
    "power_factor_percent":5
  }
]

```

Creating elements in this collection is not supported.

See also [Bus list: Bus attributes](#)

12.28 Bus list: Bus attributes

object	meter/buses/N/
Attributes for a bus	

The value is subject to the following constraints: [buses](#)[index of the value]

This object contains the following items:

name	Name
power_status	Power status
power_factor_percent	Power factor

Sample read command (note that :bus_attributes is a URL template argument and needs to be replaced before trying):

```

curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/buses/:bus_attributes/"

```

⇒

```

{
  "power_status":true,
  "name":"Sample value of name",
  "power_factor_percent":7
}

```

Sample write command (note that :bus_attributes is a URL template argument and needs to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"power_status":true,"name":"Sample value of name",\'"↵
↵ power_factor_percent":4}\'"\
"https://192.168.0.100/restapi/meter/buses/:bus_attributes/"
```

12.28.1 Name

string	meter/buses/N/name/
User-visible name of this bus	

Changing the value is denied if not [administrative user](#)

This string represents a value in persistent storage.

Sample read command (note that :bus_attributes is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/↵
↵ restapi/meter/buses/:bus_attributes/name/"
```

⇒

"Sample value"

Sample write command (note that :bus_attributes is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept↵
↵ : application/json" --data-binary "\"Sample value\"" "https↵
↵ ://192.168.0.100/restapi/meter/buses/:bus_attributes/name/"
```

12.28.2 Power status

sum (boolean)	meter/buses/N/power_status/
Status of bus power	

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This sum does not support direct modification.

This sum can change as if by itself or indirectly because of other actions.

This sum can assume the following values:

constant true	On	Bus is powered
constant false	Off	Bus is not powered

Sample read command (note that :bus_attributes is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/buses/:bus_attributes/power_status/"
```

⇒ (possible variant)

true

12.28.3 Power factor

number	meter/buses/N/power_factor_percent/
Power factor for this bus	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is greater or equal to 0
- [the value](#) is less or equal to 100

Retrieving the value is denied if not [administrative user](#)

Changing the value is denied if not [administrative user](#)

This number represents a value in persistent storage.

Sample read command (note that :bus_attributes is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/buses/:bus_attributes/power_factor_percent/"
```

⇒

6

Sample write command (note that :bus_attributes is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "7" "https://192.168.0.100/restapi/meter/ ↵
↵ buses/:bus_attributes/power_factor_percent/"
```

12.29 Power status

sum (boolean)	meter/power_status/
Status of unit power	

Retrieving the value is denied if not [administrative user](#)

This sum does not support direct modification.

This sum can change as if by itself or indirectly because of other actions.

This sum can assume the following values:

constant true	Mains	Unit is powered from at least one bus, outlets can be driven
constant false	Battery	Unit is powered from the battery only, outlets cannot be driven, unit shutdown expected

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/power_status/"
```

⇒ (possible variant)

false

12.30 Emergency shutoff status

sum (optional boolean)	meter/emergency_off_status/
Status of emergency shutoff	

Retrieving the value is denied if not [administrative user](#)

This sum does not support direct modification.

This sum can change as if by itself or indirectly because of other actions.

This sum can assume the following values:

constant true	Active	Emergency shutoff active, all outlets off
constant false	Inactive	Emergency shutoff inactive, normal outlet operation
constant null	Unknown	Emergency shutoff is in an unknown state, probably due to power failure, all outlets likely off

Sample read command:

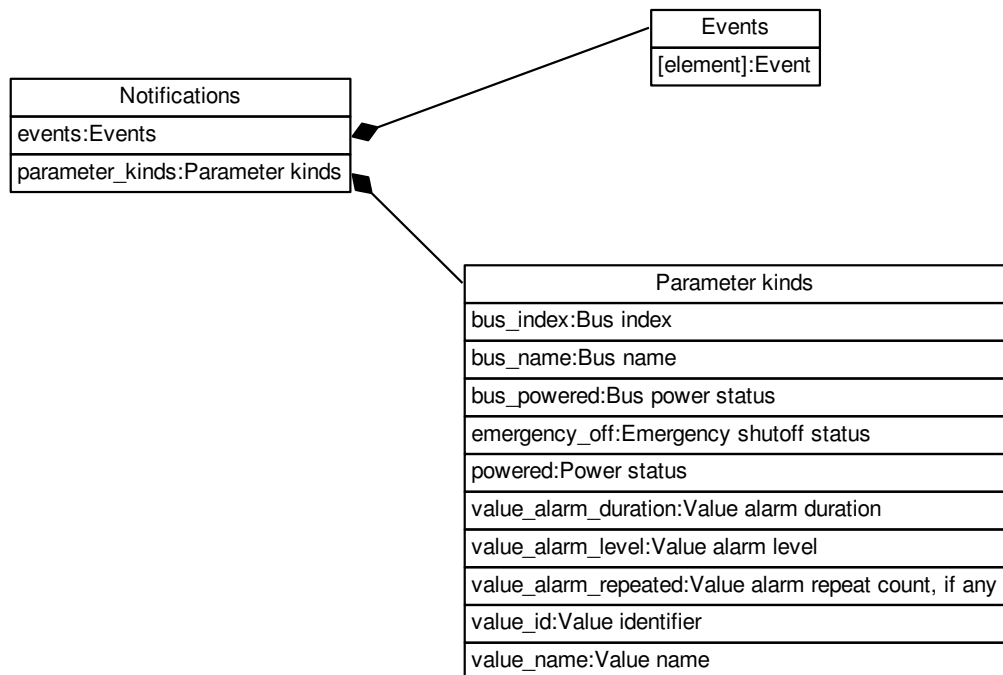
```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/emergency_off_status/"
```

⇒ (possible variant)

true

12.31 Notifications

object	meter/notifications/
Meter status notifications	



This object does not support direct modification.

This object contains the following items:

events	Events
parameter_kinds	Parameter kinds

Sample read command:

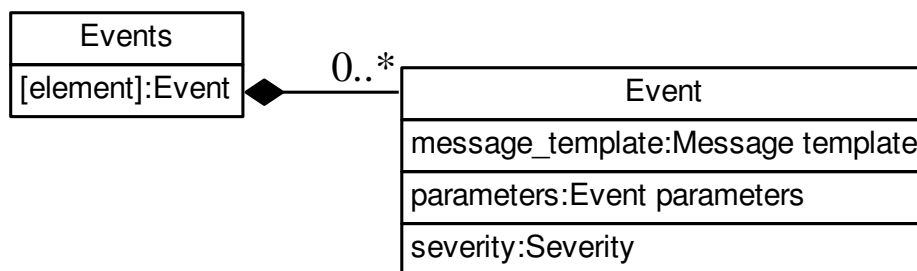
```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/notifications/"
```

⇒

...

12.31.1 Events

map	meter/notifications/events/
Event templates	



This map does not support direct modification.

This map contains [Event](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/notifications/events/"
```

⇒

...

Creating elements in this collection is not supported.

See also [Events: Event](#)

12.31.2 Parameter kinds

object	meter/notifications/parameter_kinds/
Kinds of event parameters	

This object does not correspond to an actual resource.

This object contains the following items:

bus_index	Bus index
bus_name	Bus name
bus_powered	Bus power status
emergency_off	Emergency shutoff status
powered	Power status
value_alarm_duration	Value alarm duration
value_alarm_level	Value alarm level
value_alarm_repeated	Value alarm repeat count, if any

value_id	Value identifier
value_name	Value name

See also [Parameter kinds: Bus index](#)

See also [Parameter kinds: Bus name](#)

See also [Parameter kinds: Bus power status](#)

See also [Parameter kinds: Emergency shutoff status](#)

See also [Parameter kinds: Power status](#)

See also [Parameter kinds: Value alarm duration](#)

See also [Parameter kinds: Value alarm level](#)

See also [Parameter kinds: Value alarm repeat count, if any](#)

See also [Parameter kinds: Value identifier](#)

See also [Parameter kinds: Value name](#)

12.32 Message template: Message template element

sum (variant)	meter/notifications/events/S/message_template/N/
Element of human-readable message template	

This sum does not support direct modification.

This sum can assume the following values:

string	String	Fixed string	
number	Parameter	Index of message parameter to insert	event parameters[the value]

Sample read command (note that :event and :message_template_element are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/notifications/events/:event/message_template/: ↵
↵ message_template_element/"
```

⇒ (possible variant)

2

12.32.1 String

(possibly) string	meter/notifications/events/S/message_template/N/
Fixed string	

12.32.2 Parameter

(possibly) number	meter/notifications/events/S/message_template/N/
Index of message parameter to insert	

The value is subject to the following constraints: [event parameters\[the value\]](#)

12.33 Event parameter: Fixed value

sum (variant)	meter/notifications/events/S/parameters/N/fixed_value/
Fixed parameter value for this particular event	

This sum does not support direct modification.

This sum can assume the following values:

constant null	Null	Null
constant true	True	True
constant false	False	False
string	String	This string
number	Number	This number

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/notifications/events/:event/parameters/:event_parameter/ ↵
↵ fixed_value/"
```

⇒ (possible variant)

8

12.33.1 String

(possibly) string	meter/notifications/events/S/parameters/N/fixed_value/
This string	

12.33.2 Number

(possibly) number	meter/notifications/events/S/parameters/N/fixed_value/
This number	

12.34 Event parameter: Fixed value flag

sum (boolean)	meter/notifications/events/S/parameters/N/has_fixed_value/
Flag indicating that the parameter's value for this event is fixed	

This sum does not support direct modification.

This sum can assume the following values:

constant true	Fixed	The value is fixed
constant false	Variable	The value is variable

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/notifications/events/:event/parameters/:event_parameter/ ↵
↵ has_fixed_value/"
```

⇒ (possible variant)

true

12.35 Event parameter: Identifier

string	meter/notifications/events/S/parameters/N/id/
Parameter identifier	

The value is subject to the following constraints: [parameter kinds](#)

This string does not support direct modification.

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

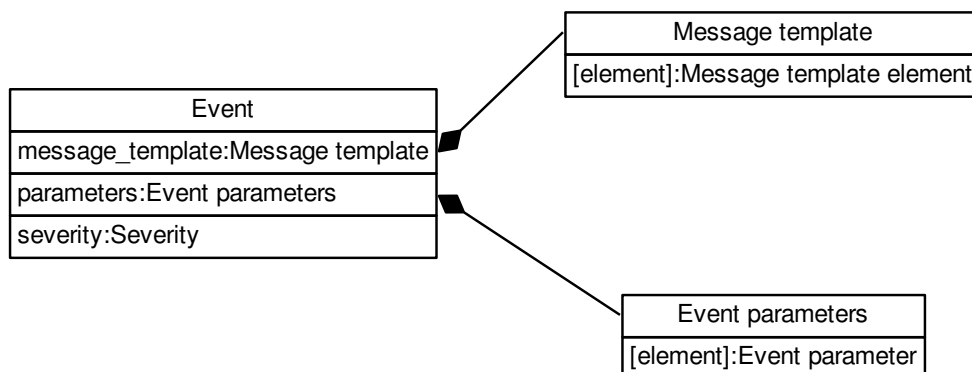
```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/notifications/events/:event/parameters/:event_parameter/id/"
```

⇒

"Sample value"

12.36 Events: Event

object	meter/notifications/events/S/
Event template	



This object contains the following items:

message_template	Message template
parameters	Event parameters
severity	Severity

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/notifications/events/:event/"
```

⇒

```
{
  "severity":3,
  "message_template":[
    "Sample value of message template of message template element #1",
    "Sample value of message template of message template element #2"
  ],
  "parameters":[
    {
      "fixed_value":true,
      "has_fixed_value":false,
      "id":"Sample value of event parameters of event parameter #1 of identifier"
    },
    {
      "fixed_value":null,
      "has_fixed_value":true,
      "id":"Sample value of event parameters of event parameter #2 of identifier"
    },
    {
      "fixed_value":true,
      "has_fixed_value":true,
      "id":"Sample value of event parameters of event parameter #3 of identifier"
    }
  ]
}
```

Sample write command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept" ↵
↵ : application/json" --data-binary "... "https://192.168.0.100/restapi/ ↵
↵ meter/notifications/events/:event/"
```

12.36.1 Message template

array	meter/notifications/events/S/message_template/
Template for human-readable message generation	

This array does not support direct modification.

This array contains [Message template element](#) elements.

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/notifications/events/:event/message_template/"
```

⇒

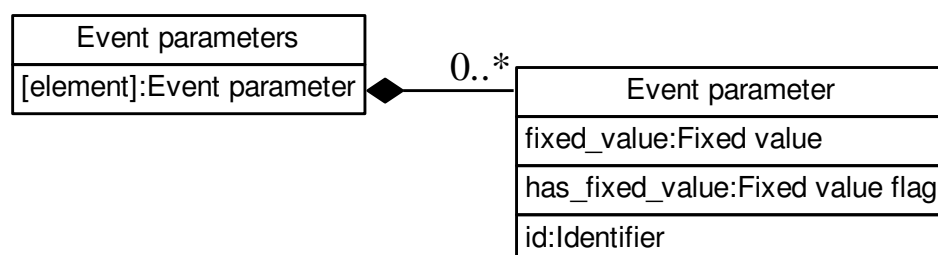
```
[
  "Sample value of message template element #1",
  "Sample value of message template element #2"
]
```

Creating elements in this collection is not supported.

See also [Message template: Message template element](#)

12.36.2 Event parameters

array	meter/notifications/events/S/parameters/
Additional data associated with the event	



This array does not support direct modification.

This array contains [Event parameter](#) elements.

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/notifications/events/:event/parameters/"
```

⇒

```
[
  {
    "fixed_value":true,
    "has_fixed_value":false,
    "id":"Sample value of event parameter #1 of identifier"
  },
  {
    "fixed_value":"Sample value of event parameter #2 of fixed value",
    "has_fixed_value":false,
    "id":"Sample value of event parameter #2 of identifier"
  },
  {
    "fixed_value":true,
    "has_fixed_value":true,
    "id":"Sample value of event parameter #3 of identifier"
  },
  {
    "fixed_value":false,
    "has_fixed_value":false,
    "id":"Sample value of event parameter #4 of identifier"
  },
  {
    "fixed_value":true,
    "has_fixed_value":true,
    "id":"Sample value of event parameter #5 of identifier"
  },
  {
    "fixed_value":"Sample value of event parameter #6 of fixed value",
    "has_fixed_value":true,
    "id":"Sample value of event parameter #6 of identifier"
  },
  {
    "fixed_value":false,
    "has_fixed_value":false,
    "id":"Sample value of event parameter #7 of identifier"
  }
]
```

Creating elements in this collection is not supported.

12.36.2.1 Event parameter

object	meter/notifications/events/S/parameters/N/
Properties of a parameter associated with the event	

This object contains the following items:

fixed_value	Fixed value
-----------------------------	-----------------------------

has_fixed_value	Fixed value flag
id	Identifier

Sample read command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/notifications/events/:event/parameters/:event_parameter/"
```

⇒

```
{
  "fixed_value":6,
  "has_fixed_value":true,
  "id":"Sample value of identifier"
}
```

Sample write command (note that :event and :event_parameter are URL template arguments and need to be replaced before trying):

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"fixed_value":true,"has_fixed_value":true,"id":"Sample ↵
↵ value of identifier"}'\
"https://192.168.0.100/restapi/meter/notifications/events/:event/parameters/: ↵
↵ event_parameter/"
```

See also [Event parameter: Fixed value](#)

See also [Event parameter: Fixed value flag](#)

See also [Event parameter: Identifier](#)

12.36.3 Severity

sum (enumerated number)	meter/notifications/events/S/severity/
Severity rating assigned to the event	

This sum does not support direct modification.

This sum can assume the following values:

constant 1	Emergency	Treat the event as an emergency
constant 2	Alert	Treat the event as an alert
constant 3	Critical	Treat the event as critical
constant 4	Error	Treat the event as an error
constant 5	Warning	Treat the event as a warning
constant 6	Notice	Treat the event as a notice
constant 7	Informational	Treat the event as informational
constant 8	Debug	Treat the event as debugging-related

Sample read command (note that :event is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/notifications/events/:event/severity/"
```

⇒ (possible variant)

4

12.37 Parameter kinds: Bus index

number	meter/notifications/parameter_kinds/bus_index/
Index of the bus	

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/notifications/parameter_kinds/bus_index/"
```

⇒

9

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "9" "https://192.168.0.100/restapi/meter/ ↵
↵ notifications/parameter_kinds/bus_index/"
```

12.38 Parameter kinds: Bus name

number	meter/notifications/parameter_kinds/bus_name/
Name of the bus	

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/notifications/parameter_kinds/bus_name/"
```

⇒

10

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "10" "https://192.168.0.100/restapi/meter ↵
↵ /notifications/parameter_kinds/bus_name/"
```

12.39 Parameter kinds: Bus power status

sum (boolean)	meter/notifications/parameter_kinds/bus_powered/
Status of bus power	

This sum can assume the following values:

constant true	Powered	The bus is powered
constant false	Not powered	The bus is not powered

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/notifications/parameter_kinds/bus_powered/"
```

⇒ (possible variant)

false

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "true" "https://192.168.0.100/restapi/ ↵
↵ meter/notifications/parameter_kinds/bus_powered/"
```

12.40 Parameter kinds: Emergency shutoff status

sum (boolean)	meter/notifications/parameter_kinds/emergency_off/
Status of emergency shutoff	

This sum can assume the following values:

constant true	Active	All outlets off
constant false	Inactive	Normal outlet operation

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/notifications/parameter_kinds/emergency_off/"
```

⇒ (possible variant)

false

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ meter/notifications/parameter_kinds/emergency_off/"
```

12.41 Parameter kinds: Power status

sum (boolean)	meter/notifications/parameter_kinds/powered/
Status of unit power	

This sum can assume the following values:

constant true	Mains	The unit is running on mains
constant false	Battery	The unit is running on battery

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/notifications/parameter_kinds/powered/"
```

⇒ (possible variant)

false

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "false" "https://192.168.0.100/restapi/ ↵
↵ meter/notifications/parameter_kinds/powered/"
```

12.42 Parameter kinds: Value alarm duration

number	meter/notifications/parameter_kinds/value_alarm_duration/
Amount of time the value has been at this alarm level	

The value is subject to the following constraints: [the value](#) is greater or equal to 0

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/notifications/parameter_kinds/value_alarm_duration/"
```

⇒

8

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "9" "https://192.168.0.100/restapi/meter/ ↵
↵ notifications/parameter_kinds/value_alarm_duration/"
```

12.43 Parameter kinds: Value alarm level

number	meter/notifications/parameter_kinds/value_alarm_level/
Alarm level associated with the value	

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/notifications/parameter_kinds/value_alarm_level/"
```

⇒

3

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "7" "https://192.168.0.100/restapi/meter/ ↵
↵ notifications/parameter_kinds/value_alarm_level/"
```

12.44 Parameter kinds: Value alarm repeat count, if any

sum (optional number)	meter/notifications/parameter_kinds/value_alarm_repeated/
Number of consecutive times this alarm has been sent, if any	

This sum can assume the following values:

constant null	Initial alarm	The value has just entered the interval	
number	Value alarm repeat count	Number of consecutive times this alarm has been sent	all of the following is true: <ul style="list-style-type: none"> • the value is an integer • the value is greater or equal to 0

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/notifications/parameter_kinds/value_alarm_repeated/"
```

⇒ (possible variant)

null

Sample (possible variant) write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "10" "https://192.168.0.100/restapi/meter ↵
↵ /notifications/parameter_kinds/value_alarm_repeated/"
```

12.44.1 Value alarm repeat count

(possibly) number	meter/notifications/parameter_kinds/value_alarm_repeated/
Number of consecutive times this alarm has been sent	

The value is subject to the following constraints: all of the following is true:

- the value is an integer
- the value is greater or equal to 0

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "10" "https://192.168.0.100/restapi/meter ↵
↵ /notifications/parameter_kinds/value_alarm_repeated/"
```

12.45 Parameter kinds: Value identifier

string	meter/notifications/parameter_kinds/value_id/
Identifier of the value	

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/notifications/parameter_kinds/value_id/"
```

⇒

"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/meter/notifications/parameter_kinds/value_id/"
```

12.46 Parameter kinds: Value name

string	meter/notifications/parameter_kinds/value_name/
Name of the value	

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/meter/notifications/parameter_kinds/value_name/"
```

⇒

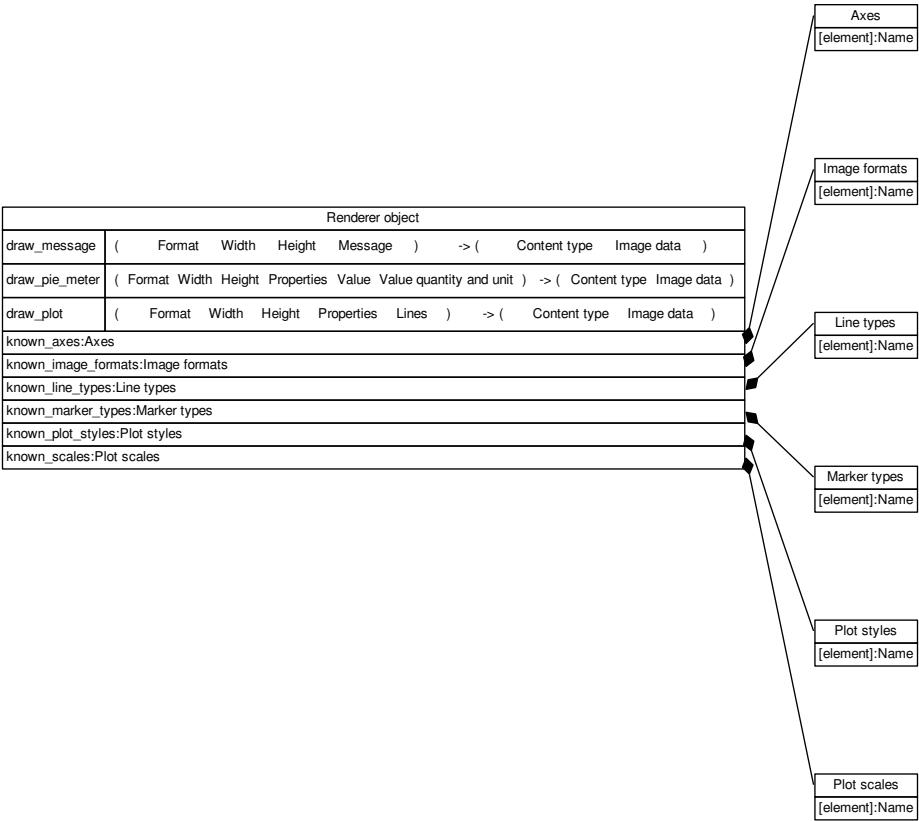
"Sample value"

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept ↵
↵ : application/json" --data-binary "\"Sample value\"" "https ↵
↵ ://192.168.0.100/restapi/meter/notifications/parameter_kinds/value_name/"
```

13 Renderer object

object	renderer/
Object representing renderer capabilities and functions	



This object contains the following items:

draw_message	Draw a message
draw_pie_meter	Draw a pie meter
draw_plot	Draw a plot
known_axes	Axes
known_image_formats	Image formats
known_line_types	Line types
known_marker_types	Marker types
known_plot_styles	Plot styles
known_scales	Plot scales

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/renderer/"
```

⇒

...

Sample write command:

```
curl --digest -u admin:1234 -X PUT -H "Content-type: application/json" -H "Accept: application/json" --data-binary "... "https://192.168.0.100/restapi/renderer/"
```

13.1 Draw a message

call	renderer/draw_message/
Generate an image with a message in its center	

Performing the function call is denied if not [administrative user](#)

The call accepts the following arguments:

1. string
2. number
3. number
4. string

The call returns the following results:

1. string
2. string

Sample invocation:

```
curl --digest -u admin:1234 -X POST -H "Accept: application/json" "https://192.168.0.100/restapi/renderer/draw_message/"
```

⇒

null

13.1.1 Format

string	renderer/draw_message/arguments: 1/
Image format	

The value is subject to the following constraints: [image formats\[the value\]](#)

This string does not correspond to an actual resource.

13.1.2 Width

number	renderer/draw_message/arguments: 2/
The width of the image	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater than 0

This number does not correspond to an actual resource.

13.1.3 Height

number	renderer/draw_message/arguments: 3/
The height of the image	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater than 0

This number does not correspond to an actual resource.

13.1.4 Message

string	renderer/draw_message/arguments: 4/
Message text	

This string does not correspond to an actual resource.

13.1.5 Content type

string	renderer/draw_message/results: 1/
The content type of the generated image	

This string does not correspond to an actual resource.

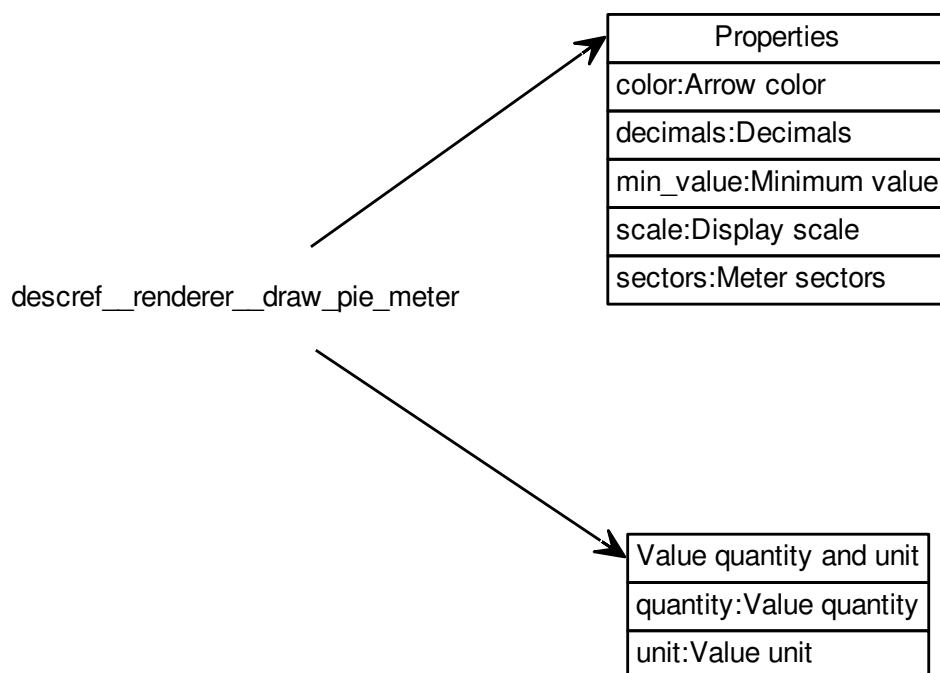
13.1.6 Image data

string	renderer/draw_message/results: 2/
Generated image data	

This string does not correspond to an actual resource.

13.2 Draw a pie meter

call	renderer/draw_pie_meter/
Generate a multi-sector meter image with an arrow indicating value	



Performing the function call is denied if not [administrative user](#)

The call accepts the following arguments:

1. string
2. number
3. number
4. object "Properties"
5. number
6. object "Value quantity and unit"

The call returns the following results:

1. string
2. string

Sample invocation:

```
curl --digest -u admin:1234 -X POST -H "Accept: application/json" "https ↵  
↵ ://192.168.0.100/restapi/renderer/draw_pie_meter/"
```

⇒

null

13.2.1 Format

string	renderer/draw_pie_meter/arguments: 1/
Image format	

The value is subject to the following constraints: [image formats\[the value\]](#)

This string does not correspond to an actual resource.

13.2.2 Width

number	renderer/draw_pie_meter/arguments: 2/
The width of the image	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater than 0

This number does not correspond to an actual resource.

13.2.3 Height

number	renderer/draw_pie_meter/arguments: 3/
The height of the image	

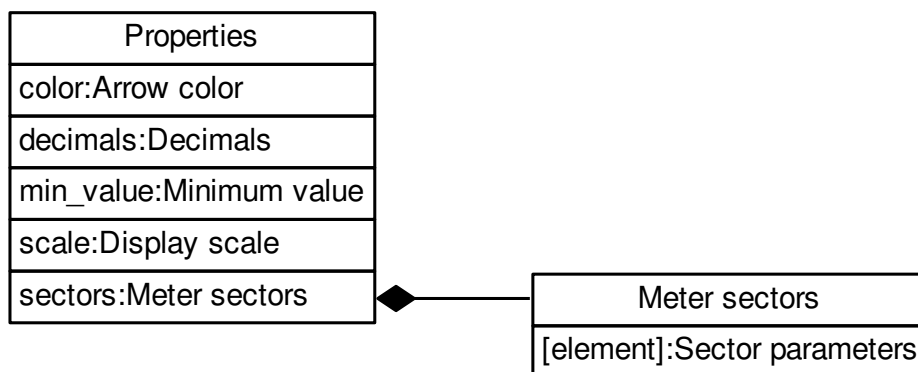
The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater than 0

This number does not correspond to an actual resource.

13.2.4 Properties

object	renderer/draw_pie_meter/arguments: 4/
Properties of the meter	



This object does not correspond to an actual resource.

This object contains the following items:

color	Arrow color
decimals	Decimals
min_value	Minimum value
scale	Display scale
sectors	Meter sectors

See also [Properties: Arrow color](#)

See also [Properties: Decimals](#)

See also [Properties: Minimum value](#)

See also [Properties: Display scale](#)

See also [Properties: Meter sectors](#)

13.2.5 Value

number	renderer/draw_pie_meter/arguments: 5/
Meter value to display	

This number does not correspond to an actual resource.

See also [Draw a pie meter: Value quantity and unit](#)

13.2.6 Content type

string	renderer/draw_pie_meter/results: 1/
The content type of the generated image	

This string does not correspond to an actual resource.

13.2.7 Image data

string	renderer/draw_pie_meter/results: 2/
Generated image data	

This string does not correspond to an actual resource.

13.3 Properties: Arrow color

string	renderer/draw_pie_meter/arguments: 4/color/
The color of the meter arrow	

The value is subject to the following constraints: [the value](#) matches $^{[0-9A-F]\{6\}}$

This string does not correspond to an actual resource.

13.4 Properties: Decimals

number	renderer/draw_pie_meter/arguments: 4/decimals/
Number of decimal places to show in displayed value	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater or equal to 0

This number does not correspond to an actual resource.

13.5 Properties: Minimum value

number	renderer/draw_pie_meter/arguments: 4/min_value/
The minimum value to be displayed on the meter	

This number does not correspond to an actual resource.

13.6 Properties: Display scale

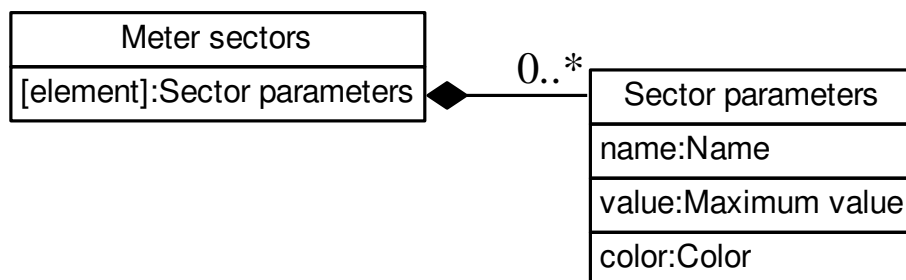
string	renderer/draw_pie_meter/arguments: 4/scale/
The scale function to use for display	

The value is subject to the following constraints: [plot scales\[the value\]](#)

This string does not correspond to an actual resource.

13.7 Properties: Meter sectors

array	renderer/draw_pie_meter/arguments: 4/sectors/
Parameters of meter sectors	



This array does not correspond to an actual resource.

This array contains [Sector parameters](#) elements.

13.7.1 Sector parameters

object	renderer/draw_pie_meter/arguments: 4/sectors/N/
Parameters of a meter sector	

This object does not correspond to an actual resource.

This object contains the following items:

name	Name
value	Maximum value
color	Color

13.7.1.1 Name

string	renderer/draw_pie_meter/arguments: 4/sectors/N/name/
The name of the sector	

This string does not correspond to an actual resource.

13.7.1.2 Maximum value

number	renderer/draw_pie_meter/arguments: 4/sectors/N/value/
The maximum value for the sector	

This number does not correspond to an actual resource.

13.7.1.3 Color

string	renderer/draw_pie_meter/arguments: 4/sectors/N/color/
The color of the sector	

The value is subject to the following constraints: [the value](#) matches `^[0-9A-F]{6}$`

This string does not correspond to an actual resource.

13.8 Draw a pie meter: Value quantity and unit

object	renderer/draw_pie_meter/arguments: 6/
The quantity and unit for value	

This object does not correspond to an actual resource.

This object contains the following items:

quantity	Value quantity
unit	Value unit

13.8.1 Value quantity

string	renderer/draw_pie_meter/arguments: 6/quantity/
The quantity for value	

The value is subject to the following constraints: [known quantities\[the value\]](#)

This string does not correspond to an actual resource.

13.8.2 Value unit

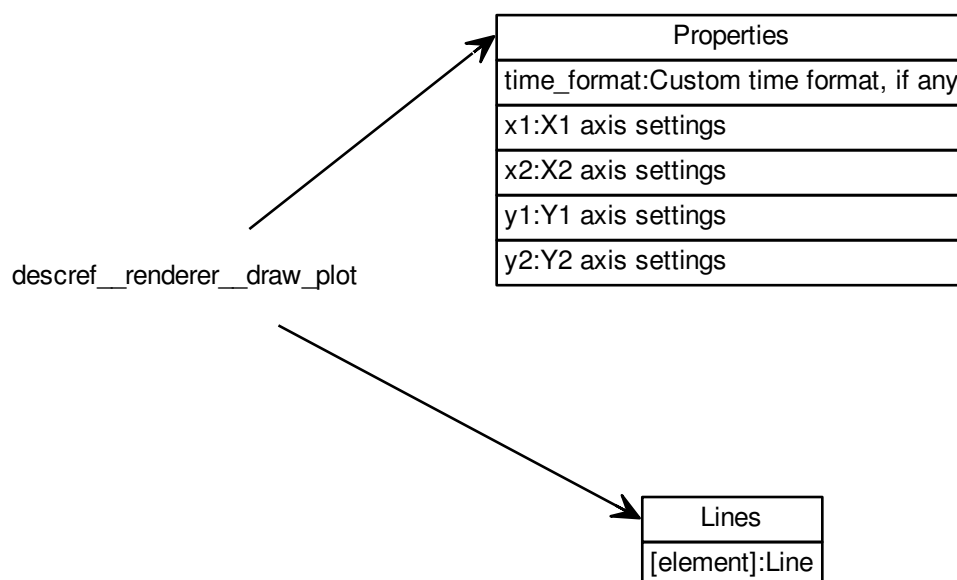
string	renderer/draw_pie_meter/arguments: 6/unit/
The unit for value	

The value is subject to the following constraints: [known quantities\[value quantity\].units\[the value\]](#)

This string does not correspond to an actual resource.

13.9 Draw a plot

call	renderer/draw_plot/
Generate an image with axes and data plotted on them	



Performing the function call is denied if not [administrative user](#)

The call accepts the following arguments:

1. string
2. number
3. number
4. object "Properties"
5. array of "(string,array of "(number,None or Y)",object "Style",(object "X axis quantity and unit",object "Y axis quantity and unit"))"

The call returns the following results:

1. string
2. string

Sample invocation:

```
curl --digest -u admin:1234 -X POST -H "Accept: application/json" "https ↵
↵ ://192.168.0.100/restapi/renderer/draw_plot/"
```

⇒

null

13.9.1 Format

string	renderer/draw_plot/arguments: 1/
Image format	

The value is subject to the following constraints: [image formats\[the value\]](#)

This string does not correspond to an actual resource.

13.9.2 Width

number	renderer/draw_plot/arguments: 2/
The width of the image	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater than 0

This number does not correspond to an actual resource.

13.9.3 Height

number	renderer/draw_plot/arguments: 3/
The height of the image	

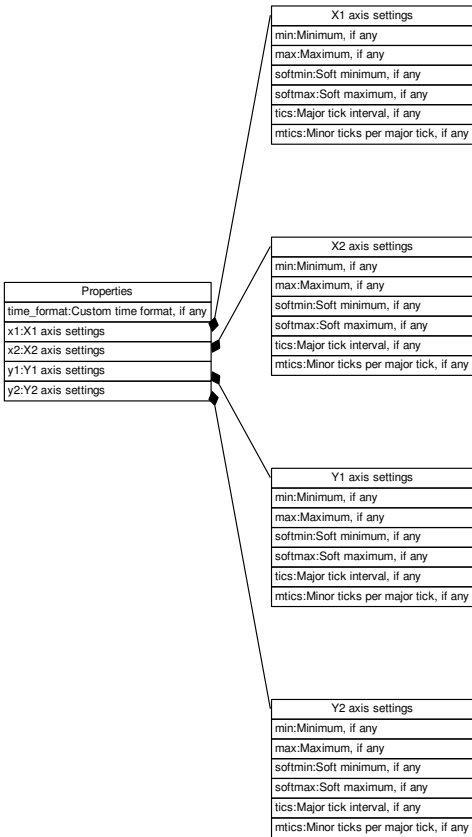
The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater than 0

This number does not correspond to an actual resource.

13.9.4 Properties

object	renderer/draw_plot/arguments: 4/
Properties of the plot	



This object does not correspond to an actual resource.

This object contains the following items:

time_format	Custom time format, if any
x1	X1 axis settings
x2	X2 axis settings
y1	Y1 axis settings
y2	Y2 axis settings

See also [Properties: Custom time format, if any](#)

See also [Properties: X1 axis settings](#)

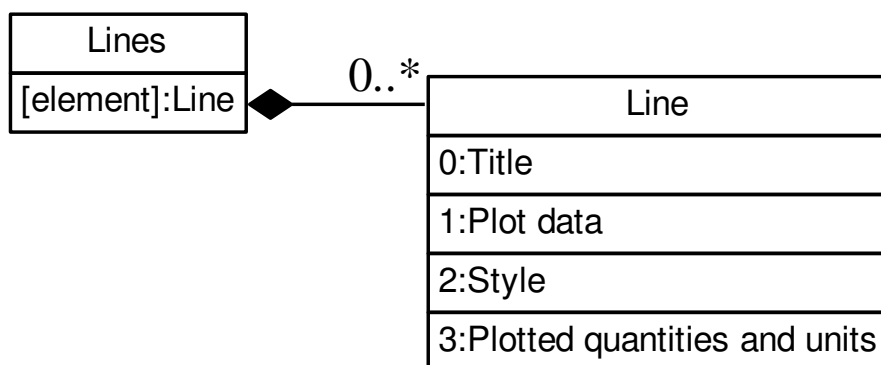
See also [Properties: X2 axis settings](#)

See also [Properties: Y1 axis settings](#)

See also [Properties: Y2 axis settings](#)

13.9.5 Lines

array	renderer/draw_plot/arguments: 5/
Plot data lines	



This array does not correspond to an actual resource.

This array contains [Line](#) elements.

See also [Lines: Line](#)

13.9.6 Content type

string	renderer/draw_plot/results: 1/
The content type of the generated image	

This string does not correspond to an actual resource.

13.9.7 Image data

string	renderer/draw_plot/results: 2/
Generated image data	

This string does not correspond to an actual resource.

13.10 Properties: Custom time format, if any

sum (optional string)	renderer/draw_plot/arguments: 4/time_format/
Custom format to display time in, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	Default	Use default time format
string	Custom time format	Custom format to display time in

13.10.1 Custom time format

(possibly) string	renderer/draw_plot/arguments: 4/time_format/
Custom format to display time in	

This string does not correspond to an actual resource.

13.11 Properties: X1 axis settings

object	renderer/draw_plot/arguments: 4/x1/
Configuration for X1 axis	

This object does not correspond to an actual resource.

This object contains the following items:

min	Minimum, if any
max	Maximum, if any

softmin	Soft minimum, if any
softmax	Soft maximum, if any
tics	Major tick interval, if any
mtics	Minor ticks per major tick, if any

13.11.1 Minimum, if any

sum (optional number)	renderer/draw_plot/arguments: 4/x1/min/
Minimum value to display on the axis, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	Automatic	The maximum value is derived from data and the soft maximum
number	Minimum	Minimum value to display on the axis

13.11.1.1 Minimum

(possibly) number	renderer/draw_plot/arguments: 4/x1/min/
Minimum value to display on the axis	

This number does not correspond to an actual resource.

13.11.2 Maximum, if any

sum (optional number)	renderer/draw_plot/arguments: 4/x1/max/
Maximum value to display on the axis, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	Automatic	The minimum value is derived from data and the soft minimum
number	Maximum	Maximum value to display on the axis

13.11.2.1 Maximum

(possibly) number	renderer/draw_plot/arguments: 4/x1/max/
Maximum value to display on the axis	

This number does not correspond to an actual resource.

13.11.3 Soft minimum, if any

sum (optional number)	renderer/draw_plot/arguments: 4/x1/softmin/
Minimum value to display on the axis unless values exist below it, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	None	No soft maximum defined
number	Soft minimum	Minimum value to display on the axis unless values exist below it

13.11.3.1 Soft minimum

(possibly) number	renderer/draw_plot/arguments: 4/x1/softmin/
Minimum value to display on the axis unless values exist below it	

This number does not correspond to an actual resource.

13.11.4 Soft maximum, if any

sum (optional number)	renderer/draw_plot/arguments: 4/x1/softmax/
Maximum value to display on the axis unless values exist above it, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	None	No soft minimum defined
number	Soft maximum	Maximum value to display on the axis unless values exist above it

13.11.4.1 Soft maximum

(possibly) number	renderer/draw_plot/arguments: 4/x1/softmax/
Maximum value to display on the axis unless values exist above it	

This number does not correspond to an actual resource.

13.11.5 Major tick interval, if any

sum (optional number)	renderer/draw_plot/arguments: 4/x1/tics/
The interval, in value units, between major ticks of the axis, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	Automatic	The tick interval is derived from data and size
number	Major tick interval	The interval, in value units, between major ticks of the axis

13.11.5.1 Major tick interval

(possibly) number	renderer/draw_plot/arguments: 4/x1/tics/
The interval, in value units, between major ticks of the axis	

This number does not correspond to an actual resource.

13.11.6 Minor ticks per major tick, if any

sum (optional number)	renderer/draw_plot/arguments: 4/x1/mtics/
The number of minor ticks between two major ticks, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	None	There are no minor ticks	
number	Minor ticks per major tick	The number of minor ticks between two major ticks	all of the following is true: <ul style="list-style-type: none"> • the value is an integer • the value is greater or equal to 0

13.11.6.1 Minor ticks per major tick

(possibly) number	renderer/draw_plot/arguments: 4/x1/mtics/
The number of minor ticks between two major ticks	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater or equal to 0

This number does not correspond to an actual resource.

13.12 Properties: X2 axis settings

object	renderer/draw_plot/arguments: 4/x2/
Configuration for X2 axis	

This object does not correspond to an actual resource.

This object contains the following items:

min	Minimum, if any
max	Maximum, if any
softmin	Soft minimum, if any
softmax	Soft maximum, if any
tics	Major tick interval, if any
mtics	Minor ticks per major tick, if any

13.12.1 Minimum, if any

sum (optional number)	renderer/draw_plot/arguments: 4/x2/min/
Minimum value to display on the axis, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	Automatic	The maximum value is derived from data and the soft maximum
number	Minimum	Minimum value to display on the axis

13.12.1.1 Minimum

(possibly) number	renderer/draw_plot/arguments: 4/x2/min/
Minimum value to display on the axis	

This number does not correspond to an actual resource.

13.12.2 Maximum, if any

sum (optional number)	renderer/draw_plot/arguments: 4/x2/max/
Maximum value to display on the axis, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	Automatic	The minimum value is derived from data and the soft minimum
number	Maximum	Maximum value to display on the axis

13.12.2.1 Maximum

(possibly) number	renderer/draw_plot/arguments: 4/x2/max/
Maximum value to display on the axis	

This number does not correspond to an actual resource.

13.12.3 Soft minimum, if any

sum (optional number)	renderer/draw_plot/arguments: 4/x2/softmin/
Minimum value to display on the axis unless values exist below it, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	None	No soft maximum defined
number	Soft minimum	Minimum value to display on the axis unless values exist below it

13.12.3.1 Soft minimum

(possibly) number	renderer/draw_plot/arguments: 4/x2/softmin/
Minimum value to display on the axis unless values exist below it	

This number does not correspond to an actual resource.

13.12.4 Soft maximum, if any

sum (optional number)	renderer/draw_plot/arguments: 4/x2/softmax/
Maximum value to display on the axis unless values exist above it, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	None	No soft minimum defined
number	Soft maximum	Maximum value to display on the axis unless values exist above it

13.12.4.1 Soft maximum

(possibly) number	renderer/draw_plot/arguments: 4/x2/softmax/
Maximum value to display on the axis unless values exist above it	

This number does not correspond to an actual resource.

13.12.5 Major tick interval, if any

sum (optional number)	renderer/draw_plot/arguments: 4/x2/tics/
The interval, in value units, between major ticks of the axis, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	Automatic	The tick interval is derived from data and size
number	Major tick interval	The interval, in value units, between major ticks of the axis

13.12.5.1 Major tick interval

(possibly) number	renderer/draw_plot/arguments: 4/x2/tics/
The interval, in value units, between major ticks of the axis	

This number does not correspond to an actual resource.

13.12.6 Minor ticks per major tick, if any

sum (optional number)	renderer/draw_plot/arguments: 4/x2/mtics/
The number of minor ticks between two major ticks, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	None	There are no minor ticks	
number	Minor ticks per major tick	The number of minor ticks between two major ticks	all of the following is true: <ul style="list-style-type: none"> • the value is an integer • the value is greater or equal to 0

13.12.6.1 Minor ticks per major tick

(possibly) number	renderer/draw_plot/arguments: 4/x2/mtics/
The number of minor ticks between two major ticks	

The value is subject to the following constraints: all of the following is true:

- the value is an integer
- the value is greater or equal to 0

This number does not correspond to an actual resource.

13.13 Properties: Y1 axis settings

object	renderer/draw_plot/arguments: 4/y1/
Configuration for Y1 axis	

This object does not correspond to an actual resource.

This object contains the following items:

min	Minimum, if any
max	Maximum, if any
softmin	Soft minimum, if any
softmax	Soft maximum, if any
tics	Major tick interval, if any
mtics	Minor ticks per major tick, if any

13.13.1 Minimum, if any

sum (optional number)	renderer/draw_plot/arguments: 4/y1/min/
Minimum value to display on the axis, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	Automatic	The maximum value is derived from data and the soft maximum
number	Minimum	Minimum value to display on the axis

13.13.1.1 Minimum

(possibly) number	renderer/draw_plot/arguments: 4/y1/min/
Minimum value to display on the axis	

This number does not correspond to an actual resource.

13.13.2 Maximum, if any

sum (optional number)	renderer/draw_plot/arguments: 4/y1/max/
Maximum value to display on the axis, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	Automatic	The minimum value is derived from data and the soft minimum
number	Maximum	Maximum value to display on the axis

13.13.2.1 Maximum

(possibly) number	renderer/draw_plot/arguments: 4/y1/max/
Maximum value to display on the axis	

This number does not correspond to an actual resource.

13.13.3 Soft minimum, if any

sum (optional number)	renderer/draw_plot/arguments: 4/y1/softmin/
Minimum value to display on the axis unless values exist below it, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	None	No soft maximum defined
number	Soft minimum	Minimum value to display on the axis unless values exist below it

13.13.3.1 Soft minimum

(possibly) number	renderer/draw_plot/arguments: 4/y1/softmin/
Minimum value to display on the axis unless values exist below it	

This number does not correspond to an actual resource.

13.13.4 Soft maximum, if any

sum (optional number)	renderer/draw_plot/arguments: 4/y1/softmax/
Maximum value to display on the axis unless values exist above it, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	None	No soft minimum defined
number	Soft maximum	Maximum value to display on the axis unless values exist above it

13.13.4.1 Soft maximum

(possibly) number	renderer/draw_plot/arguments: 4/y1/softmax/
Maximum value to display on the axis unless values exist above it	

This number does not correspond to an actual resource.

13.13.5 Major tick interval, if any

sum (optional number)	renderer/draw_plot/arguments: 4/y1/tics/
The interval, in value units, between major ticks of the axis, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	Automatic	The tick interval is derived from data and size
number	Major tick interval	The interval, in value units, between major ticks of the axis

13.13.5.1 Major tick interval

(possibly) number	renderer/draw_plot/arguments: 4/y1/tics/
The interval, in value units, between major ticks of the axis	

This number does not correspond to an actual resource.

13.13.6 Minor ticks per major tick, if any

sum (optional number)	renderer/draw_plot/arguments: 4/y1/mtics/
The number of minor ticks between two major ticks, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	None	There are no minor ticks	
number	Minor ticks per major tick	The number of minor ticks between two major ticks	all of the following is true: <ul style="list-style-type: none"> • the value is an integer • the value is greater or equal to 0

13.13.6.1 Minor ticks per major tick

(possibly) number	renderer/draw_plot/arguments: 4/y1/mtics/
The number of minor ticks between two major ticks	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater or equal to 0

This number does not correspond to an actual resource.

13.14 Properties: Y2 axis settings

object	renderer/draw_plot/arguments: 4/y2/
Configuration for Y2 axis	

This object does not correspond to an actual resource.

This object contains the following items:

min	Minimum, if any
max	Maximum, if any
softmin	Soft minimum, if any
softmax	Soft maximum, if any
tics	Major tick interval, if any
mtics	Minor ticks per major tick, if any

13.14.1 Minimum, if any

sum (optional number)	renderer/draw_plot/arguments: 4/y2/min/
Minimum value to display on the axis, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	Automatic	The maximum value is derived from data and the soft maximum
number	Minimum	Minimum value to display on the axis

13.14.1.1 Minimum

(possibly) number	renderer/draw_plot/arguments: 4/y2/min/
Minimum value to display on the axis	

This number does not correspond to an actual resource.

13.14.2 Maximum, if any

sum (optional number)	renderer/draw_plot/arguments: 4/y2/max/
Maximum value to display on the axis, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	Automatic	The minimum value is derived from data and the soft minimum
number	Maximum	Maximum value to display on the axis

13.14.2.1 Maximum

(possibly) number	renderer/draw_plot/arguments: 4/y2/max/
Maximum value to display on the axis	

This number does not correspond to an actual resource.

13.14.3 Soft minimum, if any

sum (optional number)	renderer/draw_plot/arguments: 4/y2/softmin/
Minimum value to display on the axis unless values exist below it, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	None	No soft maximum defined
number	Soft minimum	Minimum value to display on the axis unless values exist below it

13.14.3.1 Soft minimum

(possibly) number	renderer/draw_plot/arguments: 4/y2/softmin/
Minimum value to display on the axis unless values exist below it	

This number does not correspond to an actual resource.

13.14.4 Soft maximum, if any

sum (optional number)	renderer/draw_plot/arguments: 4/y2/softmax/
Maximum value to display on the axis unless values exist above it, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	None	No soft minimum defined
number	Soft maximum	Maximum value to display on the axis unless values exist above it

13.14.4.1 Soft maximum

(possibly) number	renderer/draw_plot/arguments: 4/y2/softmax/
Maximum value to display on the axis unless values exist above it	

This number does not correspond to an actual resource.

13.14.5 Major tick interval, if any

sum (optional number)	renderer/draw_plot/arguments: 4/y2/tics/
The interval, in value units, between major ticks of the axis, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	Automatic	The tick interval is derived from data and size
number	Major tick interval	The interval, in value units, between major ticks of the axis

13.14.5.1 Major tick interval

(possibly) number	renderer/draw_plot/arguments: 4/y2/tics/
The interval, in value units, between major ticks of the axis	

This number does not correspond to an actual resource.

13.14.6 Minor ticks per major tick, if any

sum (optional number)	renderer/draw_plot/arguments: 4/y2/mtics/
The number of minor ticks between two major ticks, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant null	None	There are no minor ticks	
number	Minor ticks per major tick	The number of minor ticks between two major ticks	all of the following is true: <ul style="list-style-type: none"> • the value is an integer • the value is greater or equal to 0

13.14.6.1 Minor ticks per major tick

(possibly) number	renderer/draw_plot/arguments: 4/y2/mtics/
The number of minor ticks between two major ticks	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater or equal to 0

This number does not correspond to an actual resource.

13.15 Plot point: X

number	renderer/draw_plot/arguments: 5/N/2/N/1/
X coordinate to plot	

This number does not correspond to an actual resource.

13.16 Plot point: Y, if any

sum (variant)	renderer/draw_plot/arguments: 5/N/2/N/2/
Y coordinate to plot, if any	

This sum does not correspond to an actual resource.

This sum can assume the following values:

constant false	None	Data for this X position is absent
number	Y	Y coordinate to plot

13.16.1 Y

(possibly) number	renderer/draw_plot/arguments: 5/N/2/N/2/
Y coordinate to plot	

This number does not correspond to an actual resource.

13.17 Plotted quantities and units: X axis quantity and unit

object	renderer/draw_plot/arguments: 5/N/4/1/
The quantity and unit for X axis	

This object does not correspond to an actual resource.

This object contains the following items:

quantity	X axis quantity
unit	X axis unit

13.17.1 X axis quantity

string	renderer/draw_plot/arguments: 5/N/4/1/quantity/
The quantity for X axis	

The value is subject to the following constraints: [known quantities](#)[[the value](#)]

This string does not correspond to an actual resource.

13.17.2 X axis unit

string	renderer/draw_plot/arguments: 5/N/4/1/unit/
The unit for X axis	

The value is subject to the following constraints: [known quantities](#)[[x axis quantity](#)].units[[the value](#)]

This string does not correspond to an actual resource.

13.18 Plotted quantities and units: Y axis quantity and unit

object	renderer/draw_plot/arguments: 5/N/4/2/
The quantity and unit for Y axis	

This object does not correspond to an actual resource.

This object contains the following items:

quantity	Y axis quantity
unit	Y axis unit

13.18.1 Y axis quantity

string	renderer/draw_plot/arguments: 5/N/4/2/quantity/
The quantity for Y axis	

The value is subject to the following constraints: [known quantities\[the value\]](#)

This string does not correspond to an actual resource.

13.18.2 Y axis unit

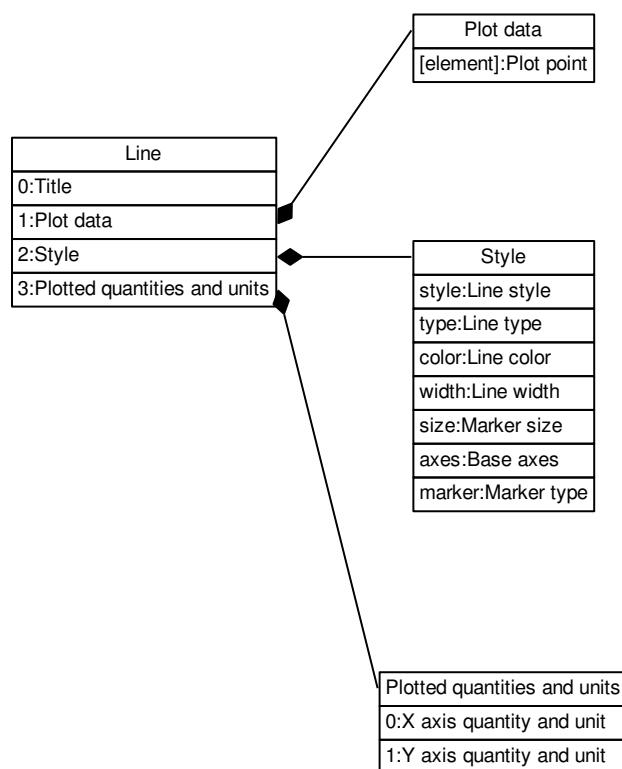
string	renderer/draw_plot/arguments: 5/N/4/2/unit/
The unit for Y axis	

The value is subject to the following constraints: [known quantities\[y axis quantity\].units\[the value\]](#)

This string does not correspond to an actual resource.

13.19 Lines: Line

tuple	renderer/draw_plot/arguments: 5/N/
Plot data line settings	



This tuple does not correspond to an actual resource.

This tuple contains the following items:

1	Title
2	Plot data
3	Style
4	Plotted quantities and units

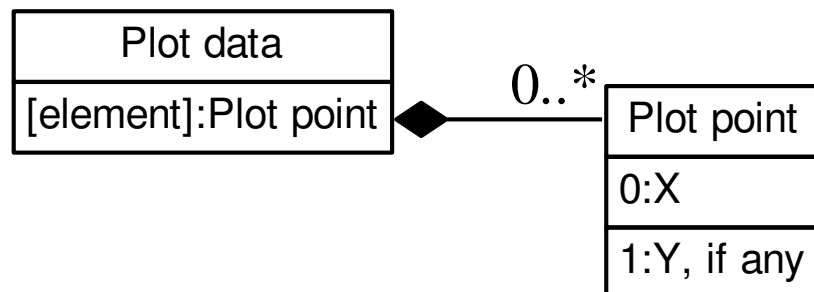
13.19.1 Title

string	renderer/draw_plot/arguments: 5/N/1/
Plot line title	

This string does not correspond to an actual resource.

13.19.2 Plot data

array	renderer/draw_plot/arguments: 5/N/2/
Data to plot	



This array does not correspond to an actual resource.

This array contains [Plot point](#) elements.

13.19.2.1 Plot point

tuple	renderer/draw_plot/arguments: 5/N/2/N/
Point to plot	

This tuple does not correspond to an actual resource.

This tuple contains the following items:

1	X
2	Y, if any

See also [Plot point: X](#)

See also [Plot point: Y, if any](#)

13.19.3 Style

object	renderer/draw_plot/arguments: 5/N/3/
Style of the plot line	

This object does not correspond to an actual resource.

This object contains the following items:

style	Line style
type	Line type
color	Line color
width	Line width
size	Marker size
axes	Base axes
marker	Marker type

13.19.3.1 Line style

string	renderer/draw_plot/arguments: 5/N/3/style/
The style of the line	

The value is subject to the following constraints: [plot styles\[the value\]](#)

This string does not correspond to an actual resource.

13.19.3.2 Line type

string	renderer/draw_plot/arguments: 5/N/3/type/
The type of the line	

The value is subject to the following constraints: [line types\[the value\]](#)

This string does not correspond to an actual resource.

13.19.3.3 Line color

string	renderer/draw_plot/arguments: 5/N/3/color/
The color of the line	

The value is subject to the following constraints: [the value](#) matches `^[0-9A-F]{6}$`

This string does not correspond to an actual resource.

13.19.3.4 Line width

number	renderer/draw_plot/arguments: 5/N/3/width/
The width of the line	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater or equal to 0

This number does not correspond to an actual resource.

13.19.3.5 Marker size

number	renderer/draw_plot/arguments: 5/N/3/size/
The size of the markers	

The value is subject to the following constraints: all of the following is true:

- [the value](#) is an integer
- [the value](#) is greater or equal to 0

This number does not correspond to an actual resource.

13.19.3.6 Base axes

string	renderer/draw_plot/arguments: 5/N/3/axes/
The axes on which the line should be plotted. Units of lines plotted on the same axes must match	

The value is subject to the following constraints: [axes\[the value\]](#)

This string does not correspond to an actual resource.

13.19.3.7 Marker type

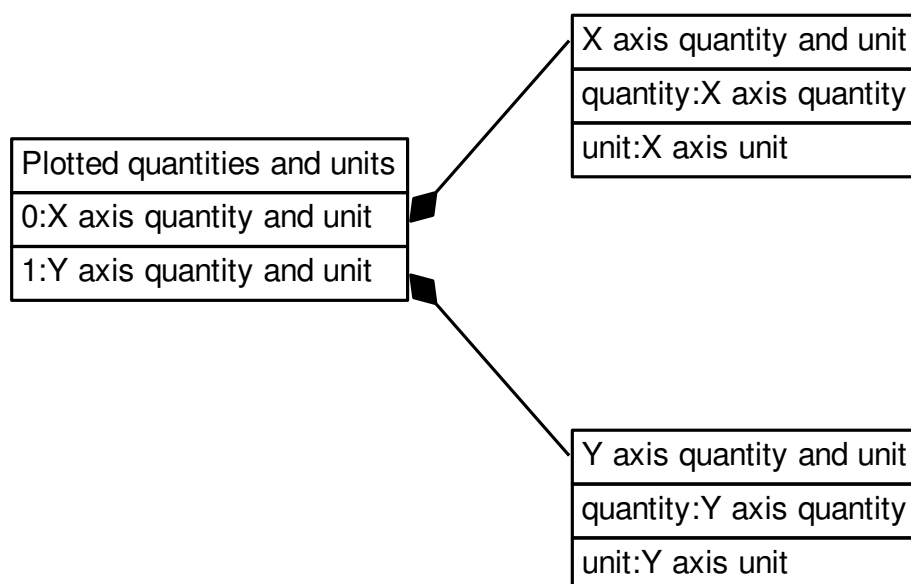
string	renderer/draw_plot/arguments: 5/N/3/marker/
The type of the marker	

The value is subject to the following constraints: [marker types\[the value\]](#)

This string does not correspond to an actual resource.

13.19.4 Plotted quantities and units

tuple	renderer/draw_plot/arguments: 5/N/4/
Quantities and units to be plotted	



This tuple does not correspond to an actual resource.

This tuple contains the following items:

1	X axis quantity and unit
2	Y axis quantity and unit

See also [Plotted quantities and units: X axis quantity and unit](#)

See also [Plotted quantities and units: Y axis quantity and unit](#)

13.20 Axes

map	renderer/known_axes/
Known axis combinations	

Retrieving the value is denied if not [administrative user](#)

This map does not support direct modification.

This map contains [Name](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/renderer/known_axes/"
```

⇒

```
{
  "axes_1": "Sample value of name axes_1",
  "axes_9": "Sample value of name axes_9",
  "axes_8": "Sample value of name axes_8",
  "axes_5": "Sample value of name axes_5",
  "axes_6": "Sample value of name axes_6",
  "axes_3": "Sample value of name axes_3",
  "axes_2": "Sample value of name axes_2",
  "axes_7": "Sample value of name axes_7",
  "axes_4": "Sample value of name axes_4"
}
```

Creating elements in this collection is not supported.

13.20.1 Name

string	renderer/known_axes/S/
Name of axis combination	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

Sample read command (note that :name is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/renderer/known_axes/:name/"
```

⇒

"Sample value"

13.21 Image formats

map	renderer/known_image_formats/
Known image formats	

Retrieving the value is denied if not [administrative user](#)

This map does not support direct modification.

This map contains [Name](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/renderer/known_image_formats/"
```


⇒

```
{
  "image_formats_2": "Sample value of name image_formats_2",
  "image_formats_3": "Sample value of name image_formats_3",
  "image_formats_4": "Sample value of name image_formats_4",
  "image_formats_1": "Sample value of name image_formats_1",
  "image_formats_6": "Sample value of name image_formats_6",
  "image_formats_5": "Sample value of name image_formats_5"
}
```

Creating elements in this collection is not supported.

13.21.1 Name

string	renderer/known_image_formats/S/
Name of image format	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

Sample read command (note that :name is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/renderer/known_image_formats/:name/"
```

⇒

```
"Sample value"
```

13.22 Line types

map	renderer/known_line_types/
Known line types	

Retrieving the value is denied if not [administrative user](#)

This map does not support direct modification.

This map contains [Name](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/renderer/known_line_types/"
```

⇒

```
{
  "line_types_2": "Sample value of name line_types_2",
  "line_types_1": "Sample value of name line_types_1"
}
```

Creating elements in this collection is not supported.

13.22.1 Name

string	renderer/known_line_types/S/
Name of line type	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

Sample read command (note that :name is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/renderer/known_line_types/:name/"
```

⇒

"Sample value"

13.23 Marker types

map	renderer/known_marker_types/
Known marker types	

Retrieving the value is denied if not [administrative user](#)

This map does not support direct modification.

This map contains [Name](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/renderer/known_marker_types/"
```

⇒

```
{
  "marker_types_2": "Sample value of name marker_types_2",
  "marker_types_1": "Sample value of name marker_types_1",
  "marker_types_3": "Sample value of name marker_types_3",
  "marker_types_4": "Sample value of name marker_types_4"
}
```

Creating elements in this collection is not supported.

13.23.1 Name

string	renderer/known_marker_types/S/
Name of marker type	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

Sample read command (note that :name is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/renderer/known_marker_types/:name/"
```

⇒

"Sample value"

13.24 Plot styles

map	renderer/known_plot_styles/
Known plot styles	

Retrieving the value is denied if not [administrative user](#)

This map does not support direct modification.

This map contains [Name](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/renderer/known_plot_styles/"
```

⇒

```
{
  "plot_styles_1": "Sample value of name plot_styles_1"
}
```

Creating elements in this collection is not supported.

13.24.1 Name

string	renderer/known_plot_styles/S/
Name of plot style	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

Sample read command (note that :name is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/renderer/known_plot_styles/:name/"
```

⇒

"Sample value"

13.25 Plot scales

map	renderer/known_scales/
Known plot scales	

Retrieving the value is denied if not [administrative user](#)

This map does not support direct modification.

This map contains [Name](#) elements.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/renderer/known_scales/"
```

⇒

```
{  
  "plot_scales_7": "Sample value of name plot_scales_7",  
  "plot_scales_1": "Sample value of name plot_scales_1",  
  "plot_scales_3": "Sample value of name plot_scales_3",  
  "plot_scales_5": "Sample value of name plot_scales_5",  
  "plot_scales_6": "Sample value of name plot_scales_6",  
  "plot_scales_4": "Sample value of name plot_scales_4",  
  "plot_scales_2": "Sample value of name plot_scales_2"  
}
```

Creating elements in this collection is not supported.

13.25.1 Name

string	renderer/known_scales/S/
Name of plot scale	

Retrieving the value is denied if not [administrative user](#)

This string does not support direct modification.

Sample read command (note that :name is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵  
↵ restapi/renderer/known_scales/:name/"
```

⇒

```
"Sample value"
```

14 Credentials

object	cred/
Security attributes of agent performing request	

This object contains the following items:

name	Client username, if any
is_admin	Administrative user
outlet_access	Outlet access permissions
agent	Agent identifier
ip_address	Client IP address, if any

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/cred/"
```

⇒

```
{
  "ip_address":"Sample value of client ip address, if any",
  "is_admin":false,
  "name":null,
  "agent":"Sample value of agent identifier",
  "outlet_access":[
    true,
    false,
    true,
    false,
    false
  ]
}
```

Sample write command:

```
curl\
--digest\
-u admin:1234\
-X PUT\
-H "Content-type: application/json"\
-H "Accept: application/json"\
--data-binary '{"ip_address":"Sample value of client ip address, if any","\ ↵
↵ is_admin":true,"name":null,"agent":"Sample value of agent identifier ↵
↵ "\',"outlet_access":[false,true,true,false,true,false,true]}'"\
"https://192.168.0.100/restapi/cred/"
```

14.1 Client username, if any

sum (optional string)	cred/name/
Username of the client, as verified by the agent, if any	

This sum does not support direct modification.

This sum can assume the following values:

constant null	Username absent or unknown	Username could not be obtained
string	Client username	Username of the client, as verified by the agent

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/cred/name/"
```

⇒ (possible variant)

```
"Sample value"
```

14.1.1 Client username

(possibly) string	cred/name/
Username of the client, as verified by the agent	

14.2 Administrative user

sum (boolean)	cred/is_admin/
Flag indicating whether the user is an administrator	

This sum does not support direct modification.

This sum can assume the following values:

constant true	Administrator	The user is an administrator
constant false	Regular user	The user is a regular user

Sample read command:

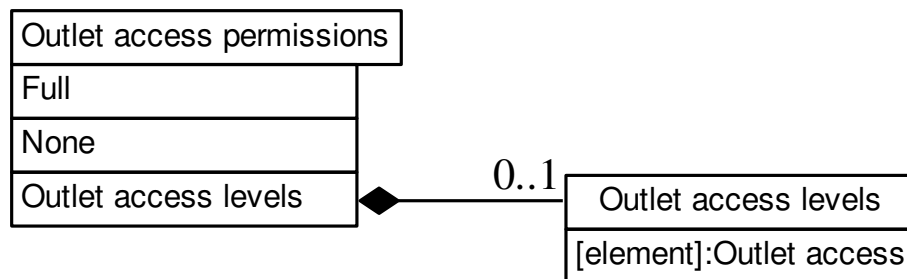
```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/cred/is_admin/"
```

⇒ (possible variant)

```
false
```

14.3 Outlet access permissions

sum (variant)	cred/outlet_access/
Access settings for outlets	



The value is subject to the following constraints: any of the following is true:

- the value is equal to true
- the value is equal to false
- length of the value is equal to length of outlets

This sum does not support direct modification.

This sum can assume the following values:

constant true	Full	State of all outlets can be manipulated by the user
constant false	None	Outlet states cannot be neither seen nor manipulated by the user
array	Outlet access levels	Access levels per outlet

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/cred/outlet_access/"
```

⇒ (possible variant)

false

See also [Outlet access permissions: Outlet access levels](#)

14.4 Outlet access permissions: Outlet access levels

(possibly) array	cred/outlet_access/
Access levels per outlet	

This array contains [Outlet access](#) elements.

Creating elements in this collection is not supported.

14.4.1 Outlet access

sum (boolean)	cred/outlet_access/N/
Access level for outlet by index	

The value is subject to the following constraints: [outlets](#)[index of the value]

This sum does not support direct modification.

This sum can assume the following values:

constant true	Full	Outlet state can be manipulated by the user
constant false	None	Outlet state cannot be neither seen nor manipulated by the user

Sample read command (note that :outlet_access is a URL template argument and needs to be replaced before trying):

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/cred/outlet_access/:outlet_access/"
```

⇒ (possible variant)

```
true
```

14.5 Agent identifier

string	cred/agent/
Identifier of the agent performing request	

This string does not support direct modification.

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/cred/agent/"
```

⇒

```
"Sample value"
```

14.6 Client IP address, if any

sum (optional string)	cred/ip_address/
IPv4 address of the client performing request, if any	

This sum does not support direct modification.

This sum can assume the following values:

constant null	Client IP address absent or unknown	The request is performed locally, or its origin is unknown	
string	Client IP address	IPv4 address of the client performing request	the value matches <code>^([0-9] [1-9][0-9] 1[0-9]{2} 2[0-4][0-9] 25[0-5]).{3}([0-9] [1-9][0-9] 1[0-9]{2} 2[0-4][0-9] 25[0-5])\$</code>

Sample read command:

```
curl --digest -u admin:1234 -H "Accept: application/json" "https://192.168.0.100/ ↵
↵ restapi/cred/ip_address/"
```

⇒ (possible variant)

null

14.6.1 Client IP address

(possibly) string	cred/ip_address/
IPv4 address of the client performing request	

The value is subject to the following constraints: the value matches `^([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5]).{3}([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5])$`