



Access Control

draft-toutain-schc-access-control-03

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Context



- Updates from -02
 - Added Terminology Section
 - Defined which descriptors could be modified and add a default behaviour
 - Defined the actions over these descriptors
 - Added CoAP Access Control
 - Added CoAP Extension Access Control

Which field descriptors need Access control?



- SCHC Field Descriptors:
 - FID. Field ID Description
 - FL. Field Length
 - FP. Field Position
 - DI. Direction
 - TV. Target Value
 - MO. Matching Operator
 - CDA. Compression/Decompression Action

FID



- Must not change the Protocol description
- The only case is:
 - CoAP repeatable fields
 - Ex: Uri-Path

TV (target value)



- More optimal
- Not all but
 - Flow Label, Hop Limit, Sequence Number, UDP Source Port, CoAP Uri-Path, CoAP Token, etc.

CoAP based header



Access Control FID	FL FP DI	Access Control TV	TV (default value)
Read Only	CoAP.Version	2 1 Bi	Read Only 1
Read Only	CoAP.Type	2 1 Bi	Read Only CON, NON-C, ACK, RST.
Read Only	CoAP.TKL	4 1 Bi	Read/Write none
Read Only	CoAP.Code	8 1 Bi	Read Only See CoAP Code Registries
Read Only	CoAP.MessageID	16 1 Bi	Read/Write none
Read Only	CoAP.Token	0-8 1 Bi	Read/Write none

CoAP Options



Access	CoAP	FID	FL	FP	DI	Access	TV
Control	Opt.					Control	(default
FID	Num.					TV	value)
Read/	1	CoAP.Option.	0-8	var	Bi	Read/	none
Write		If-Match				Write	
Read	3	CoAP.Option.				Read/	Sect. 5
Only		Uri-Host	1-255	var	Bi	Write	RFC7252
Read/	4	CoAP.Option.				Read/	none
Write		ETag	1-8	var	Bi	Write	
Read	5	CoAP.Option.				Read	empty
Only		If-None-Match	0	1	Bi	Only	
Read	6	CoAP.Option.				Read	none
Only		Observe	0-3	var	Bi	Only	

Access	CoAP	FID	FL	FP	DI	Access	TV
Control	Opt.					Control	(default
FID	Num.					TV	value)
Read	7	CoAP.Option.				Read	Sect. 5
Only		Uri-Port	0-2	var	Bi	Only	RFC7252
Read/	8	CoAP.Option.				Read/	none
Write		Location-Path	0-255	var	Bi	Write	
Read	9	CoAP.Option.				Read	none
Only		OSCORE	0-255	var	Bi	Only	
Read/	11	CoAP.Option.				Read/	none
Write		Uri-Path	0-255	var	Bi	Write	
Read	12	CoAP.Option.				Read	none
Only		Content-Format	0-2	var	Bi	Only	

CoAP Options



Access Control	CoAP Opt.	FID	FL	FP	DI	Access Control	TV (default value)
Read Only	14	CoAP.Option.Max-Age	0-4	var	Bi	Read Only	60
Read Only	15	CoAP.Option.Uri-Query	0-255	var	Bi	Read Only	none
Read Only	16	CoAP.Option.Hop-Limit	1	1	Bi	Read Only	16
Read Only	17	CoAP.Option.Accept	0-2	var	Bi	Read Only	none
Read Only	19	CoAP.Option.Q-Block1	0-3	var	Bi	Read Only	none

Access Control	CoAP Opt.	FID	FL	FP	DI	Access Control	TV (default value)
Read Only	20	CoAP.Option.Location-Query	0-255	var	Bi	Read Only	none
Read Only	23	CoAP.Option.Block2	0-3	var	Bi	Read Only	none
Read Only	27	CoAP.Option.Block1	0-3	var	Bi	Read Only	none
Read Only	28	CoAP.Option.Size2	0-4	var	Bi	Read Only	none
Read Only	31	CoAP.Option.Q-Block2	0-3	var	Bi	Read Only	none

CoAP Options



Access Control	CoAP Option	FID	FL	FP	DI	Access Control	TV (default value)
Read Only	35	CoAP.Option.Proxy-Uri	1-1034	var	Bi	Read Only	none
Read Only	39	CoAP.Option.Proxy-Scheme	1-255	var	Bi	Read Only	none
Read Only	60	CoAP.Option.Size1	0-4	var	Bi	Read Only	none
Read Only	252	CoAP.Option.Echo	1-40	var	Bi	Read Only	none
Read Only	258	CoAP.Option.No-Response	0-1	1	Up	Read Only	0
Read Only	292	CoAP.Option.Request-Tag	0-8	var	Bi	Read Only	none

Comment



- Adoption?