



IMT Atlantique

Bretagne-Pays de la Loire
École Mines-Télécom

Travaux Dirigés (TD)

6LoWPAN: Compression Examples RFC 6282

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Example 1

	Derived from link hdr		Non-compressed fields
	Compressed fields		

Link Hdr

Len = 50	FCF	DSN	DSTPAN
DST = 00-17-3B-AA-BB-CC			
SRC = 00-17-3B-11-22-33			





IPv6 Hdr

Ver = 6	Traffic Class = 0	Flow Label = 0
Payload Length	N. Header = UDP	Hop Limit = 1
Source Prefix = fe80::/64		
Source IID = 0217:3BFF:FEAA:BBCC		
Dest Prefix = fe80::/64		
Dest IID = 0217:3BFF:FE11:2233		

UDP Hdr

Source Port, where P = 11	Destination Port, where P = 11
Length	Checksum

Example 2

	Derived from link hdr		Non-compressed fields
	Compressed fields		Derived from context

Link Hdr

Len = 50	FCF	DSN	DSTPAN
DST = 00-17-3B-00-AA-BB-CC-DD			
SRC = 00-17-3B-00-11-22-33-44			

IPv6 Hdr

Ver = 6	Traffic Class = 0	Flow Label = 0
Payload Length	N. Header = UDP	Hop Limit = 23
Source Prefix = 2001:5a8:4:3721::/112		
Source IID = 0000:00ff:fe00:1234		
Dest Prefix = 2001:5a8:4:3721::/112		
Dest IID = 0000:00ff:fe00:ABCD		

UDP Hdr

Source Port, where P = 11	Destination Port, where P = 11
Length	Checksum

Example 3

	Derived from link hdr		Non-compressed fields
	Compressed fields		

Link Hdr

Len = 50	FCF	DSN	DSTPAN
DST = 00-17-3B-AA-BB-CC			
SRC = 00-17-3B-11-22-33			

IPv6 Hdr

Ver = 6	Traffic Class = 0	Flow Label = 0
Payload Length	N. Header = UDP	Hop Limit = 255
Source Prefix = fe80::/64		
Source IID = 0217:3BFF:FEAA:BBCC		
Dest Prefix = ff02::12		





UDP Hdr

Source Port, where P = 11	Destination Port, where P = 11
Length	Checksum

Example 4

⁶ <i>Version</i>	^{e0} <i>Traffic Class</i>	⁰⁰ <i>Flow Label</i>	
<i>Payload Length</i> ^{03 1a}		<i>Next Header</i> ¹¹	<i>Hop Limit</i> ⁵⁶
<i>Source Address</i> ^{fe80::c001:1dff:fee0:0}			
<i>Destination Address</i> ^{ff02::2}			

Example 5

	Derived from link hdr		Non-compressed fields
	Compressed fields		Derived from context

Link Hdr

Len = 50	FCF	DSN	DSTPAN
DST = 00-17-3B-00-AA-BB-CC-DD			
SRC = 00-17-3B-00-11-22-33-44			

IPv6 Hdr

Ver = 6	Traffic Class = 0	Flow Label = 0
Payload Length	N. Header = UDP	Hop Limit = 64
Source Prefix = 2001:5a8:4:3721::/64		
Source IID = 0000:8a2e:0370:7334		
Dest Prefix = 2001:5a8:4:3721::/112		
Dest IID = 0000:00ff:fe00:ABCD		

UDP Hdr

Source Port	Destination Port
Length	Checksum



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