

Tidbit Header Format (Draft)  
The Directory Exchange Protocol (DXP)  
<https://github.com/naiithink/dxp>

Rev: 1 (2024-02-09)

Field width (bits)		Ref.	Name	Semantic
Field	Subfield			
24	8	A	Sender's DXP version	major
	8	B		minor
	8	C		patch
8	1	D	Tidbit type flag	req/res
	1	E	Fragment flag	no/yes
	1	F	Ctrl. flag	presence
	1	G	Crtl. rept. flag	presence
	1	H	Cookie flag	presence
	1	I	Checksum flag	presence
	1	J	Reserved	future
	1	K		future
32		L	UNIX timestamp	
32		M	Reserved	future
8	4	N	DXP method	
	4	O	Node type	
8		P	Ctrl. inst.	
16		Q	Status	
>= 0		R	Data	

	0	8	16	24
0	AAAAAAAA	BBBBBBBB	CCCCCCCC	DEFGHIJK
1	LLLLLLLL	LLLLLLLL	LLLLLLLL	LLLLLLLL
2	MMMMMMMM	MMMMMMMM	MMMMMMMM	MMMMMMMM
3	NNNNOOOO	PPPPPPPP	QQQQQQQQ	QQQQQQQQ
4	RRRRRRRR	...		

Header Size	
Min	32 * 5 = 160 bits = 20 bytes
Avg	160 (Min) + 16 (cookie) + 16 (padding) = 192 bits = 24 bytes