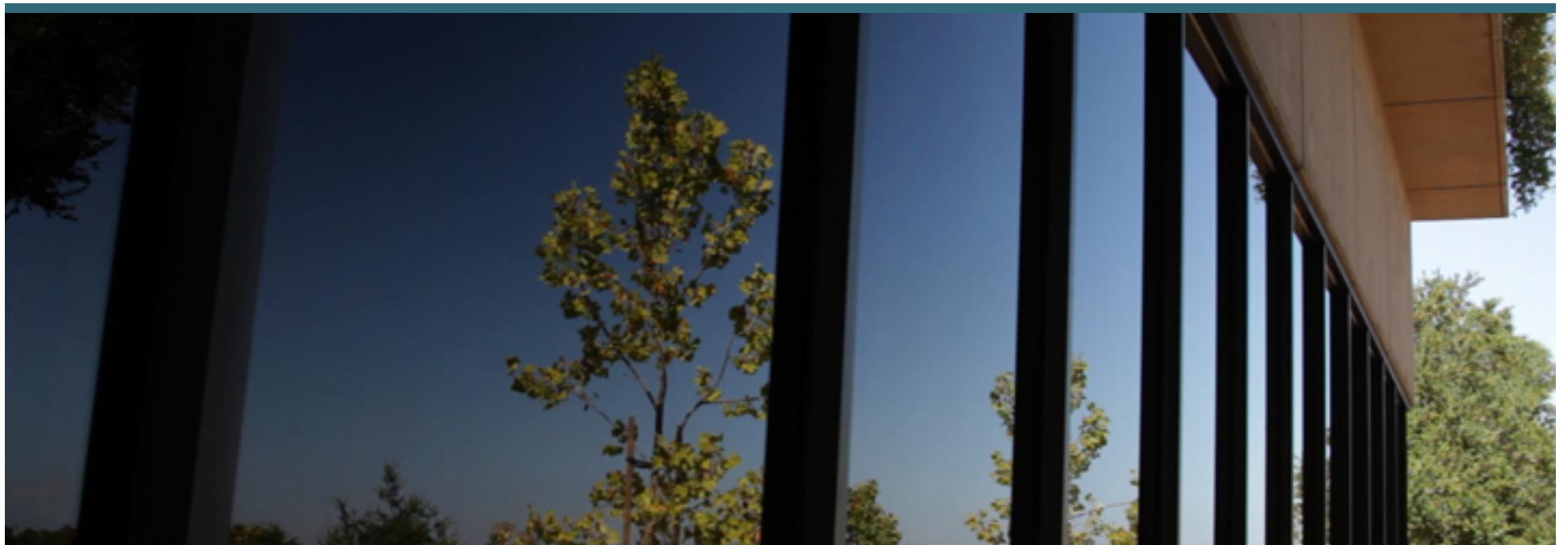
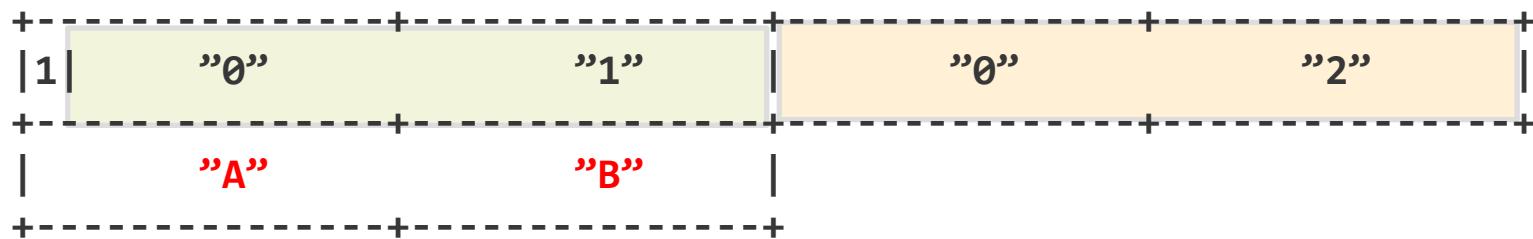
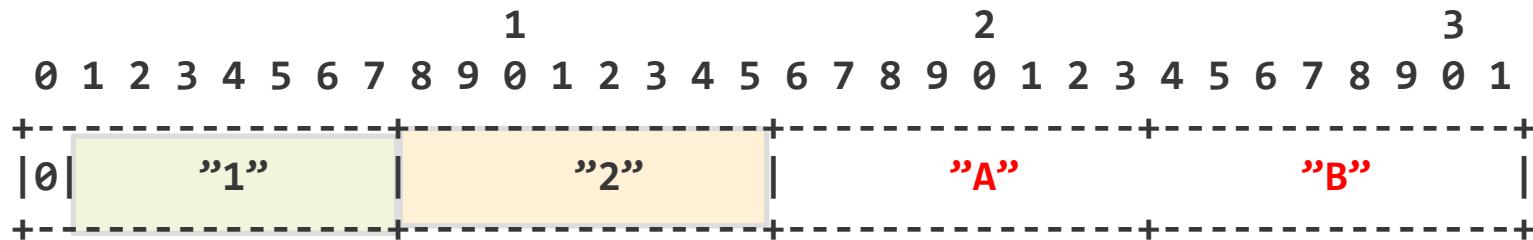


CCNx 1.0 Wire Format

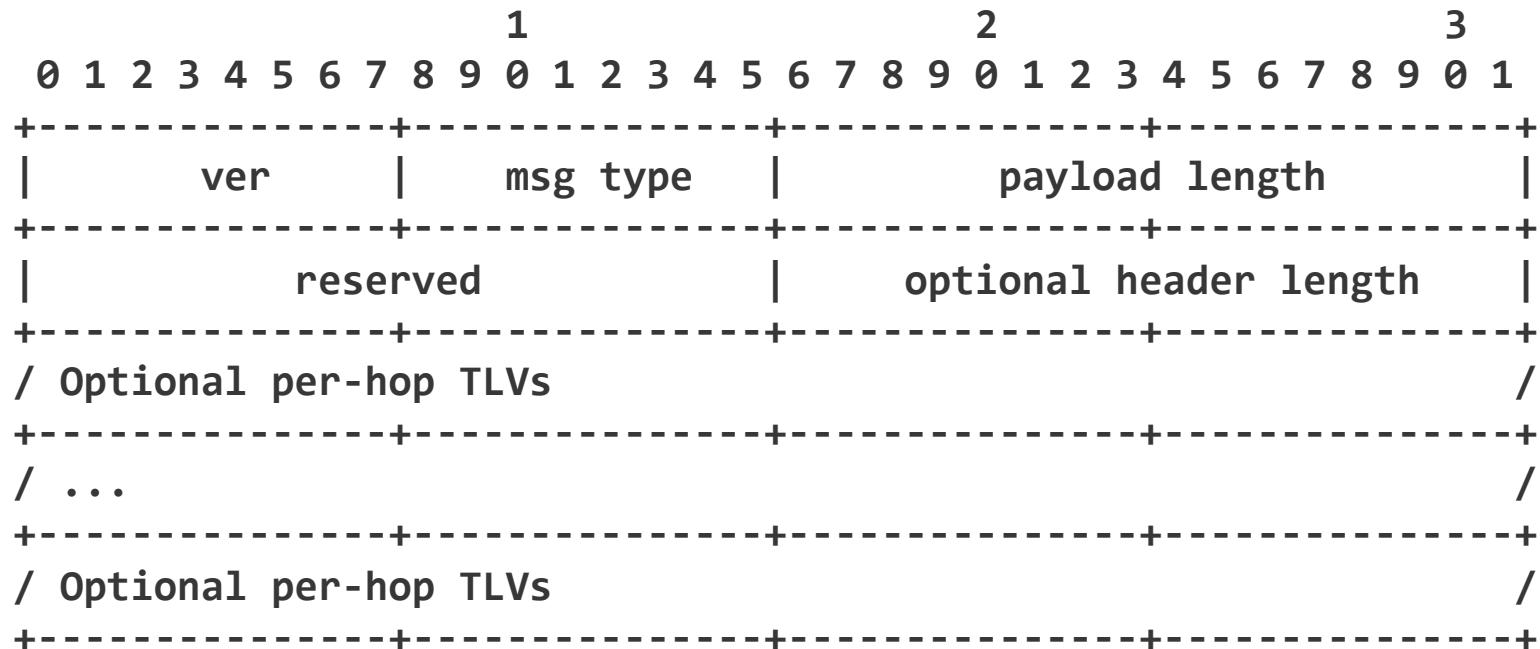
Marc Mosko



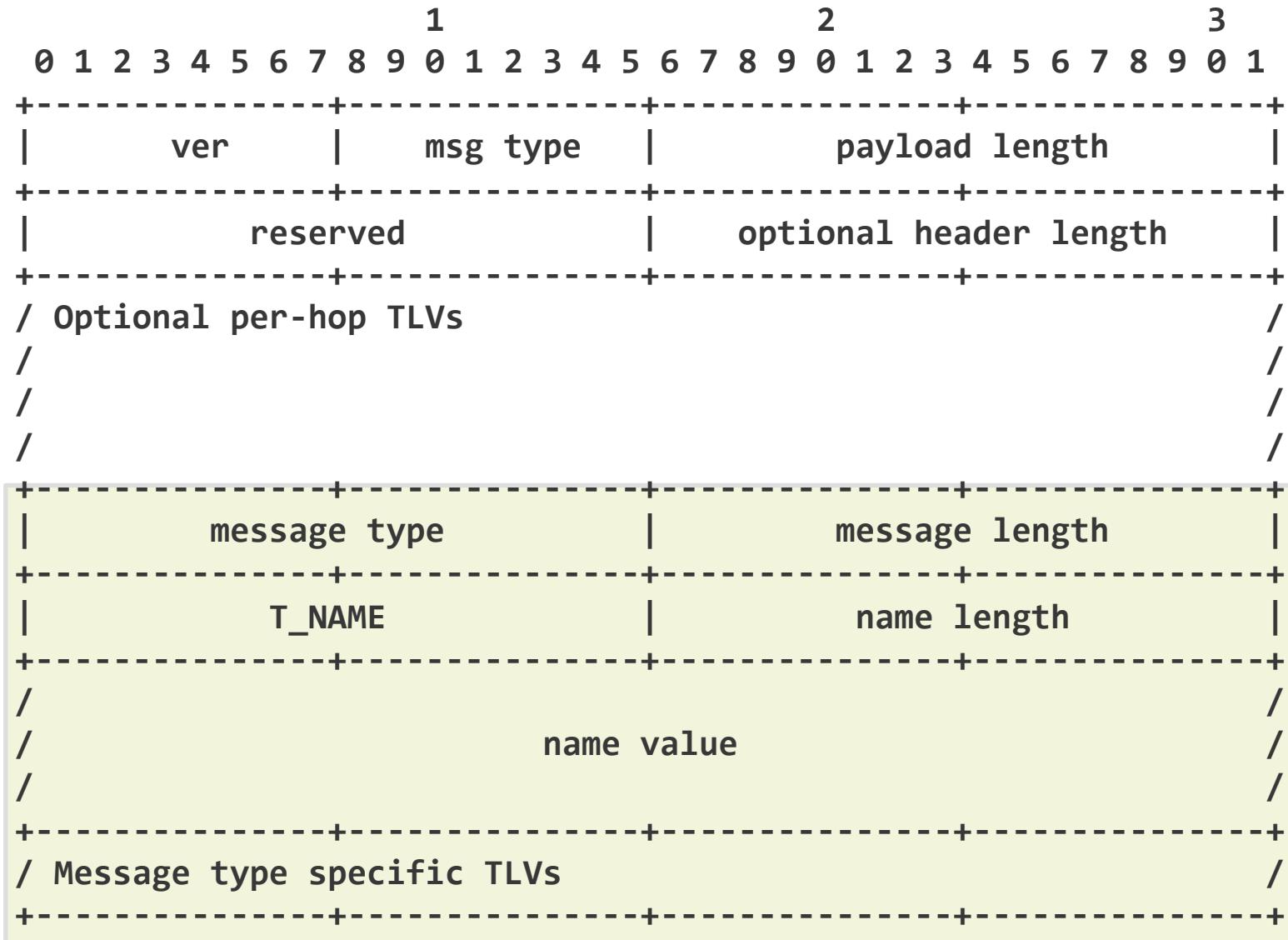
	1	2	3
0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1			
+-----+-----+-----+-----+			
	type	length	
+-----+-----+-----+-----+			



How to normalize aliases?



- o ver: the version of the packet.
- o optional header length: The length of optional per-hops headers. The minimum value is "0".
- o msg type: 0 = content object, 1 = interest
- o payload length: Total octets following the headers (fixed header plus optional headers).



/utf8=foo/binary=0x656060/serial=24/segment=3

Name path segments have types

UTF-8

Binary

Application Specific

Nonce

KeyId

Metadata

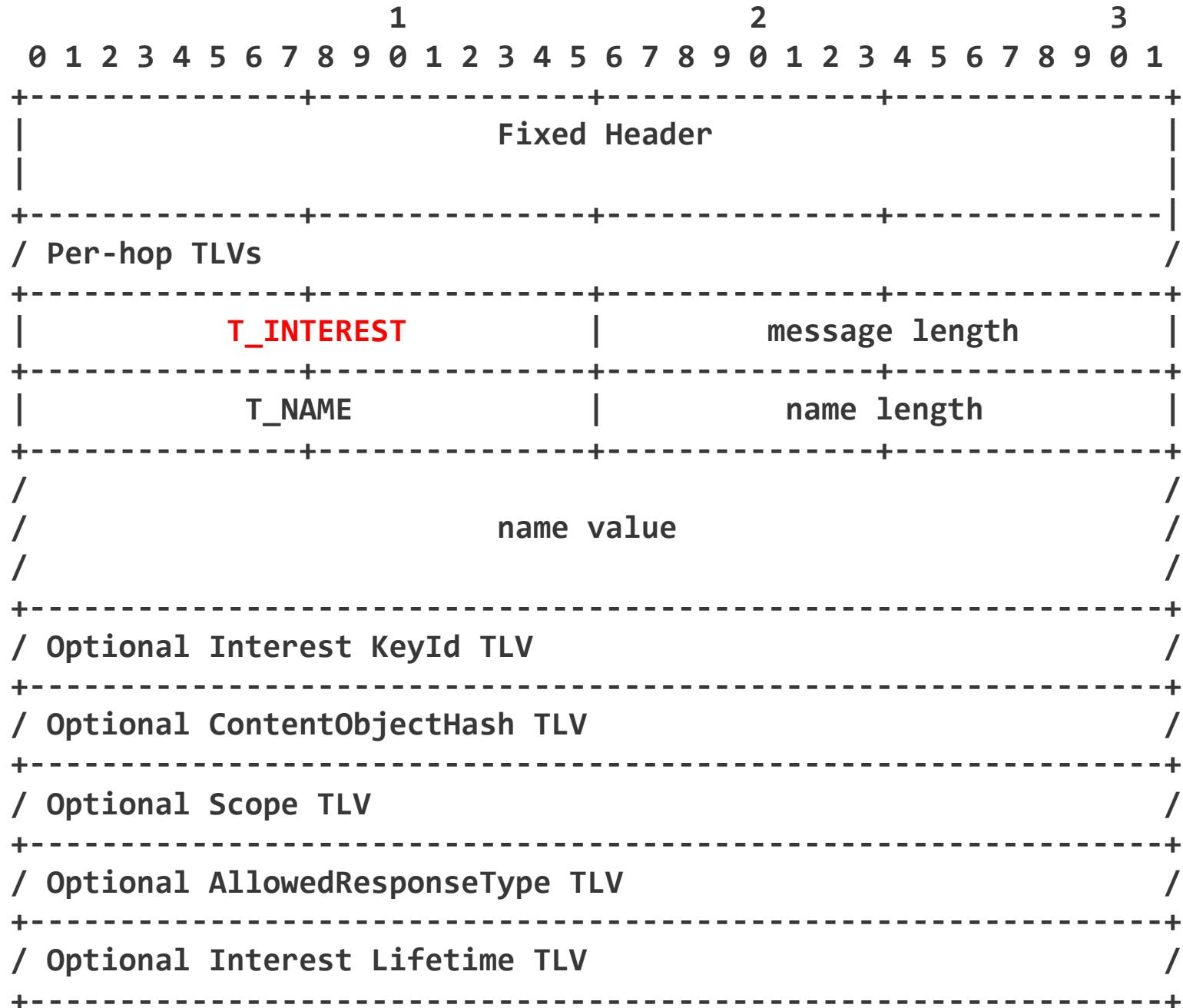
Content Object Hash

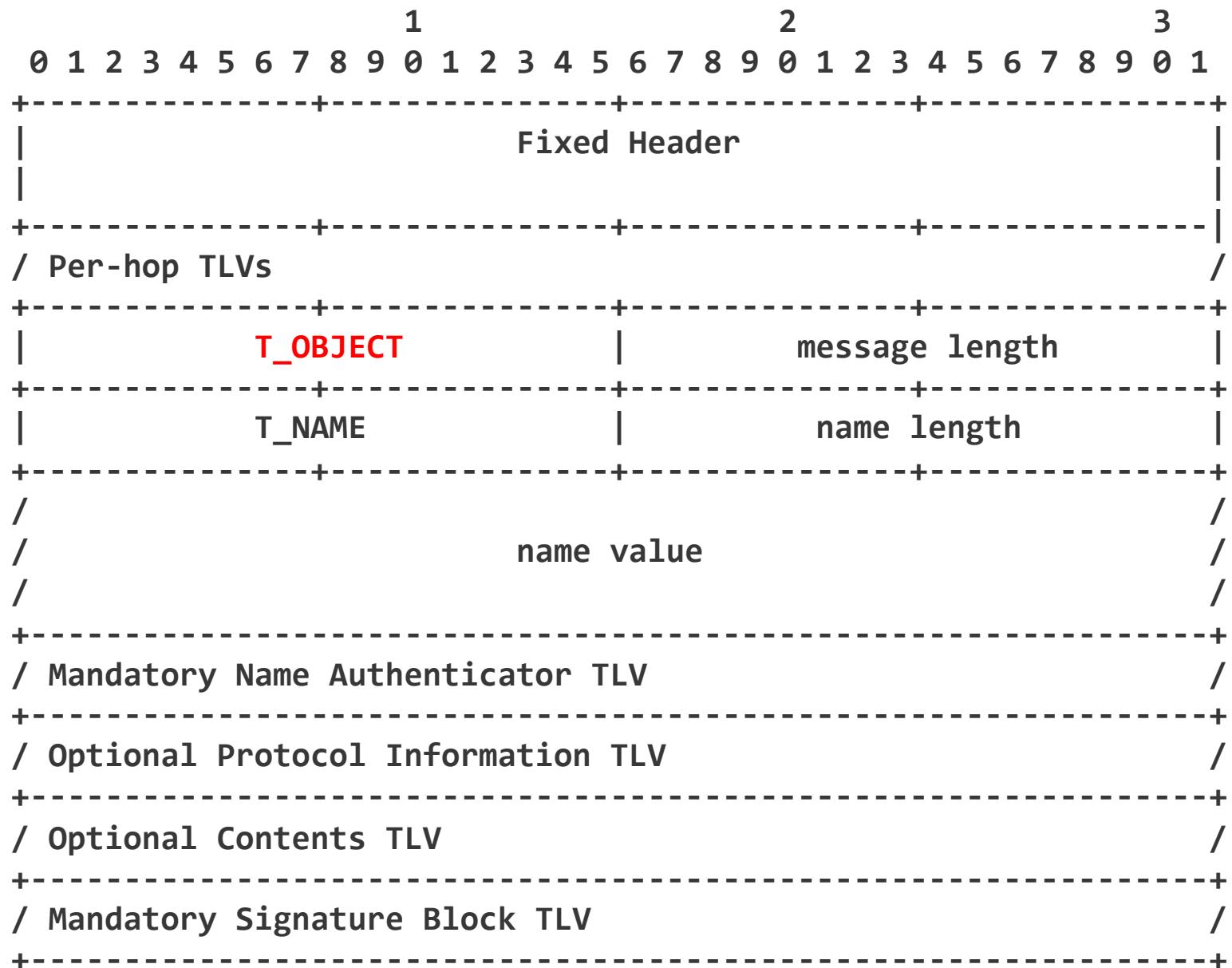
Content Object Segment

Version Timestamp

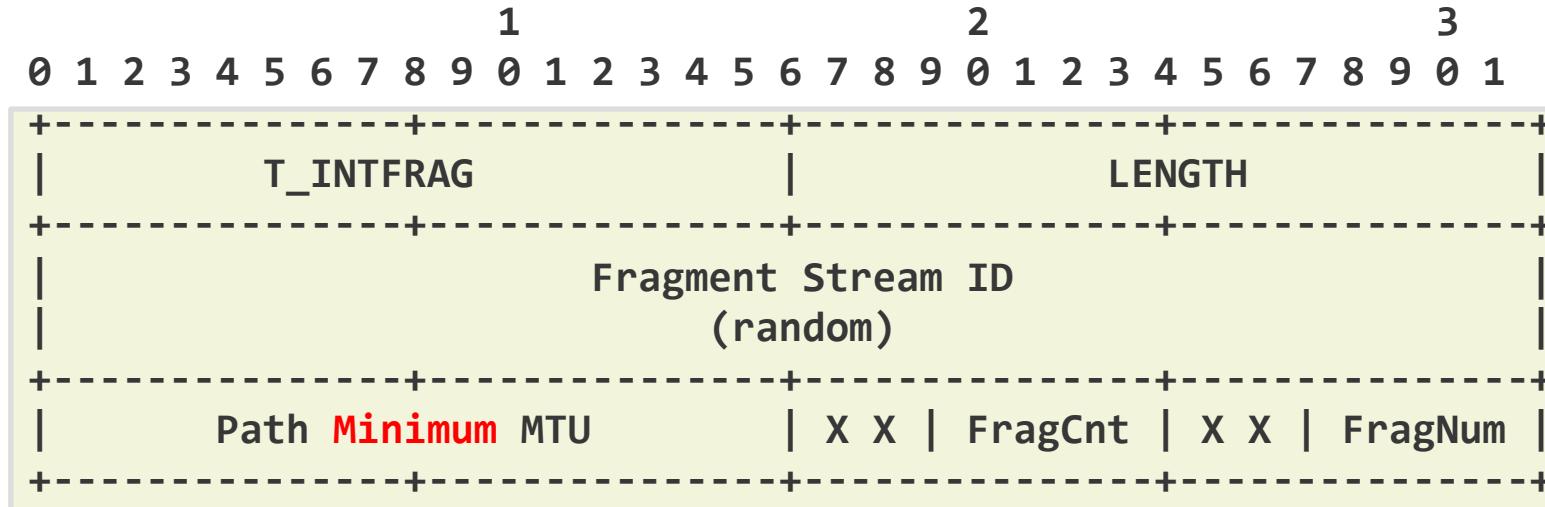
Version Serial Number

etc

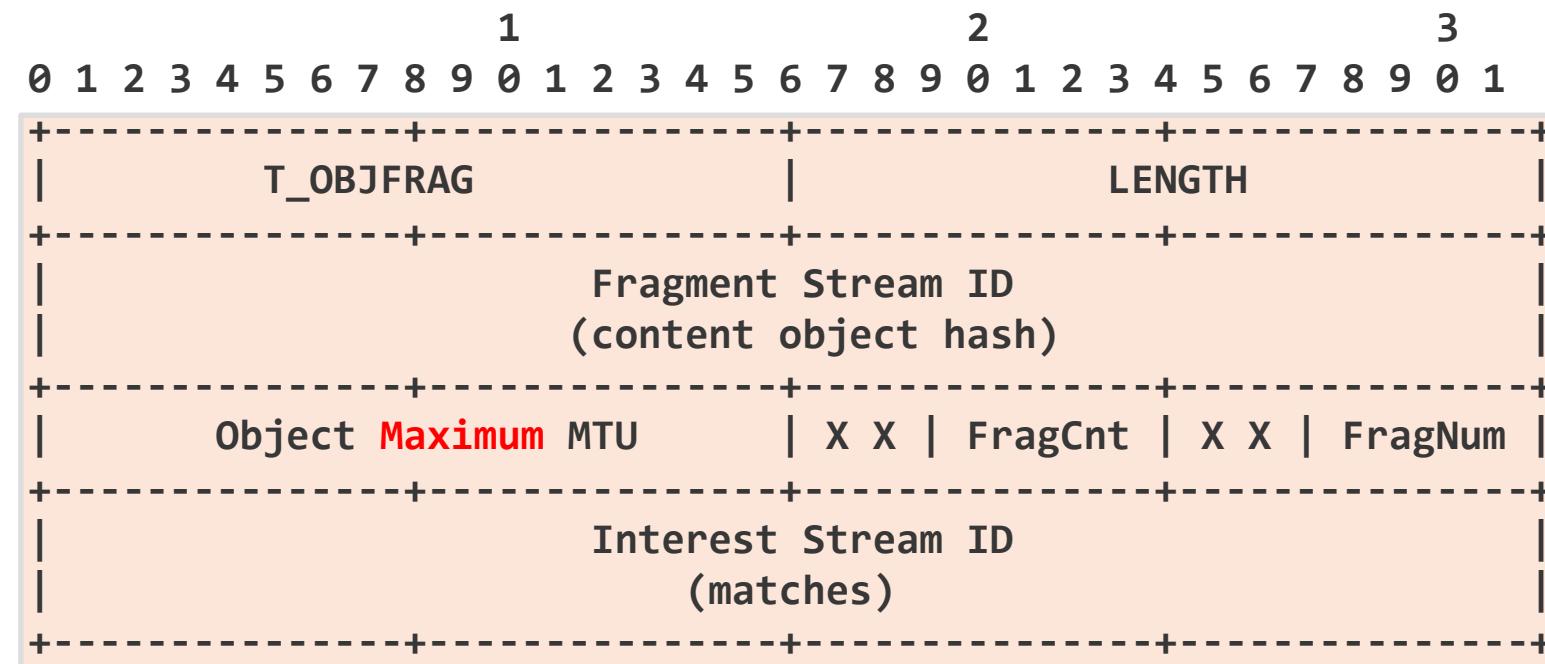




Interest

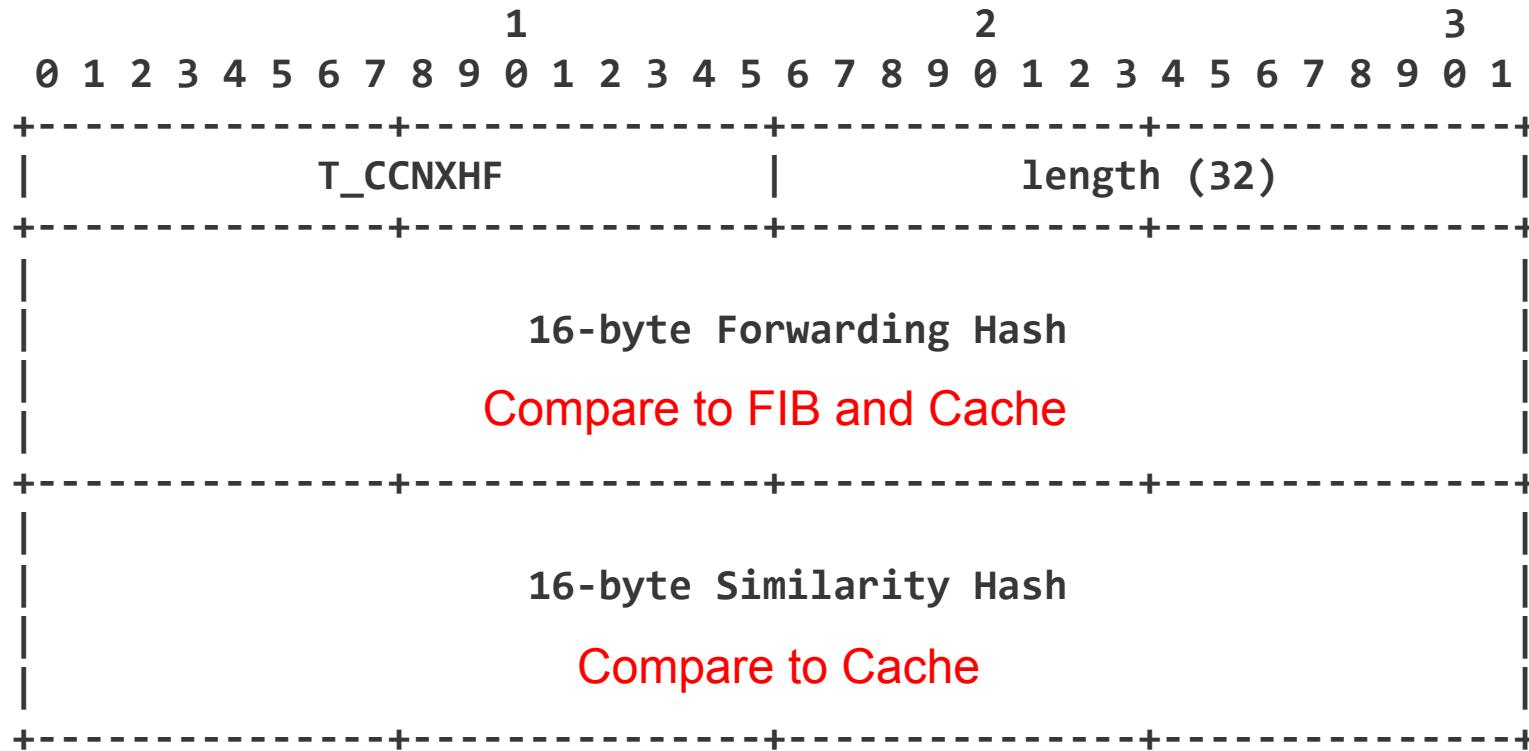


Content Object



Forwarding based on pre-computed values in Per-Hop Headers

CCNx Hash Forwarding (CCNxHF)



CCNx 1.0 Protocol Roadmap

TimeVersion

SerialVersion

Segmentation

Labeled URIs

Peer-to-Peer
Discovery

Sync Based
Discovery

Directory Based
Discovery

Selector
Discovery

Core Protocol
Equals, ComputeHash

Hash Forwarding

Fragmentation

TLV Wire Format

Documents

1. CCNx 1.0 Protocol Specification Roadmap
2. CCNx Semantics
3. TLV Packet Format
4. CCNx Messages in TLV Format
5. Labeled Segment URIs
6. Labeled Content Information URIs for CCNx
7. CCNx Content Object Caching
8. CCNx End-to-end Fragmentation
9. CCNx Content Object Segmentation
10. CCNx Publisher Clock Time Versioning
11. CCNx Publisher Serial Versioning
12. CCNx Selector Based Discovery
13. CCNx Hash Forwarding