

GUE update

draft-ietf-intarea-gue-05
draft-ietf-intarea-gue-extensions-03

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draft-ietf-intarea-gue-05

- In WGLC (not many comments)
- Previously had several reviews
- Only major change to latest version is rename “GUE version” to “GUE variant”

Possible future updates

- Recategorize Ctype field to allow for alternate, non-IP protocol encapsulations
 - E.g. could have BIER/GUE, LISP/GUE, etc.
- Formatted private data
 - New flag that says private data is formatted
 - First byte of private data indicates type
 - Alternatively, extension field could do that
- Ethernet code point, IP protocol (like GRE)?

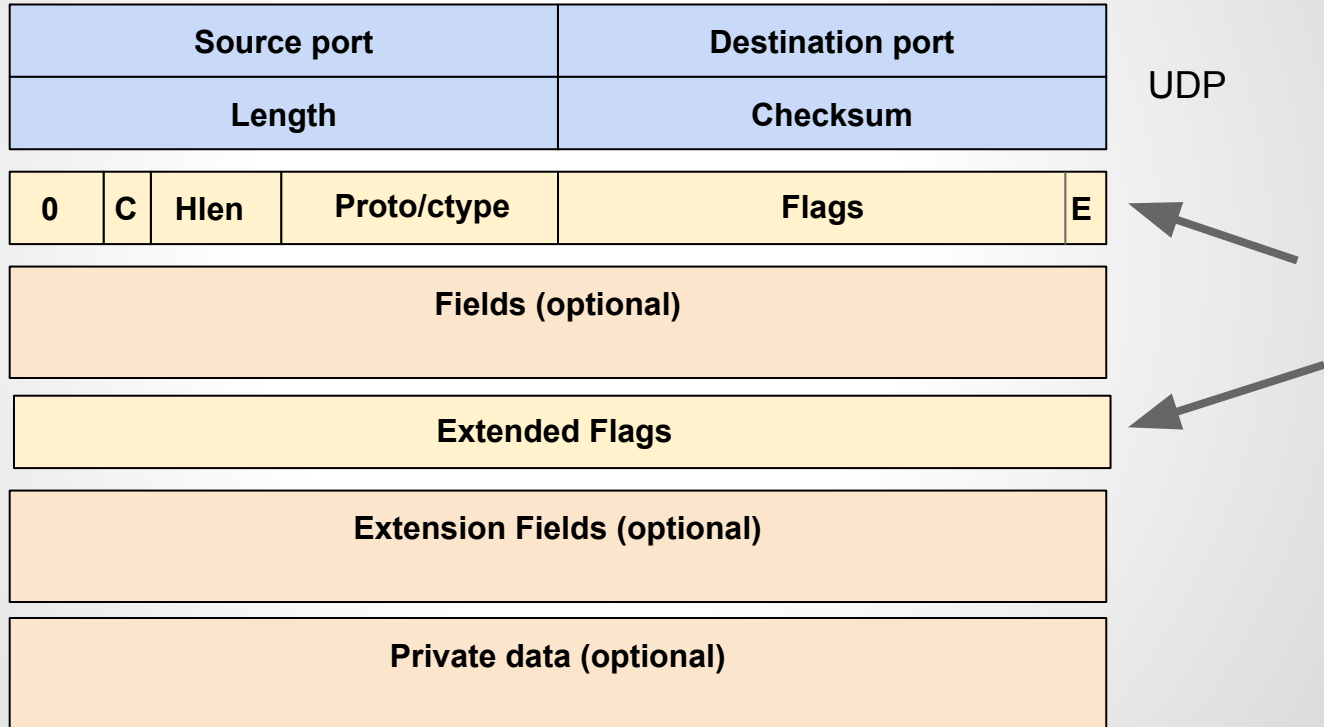
draft-ietf-intarea-gue-extensions-03

- In WGLC (not many comments)
- Some reviews
- 8 extensions, 11/16 flag bits allocate
- Major addition to latest version is “Alternate checksum” extension
 - Checksum over header and # of bytes of data
 - CRC-32, CRC-16, and CRC-16-CCITT
 - Pitfalls of making checksums optional is noted

Defining new flags/extensions

- *Philosophy*: GUE extensions are for general mechanisms of encapsulation, not specific use cases
- Estimate ~1 new flag bit allocated per year
- Five unallocated flags currently
- Solution: last flag bit (#31) indicates a “flag field extension”- provides 32 more flag bits

GUE with flag field extension



Possible new extensions

- Two bits for passive OAM measurement like in RFC8321
- One bit for group based policy field
- Aforementioned formatted private data

Thank you!