A Lightweight Textual Format for IPFIX Information Models and Templates
(draft-trammell-ipfix-text-iespec-00)

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What?

- An easily-parsed, easily-generated, human-readable, textual information element specifier (*iespec*)
  - compatible with RFC 5102 and RFC 5610

\[
\text{octetDeltaCount}(1)\langle\text{unsigned64}\rangle[8]
\]

\[
\text{sipRequestURI}(35566/403)\langle\text{string}\rangle[v]
\]
Why?

• For defining information model extensions as well as templates
  – In Internet-Drafts
  – At runtime

• Applicable in areas where XML (IANA) isn’t
  – readable by humans when pasted into an Internet-Draft
  – easier to implement in resource-restricted environments: who wants to slam an XML parser onto an FPGA?

• Initial application: SIPCLF working group (Monday)
• Initial implementation: ripfix (NMRG workshop, Friday)
Structure

• Each element of an iespec is delimited, and can stand on its own, or be combined in any order.
• Fully qualified iespecs (containing all elements) useful for documentary purposes or information model extensions
  – e.g. SIPCLF draft: all SIP IEs in one figure.
• Unqualified iespecs useful for runtime template definition
  – e.g.: note that (1)[8] for octetDeltaCount is directly equivalent to the information in a Template.
Next Steps

• Define runtime representation for Templates
  – Start at this with \{attributes\}, i.e. \{scope\}

• Complete 5610 implementation?
  – Add information about units/semantics as attributes?
  – Inline description probably best handled with XML.

• Determine WG interest in adoption/further development