

# IANA Registry for the First Nibble Following a Label Stack

draft-kbbma-mpls-1stnibble

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# Goal

- Create a new IANA registry for the “MPLS First Nibble” (MFN)
  - With all the trappings: initial entries, allocation policy, references
- Explain why we need this
  - Distinguish it from the IP version number registry
  - IPv7 is distinct from an MFN value of 7
- Offer a Requirement and a Recommendation

“MPLS First Nibble” = first 4 bits after MPLS Bottom of Stack

# Requirement

“Going forward, network equipment **MUST** use a post-stack header with an MPLS First Nibble value that is not 0x4 or 0x6 in all cases when the MPLS payload is not an IP packet.”

(updates/strengthens RFC4928)

# Recommendation

make this a MUST?

“It is RECOMMENDED that, going forward, if good load balancing of MPLS packets is desired, either an Entropy Label or a FAT Pseudowire Label SHOULD be used; furthermore, going forward, the heuristic in Section 2.1.1.1 MUST NOT be used.”

(i.e., *don't* let a first nibble value of 4 or 6 fool you into thinking you have an IP packet!)