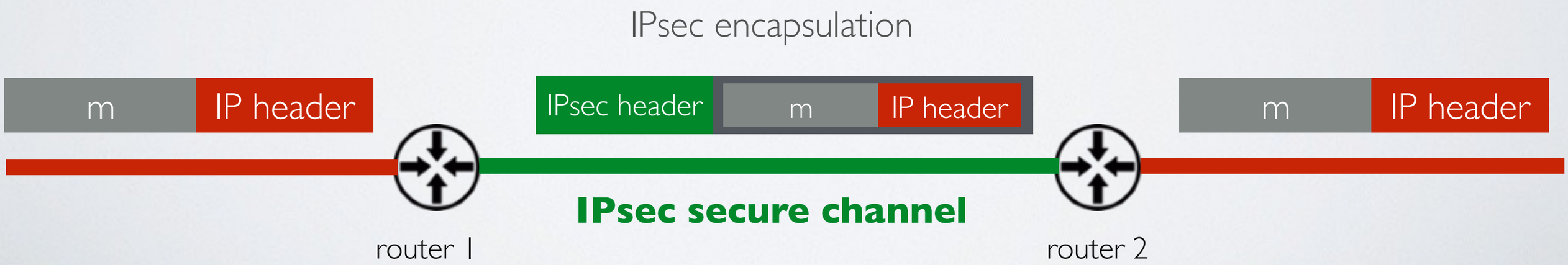
Preventing IP forgery

IPsec - Internet Protocol Security provides authentication (and optionally encryption) of IP traffic

➡ Uses SHA2 and AES (previously SHA1 and 3DES)

✓ Used usually between routers (link and network layers only)

◉ Usually deployed by large organizations



Preventing DNS spoofing

DNSSEC - Domain Name System Security Extensions provides authentication (but not encryption) between DNS servers

- Not widely deployed

DNS over HTTPS (since 2018)
provides authentication and encryption between client/server and server/server

- Pushed by Google and Mozilla