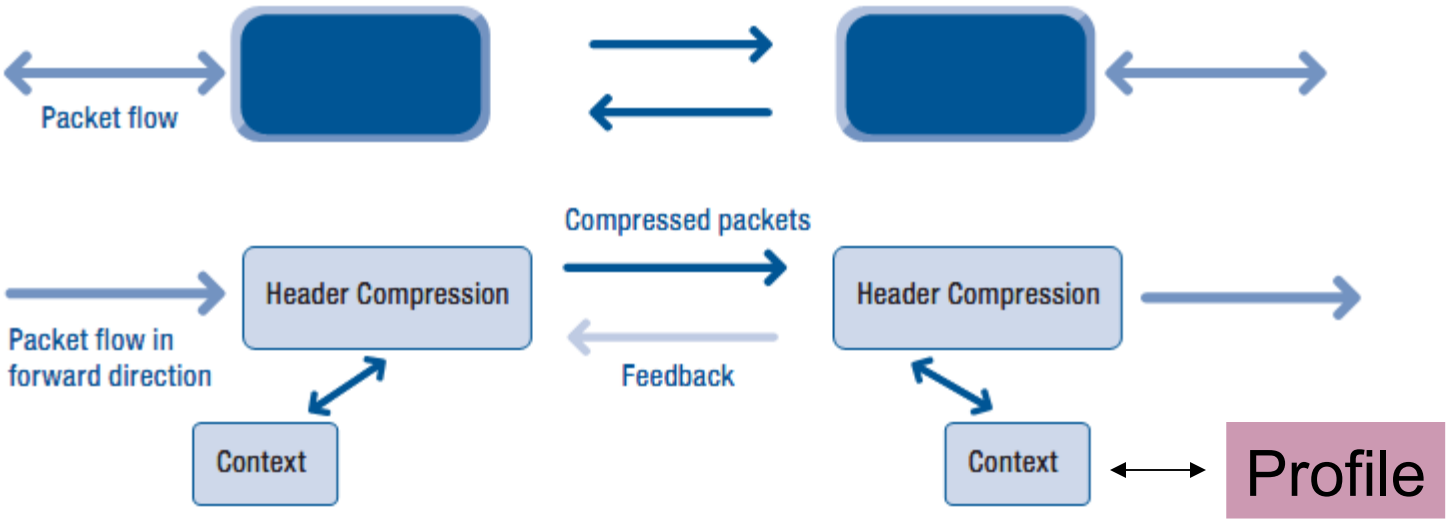
A ne w4i6pvw aad6r

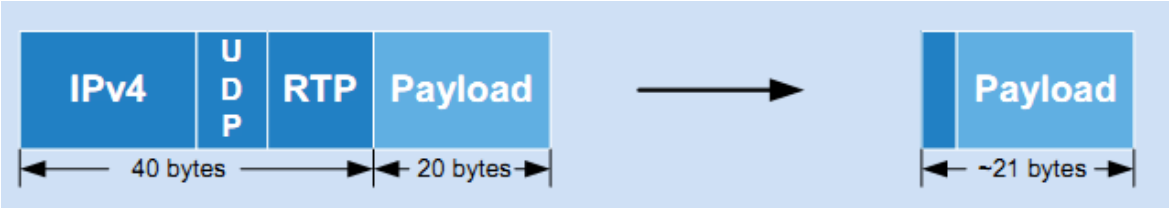
sdrfdnr4o6rm

tadrmbn4rdwad

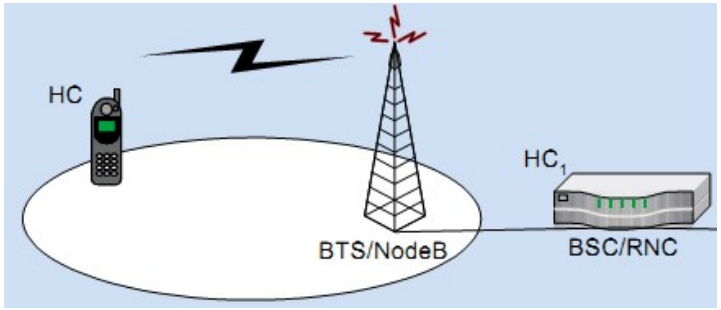
ROHC in one slide (rfc3095)

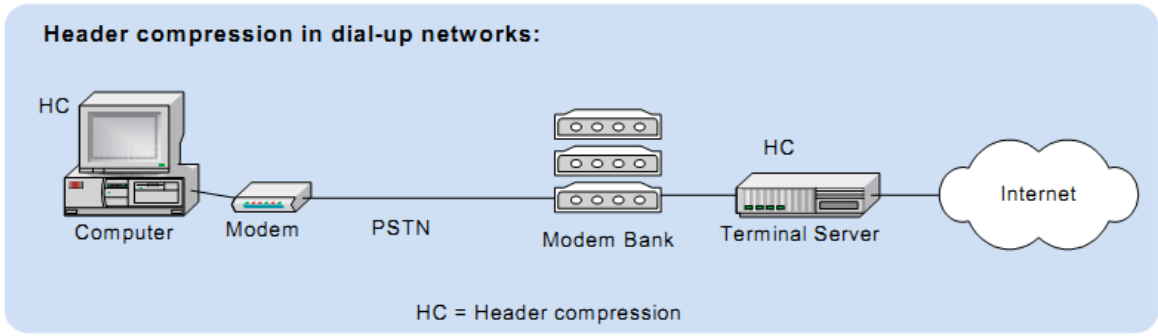


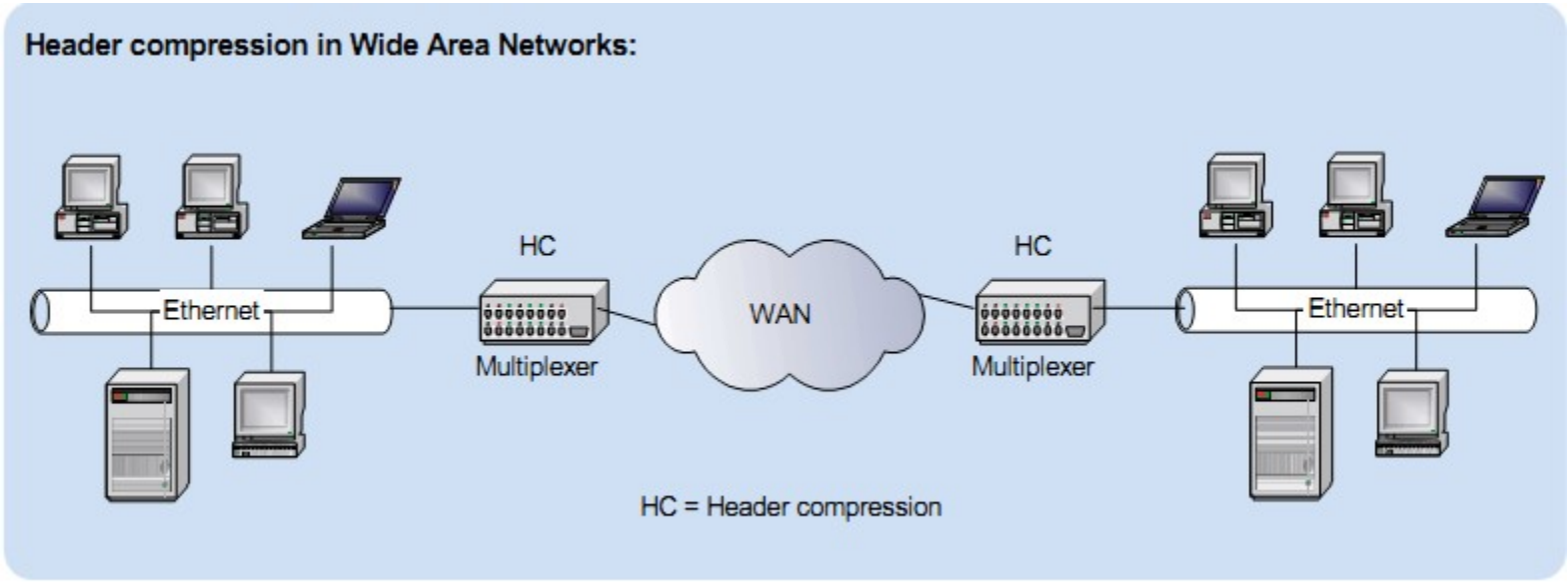
Header compression functional blocks



Application areas

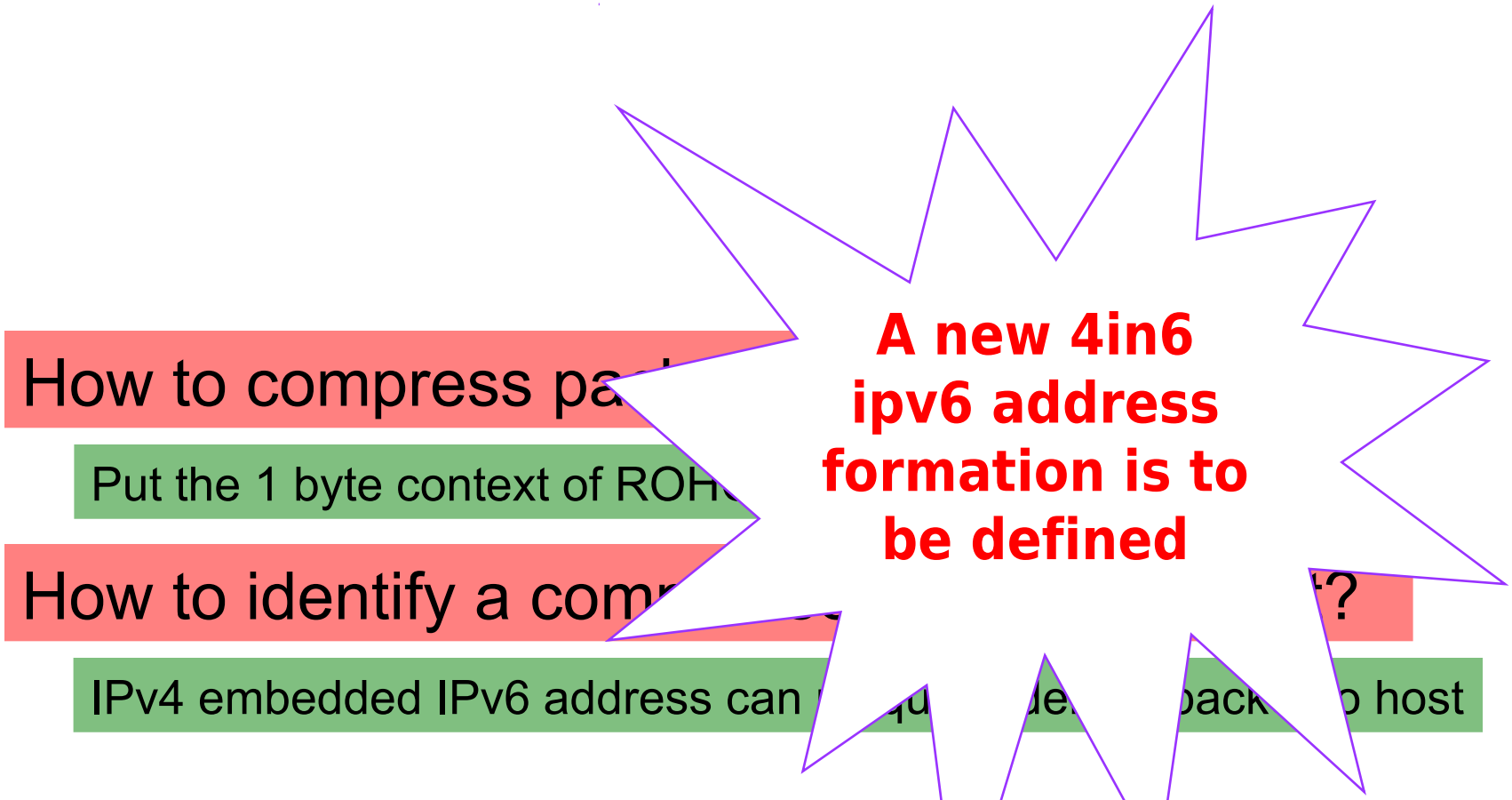






VPN scenario of ROCH

IPv4-IPv6 Network Traversing



LENT in one slide

The compression is changed to a translation process

The IPv6 address calculation is essential in the translation

A case study

The profile contains the IPv4 options

A Preliminary Evaluation of LENT464

- For large packets
  - a.550 bytes, b. 1400bytes
  - a)4.36%, b) 1.71%
- For small packets (VoIP for example)
  - VoIP, G.726 codec (24 Kbps), 60 bytes payload
  - RTP/UDP/IP/IPv6 header of 84 bytes
    - (IPv4 with options=24 bytes; IPv6=40; UDP=12 bytes; RTP=8 bytes)
  - 16.67%

- Only inner IPv4 header cached in LENT 464
  - 20 corresponding nodes for each host
  - only 480 bytes for a host
  - The cached data will be cleared when expired

Discussions

- Question 1
  - The large packets are dominants in ISP network, such as video traffic etc. Why HC?
- Argument 1
  - HC is about link efficiency significantly in wireless network with bandwidth constraint.
    - Decrease in packet header overhead (bandwidth savings)
    - Reduction in packet loss.
    - Better interactive response time.
    - Decrease in infrastructure cost

Discussions

- Question 2
  - Why not deploy ROHC directly in IPv4-IPv6 coexistence.
- Argument 2
  - The scenario is different from ROHC
  - We want to make fully use of IPv6 address space
    - IPv4 embedded IPv6 address can identify the each host without any extra information
    - Save 1 extra bytes in ROHC
    - Free for expensive compression /decompression using dedicated Chips in some cases

- Thank you!