

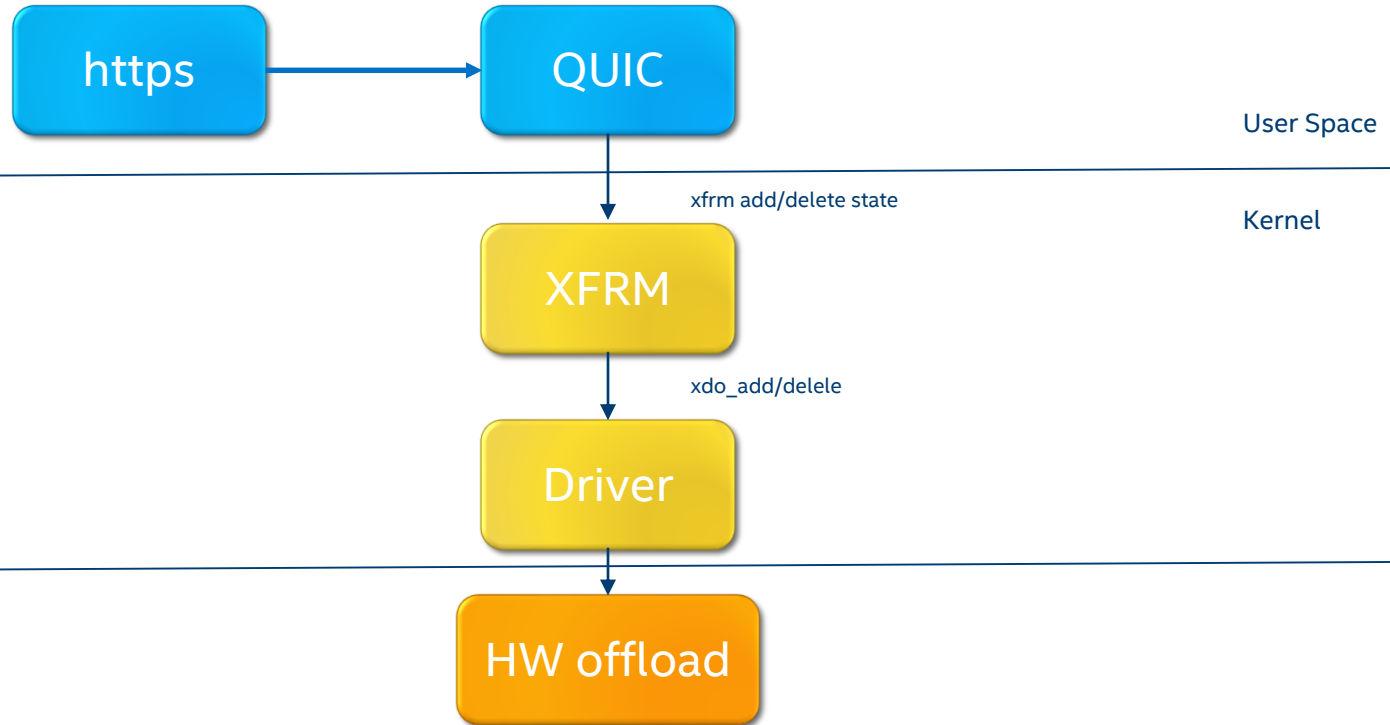
QUIC HW OFFLOAD SUPPORT

Don Skidmore, ND
Josh Hay, ND
March 2018

RFC

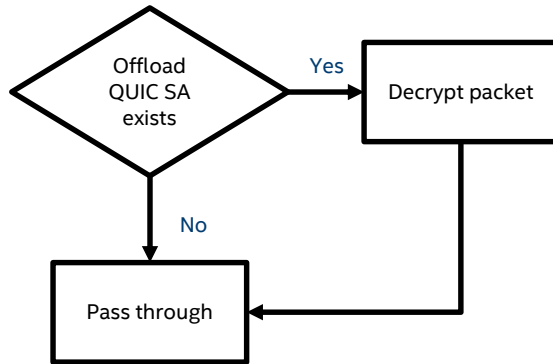
- Asked Steffen if XFRM was a valid interface to enable QUIC offload and he suggested I bring it up here.
- So purpose here is to gage if this would be a valid approach.
- Very much an RFC

Using XFRM to offload QUIC encrypt/decrypt

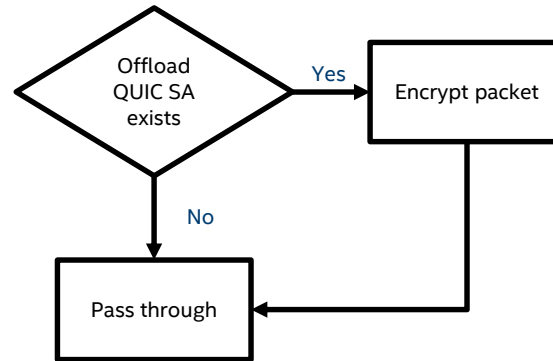


HW offload functionality

Ingress



Egress



Example of XFRM interface extension

```
ID := [ src ADDR ] [ dst ADDR ] [ proto XFRM-PROTO ] [ spi SPI ] [ qport QUIC-  
UDP-PORT ] [ qversion QUIC-VERSION ] [ qcid QUIC-CONNECTION-ID ]
```

```
XFRM-PROTO := esp | ah | comp | route2 | hao | quic
```

```
ip xfrm state add ID [ALGO-LIST] .. [ init-seq-num INITIAL-SEQUENCE-NUM ]
```

RED = New additions for QUIC support

Thoughts?

