

strongSwan - Feature #2189

Support RFC 8229: TCP Encapsulation of IKE and IPsec Packets

14.12.2016 06:15 - Jun Hu

Status:	Assigned	Start date:	14.12.2016
Priority:	Normal	Due date:	
Assignee:	Tobias Brunner	Estimated time:	0.00 hour
Category:			
Target version:			
Resolution:			
Description			
<p>There is new IETF ipsecme group draft draft-ietf-ipsecme-tcp-encaps, which defines a standard way to encapsulate IKE/ESP packet in TCP/TLS; which is a useful feature for IPsec travel through firewall that only allows HTTP/HTTPS traffic; right now, the draft is version 4, and pretty stable, could become RFC soon;</p> <p>it would be great if strongswan could support this draft;</p> <p>https://datatracker.ietf.org/doc/draft-ietf-ipsecme-tcp-encaps/</p>			

History

#1 - 19.07.2017 00:55 - Carl-Daniel Hailfinger

draft-ietf-ipsecme-tcp-encaps is now in the RFC Editor Queue.

#2 - 15.08.2017 23:55 - Carl-Daniel Hailfinger

RFC 8229: TCP Encapsulation of IKE and IPsec Packets has been published.

#3 - 13.02.2018 14:33 - Carl-Daniel Hailfinger

A first implementation of RFC 8229 for the Linux kernel has been submitted: <https://marc.info/?l=linux-netdev&m=151567688126015&w=2>

#4 - 07.03.2018 17:41 - Tobias Brunner

- Subject changed from *Support TCP encapsulation* to *Support RFC 8229: TCP Encapsulation of IKE and IPsec Packets*

#5 - 09.03.2018 10:04 - Tobias Brunner

- Status changed from *New* to *Assigned*

- Assignee set to *Tobias Brunner*

#6 - 09.03.2018 10:04 - Tobias Brunner

- Target version set to *5.6.3*

#7 - 24.05.2018 09:45 - Tobias Brunner

- Target version deleted (*5.6.3*)

#8 - 03.07.2019 14:50 - Carl-Daniel Hailfinger

A new version of the RFC 8229 ESPinTCP patch has been submitted to the Linux kernel: <https://lwn.net/Articles/792028/>

#9 - 22.09.2019 20:17 - Carl-Daniel Hailfinger

The RFC 8229 ESPinTCP patch for the Linux kernel has finally left the RFC stage. According to the review comments, the only thing left to change is changing the name of the Kconfig option. The API for userspace seems to be final already.

<https://lore.kernel.org/netdev/cover.1568192824.git.sd@queasysnail.net/>

The feature is (like UDP encapsulation) IPv4-only right now. The author of the patch plans to extend the functionality to IPv6 later.

#10 - 26.11.2019 01:10 - Carl-Daniel Hailfinger

The RFC 8229 ESPinTCP patches have been merged into the upstream ipsec-next kernel tree in branch "testing".

<https://git.kernel.org/pub/scm/linux/kernel/git/klassert/ipsec-next.git/log/?h=testing>

#11 - 26.01.2020 16:47 - Carl-Daniel Hailfinger

The RFC 8229 ESPinTCP patches have been merged into the upstream net-next tree and will be part of Linux 5.6.

<https://git.kernel.org/pub/scm/linux/kernel/git/netdev/net-next.git/commit/?id=e27cca96cd68fa2c6814c90f9a1cfd36bb68c593>

#12 - 31.01.2020 01:01 - Carl-Daniel Hailfinger

The RFC 8229 ESP in TCP encapsulation patches have finally landed in mainline Linux:

<https://git.kernel.org/pub/scm/linux/kernel/git/torvalds/linux.git/commit/?id=e27cca96cd68fa2c6814c90f9a1cfd36bb68c593>

#13 - 05.06.2020 19:48 - Carl-Daniel Hailfinger

RFC8229 ESP in TCP is now also supported for IPv6 in mainline Linux:

<https://git.kernel.org/pub/scm/linux/kernel/git/torvalds/linux.git/commit/?id=26333c37fc285e7372f1b9461f3ae0ba3dc699c9>