

# NEA Working Group IETF meeting

Nov 17, 2011

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# Agenda Review

0900 Administrivia

Jabber & Minute scribes

Agenda bashing

0905 WG Status

0910 NEA Reference Model

0915 Discuss and Resolve WGLC PT-TLS Comments

<http://www.ietf.org/internet-drafts/draft-ietf-nea-pt-tls-01.txt>

1000 Discuss and Resolve PT-EAP Issues

<http://www.ietf.org/internet-drafts/draft-ietf-nea-pt-eap-00.txt>

1100 Discuss next steps for NEA Asokan I-D

<http://tools.ietf.org/id/draft-salowey-nea-asokan-00.txt>

1115 Next Steps

1130 Adjourn

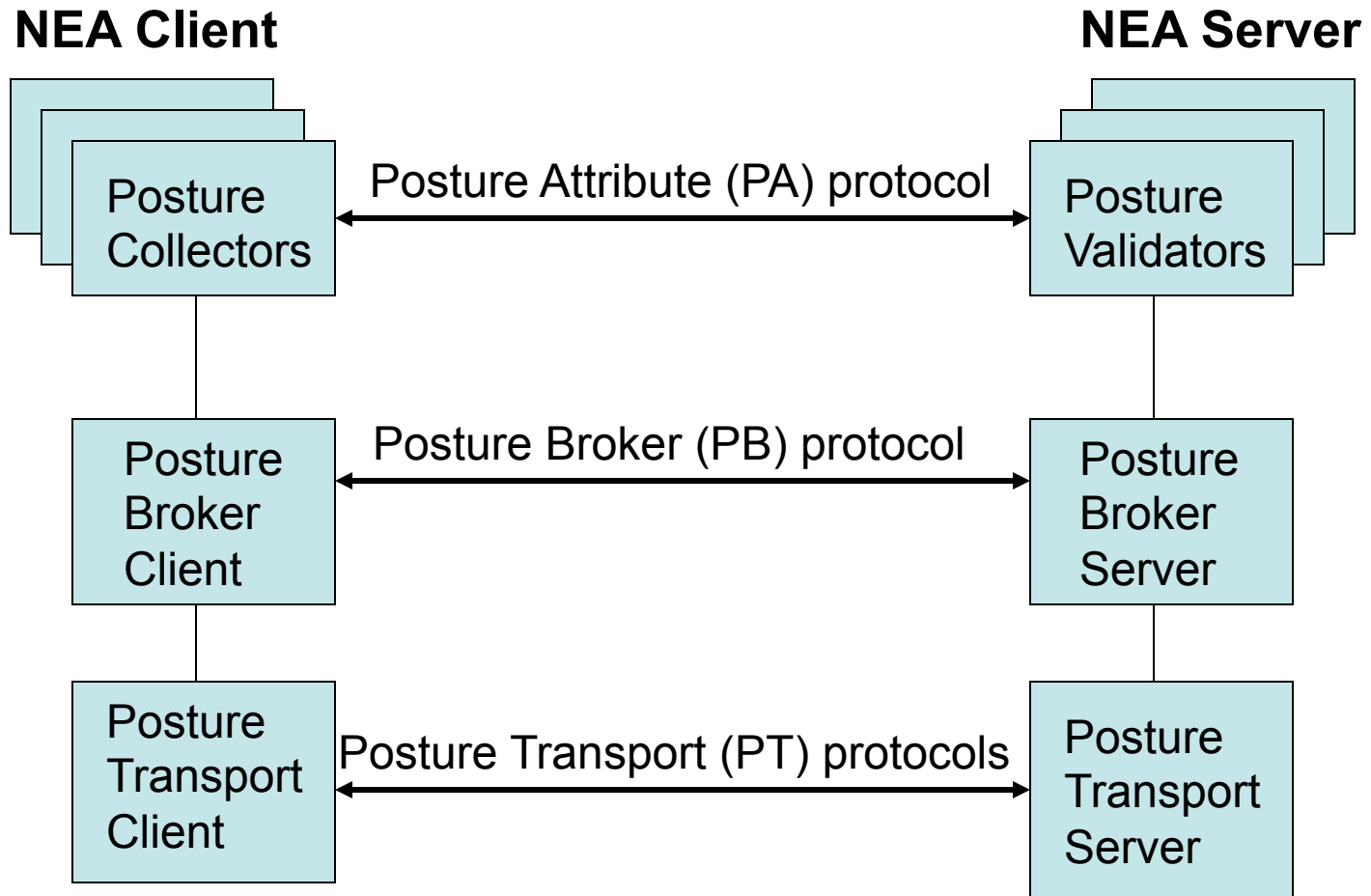
# WG Status

- TLS-based Posture Transport
  - WGLC on PT-TLS -01 I-D
- EAP-based Posture Transport
  - PT-EAP selected as basis for WG document
  - PT-EAP published as -00 I-D

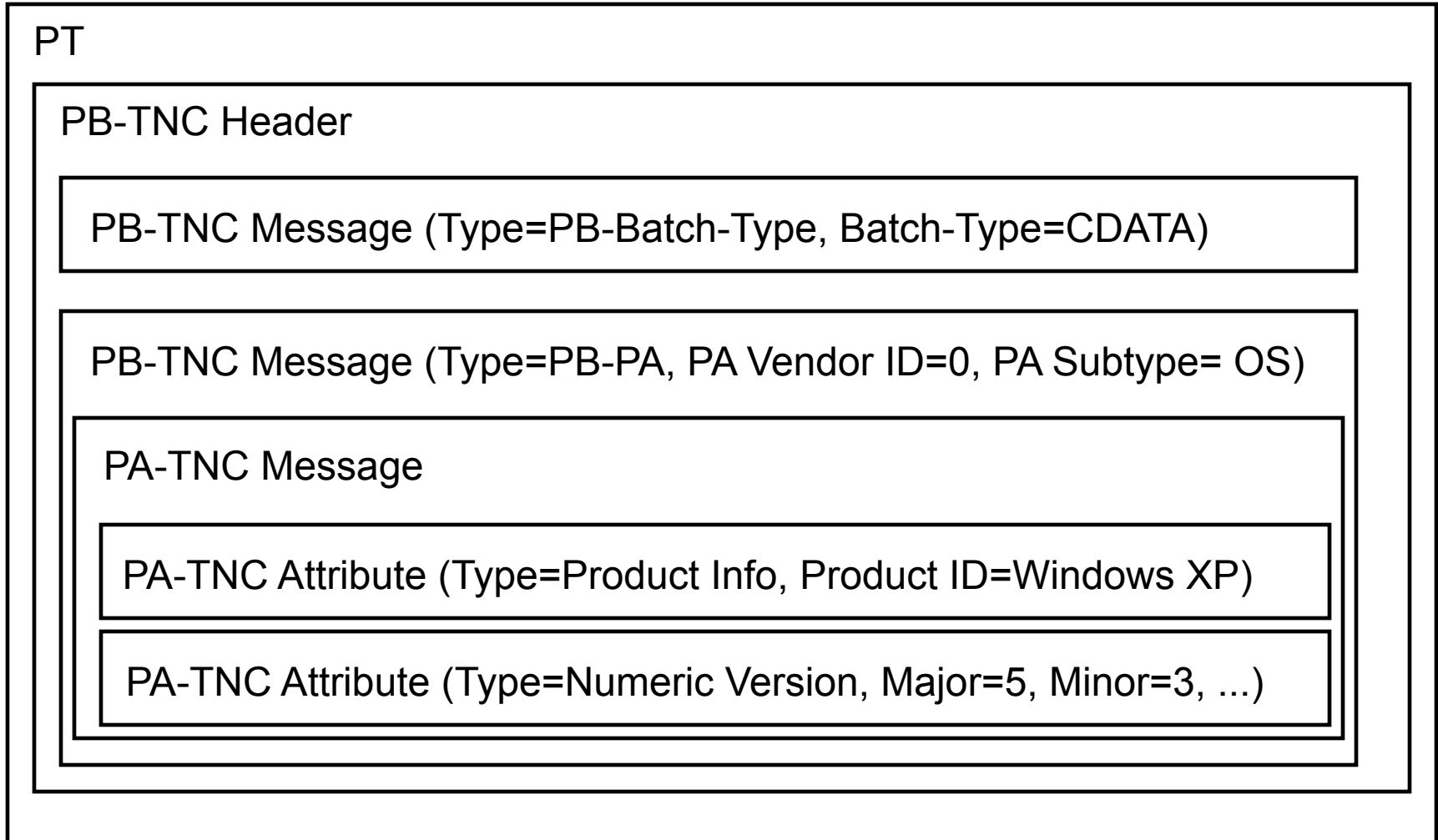
# NEA Reference Model

# NEA Reference Model

from RFC 5209



# PA-TNC Within PB-TNC Within PT



# PT-TLS WG/LC Issues

Paul Sangster

Nancy Cam-Winget

Joseph Salowey



# PT-TLS

- Working Group Last Call completed
  - Some open issues with proposed resolutions

# TLS Keepalive

- TLS Heartbeat provides mechanism to keep TLS session up
  - draft-ietf-tls-dtls-heartbeat
  - Should be completed before PT-TLS
- Proposed Resolution: revise PT-TLS draft to include optional support for TLS heartbeat

# Version Negotiation

“Subsequent assessments on the same session **MUST** use the negotiated version number and therefore **SHOULD NOT** send additional version negotiation messages.”

Proposed Resolution: Change **SHOULD NOT** to **MUST NOT**

# SASL initiation

- Who initiates the SASL exchange? TLS client or server
- Proposed Resolution: Identify use cases to be supported and expected behavior. Update draft to ensure specified operation is unambiguous .

# PT Client as TLS server

- If PT client is the TLS server, how does it authenticate the PT server?
- Proposed Resolution: Require TLS mutual authentication when PT client is acting as TLS server.

# Channel Bindings

- Would be good to bind authentication to TLS tunnel when possible
  - SASL GS2 mechanism provides this capability
- Proposed Resolution: Add text describing usage of Channel Bindings between TLS and SASL

# PT-EAP Issues

Nancy Cam-Winget

Paul Sangster

# Status

- draft-ietf-nea-pt-eap-00 submitted on Aug 30, 2011
- A few comments posted by one of the editors
- Need more reviews!



# Received Comment Summary

- Minimize acronyms, use PT-EAP for all instances of EAP-TNC and PT-TNC
  - Comments include proposed updates to achieve this throughout the draft
- New EAP method: NEA has defined new behavior
- *Section 1.1 remove TNC reference (e.g. the last sentence of the paragraph)*

# Use PT-EAP only

Comment: PT-EAP defines the standalone method for carrying NEA data and specifies its bounds and usage to an EAP tunnel method. As such, I recommend that the draft stick to naming this method PT-EAP (vs. The use of both PT-EAP, EAP-TNC, and PT-TNC)

Proposal: Update draft to use PT-EAP only

# Abstract simplification

- Update the abstract to:

*This document specifies PT-EAP, an EAP based Posture Transport (PT) protocol designed to be used only inside an EAP tunnel method. As such, the document also describes the intended applicability of PT-EAP as well as the evaluation against the requirements defined in the NEA Requirements and PB-TNC specifications.*

Proposal: Update draft as suggested above

# Introduction simplification

- Update 1<sup>st</sup> sentence of Introduction to:  
*This document specifies PT-EAP, an EAP based Posture Transport (PT) protocol protected by a TLS based tunnel established by an EAP tunnel method.*

Proposal: Update but with Steve's suggestion to:

*This document specifies PT-EAP, an EAP based Posture Transport (PT) protocol protected by an outer TLS tunnel or equivalent protection.*

# Introduction simplification

- Update 2nd paragraph of Introduction to:  
*The PT protocol in the NEA architecture is responsible for transporting PB-TNC batches (often containing PA-TNC [3] attributes) across the network between the NEA Client and NEA Server. The PT protocol must be protected by an outer TLS-based tunnel to ensure the exchanged messages are protected from a variety of threats from hostile intermediaries.*

Proposal: adopt changes in next draft

# Introduction simplification

- To be consistent with a single reference of the inner method, my suggestion is to remove the 5th and 6th paragraph and replace the entire 4th paragraph with:  
*PT-EAP is an inner EAP method designed to be used under a protected tunnel such as EAP-FAST and EAP-TTLS.*

Proposal: adopt changes in next draft

# Remove TNC reference

- *Section 1.1 remove TNC reference (e.g. the last sentence of the paragraph)*

Proposal: adopt change in next draft. If TNC needs to be noted, include in the acknowledgement “N.B. The Trusted Computing Group will also be referencing the protocol as defined in this document at the time of completion.”

# Clarification on 3.1

- Section 3.1: 4th paragraph, 2nd sentence seems to be a non sequitur, suggest to remove it (e.g. the sentence reading:

*”Some EAP tunnel methods may provide explicit confirmation of inner method success; others may not. This is out of scope for the EAP-TNC method.”*)

Proposal: can discuss on the list to either clarify the sentence/paragraph or adopt above update



# New EAP method

- *Section 3.4: as NEA has changed the behavior of the method, it merits its own type and thus should be a TBD.*

Proposal: update in the next draft

# Enforce use of EAP tunnel

- Section 4: language to enforce use within protected tunnel should be used, suggest wording to: *“is designed and MUST run inside an EAP tunnel method”*

Proposal: adopt change in the next draft

# Questions?

# Disposition of NEA Asokan I-D

# Disposition of NEA Asokan I-D

- I-D provides analysis and recommendations for dealing with NEA Asokan attack
- Referenced by PT-TLS and PT-EAP I-Ds (Informative)
- Consensus to make WG document with goal to publish as Informational RFC?

# Next Steps

- PT-TLS:
  - Update PT-TLS I-D after resolving WGLC issues
  - Issue 2<sup>nd</sup> WGLC
- PT-EAP:
  - More WG Comments Please!
  - Update PT-EAP I-D and issue WGLC
- NEA Asokan I-D:
  - Publish updated version as WG document

# Milestones

- Nov 2011
  - Resolve issues from PT-TLS WGLC at IETF 82
  - Resolve open issues with PT-EAP at IETF 82
- Dec 2011
  - Publish -02 PT-TLS I-D and issue 2<sup>nd</sup> WGLC
  - Publish -01 PT-EAP I-D and issue WGLC
  - Publish -00 WG I-D on NEA Asokan attack
- Jan 2012
  - Send PT-TLS I-D to IESG
  - Resolve WGLC issues on PT-EAP
  - Resolve issues with NEA Asokan I-D
- Feb 2012
  - Publish -02 PT-EAP I-D
  - Publish -01 NEA Asokan I-D and issue WGLC
- Mar 2012
  - Resolve IETF LC issues with PT-TLS I-D
  - Resolve WGLC issues with PT-EAP and Asokan I-D

# Adjourn