EAP TLV for NEA
draft-cam-winget-eap-nea-tlv-00

Abstract

This document describes how Network Endpoint Assessment (NEA) data can be carried inside of an EAP method using EAP-TLV.

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1. Introduction

NEA has standardized a transport agnostic Posture Broker protocol defined in [I-D.ietf-nea-pb-tnc] to effect a network endpoint assessment between a Posture Broker Client and a Posture Broker Server. The Extensible Authentication Protocol (EAP) [RFC3748] defines an authentication transport mechanism that can be extended to transport the Posture Broker Protocol. [draft-cam-winget-eap-tlv-00] defines an EAP-TLV container to carry arbitrary data within an EAP method.

This document describes an EAP-TLV that can be used to carry Posture Broker messages within an EAP method. This document also describes the capabilities and limitations of EAP as a transport mechanism for carrying NEA protocols.

2. Specification Requirements

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [RFC2119].

3. EAP NEA TLV Format

The NEA EAP TLV Format is defined and described below. The fields are transmitted from left to right.

```
0                   1                   2                   3
0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|M|R|            TLV Type       |            Length             |
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|                                                               |
|                        PB-TNC Header                          |
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|                        PB-PA Message....                      |
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
```

M
0  Optional TLV
1  Mandatory TLV

R

Reserved, set to zero (0)

TLV Type

The EAP NEA TLV type:

TBD

Length

The length of the Value field in octets.

PB-TNC Header

The PB-TNC encapsulation header as described in [I-D.ietf-nea-pb-tnc].

PB-PA Message

The message between the Posture Broker Client and Posture Broker Server as described in [I-D.ietf-nea-pb-tnc].

4. Capabilities and Limitations of EAP-TLV as a PT for PB-TNC

TBD

5. Security Considerations

The EAP NEA TLV container carries network endpoint assessment information between the Posture Broker Client and the Posture Broker Server. As some of this data can be sensitive, it is highly recommended that the EAP NEA TLV container MUST be carried inside a protected EAP tunneled method.
6. IANA Considerations

The IANA is hereby requested to create a new registry for the EAP NEA TLV defined in Section 3. The purpose of this registry is uniquely identify when NEA Posture Broker Protocol packets are being transported in an EAP method.

7. Acknowledgements

The authors would like to recognize Joe Salowey, Susan Thomson, Syam Appala and Subbu Srinivasan for providing input into this draft.

8. Normative References

[I-D.ietf-nea-pb-tnc]
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