IETF NEA BOF
(NEA = Network Endpoint Assessment)

nea@ietf.org
IETF 65, Tuesday, March 21, 2006, 3:20-5:20 PM
NEA BOF Goals

• Review and discuss NEA Problem Statement

• Review and discuss NEA WG Charter, revise as needed

• Check consensus
  – Do you understand the problem we’re trying to solve and agree it’s important and solvable?
  – Should we form a WG with the proposed charter?

• Sign up volunteers for
  – Active participants (reviewing docs, etc.)
  – Requirements I-D
    • Contributors
    • Document editors
Agenda Review

3:20 Agenda Bashing, Review BOF Goals

3:25 NEA Problem Statement

4:10 Proposed NEA WG Charter

4:55 Consensus Check and Volunteering

5:20 Adjourn
NEA BOF Expectations

Participants are expected to have read the documents listed below:

– NEA Problem Statement
draft-thomson-nea-problem-statement-01.txt

– Proposed NEA WG Charter
Linked from IETF 65 Agenda
NEA WG Charter

• Purposes

  – Define requirements for the protocols needed to ensure interoperability in an NEA system

  – Ensure standardization of protocols that meet these requirements (in this WG or others)
NEA Problem Statement
draft-thomson-nea-problem-statement-01.txt

NEA BOF
March 2006
What is NEA?

• Add *posture assessment* to authentication as part of network access control

• “Posture” is hardware or software configuration info e.g.
  – OS patches
  – AV signature file version
  – FW enabled
  – Etc

• Posture assessed against policy
Message Flow

1. Posture Request
2. Posture Response
3. Posture Result
4. Authorization
Examples

- Trusted Network Connect (TNC)
- Network Access Protection (NAP)
- Network Admission Control (NAC)
Problem

- Architectures leverage the standards-based EAP/RADIUS framework
- But not all needed protocols are standardized
NEA Architecture
EAP/RADIUS Framework

- NEA Client
  - Posture Collectors
  - Client Broker

- NEA Server
  - Posture Validators
  - Server Broker

Posture Attribute protocol
Posture Broker protocol
Posture Validation protocol

EAP / RADIUS Framework

- Network Access Requestor
  - Posture Tunnel Carrier (802.1x, EAPoL3, etc)

- Network Enforcer

- Network Access Authority
  - Network Access Enforcement (RADIUS)

Posture Tunnel Transport (EAP tunneling method)
## Protocol Summary

<table>
<thead>
<tr>
<th>Protocol</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posture Attribute (PA)</td>
<td>New</td>
</tr>
<tr>
<td>Posture Broker (PB)</td>
<td>New</td>
</tr>
<tr>
<td>Posture Transport Tunnel (PTT)</td>
<td>EAP-TTLS, PEAP, EAP-FAST</td>
</tr>
<tr>
<td>Posture Transport Carrier (PTC)</td>
<td>EAPoL2: 802.1x</td>
</tr>
<tr>
<td></td>
<td>EAPoL3: PANA, NACP</td>
</tr>
<tr>
<td>Network Access Enforcement (NAE)</td>
<td>RADIUS</td>
</tr>
<tr>
<td>Posture Validation (PV)</td>
<td>New</td>
</tr>
</tbody>
</table>
Questions?
NEA WG Charter

• Purposes

  – Define requirements for the protocols needed to ensure interoperability in an NEA system

  – Ensure standardization of protocols that meet these requirements (in this WG or others)
NEA WG Charter

• Initial Scope
  – EAP/RADIUS

• Initial Protocols
  – Posture Broker protocol (PB)
  – Posture Transport Tunnel protocol (PTT)
  – Posture Transport Carrier protocol (PTC)
  – RADIUS attributes for network access enforcement (NAE)
NEA WG Charter

• Milestones
  – June 2006
    • Submit requirements I-D to IETF including
      – requirements for PTT protocol (EAP tunneling method)
      – requirements for NAE protocol (RADIUS extensions)
  – September 2006:
    • Submit revised requirements I-D to IETF that includes above plus:
      – requirements for PB protocol
      – requirements for PTC protocol (EAP over IP carrier protocol)
  – December 2006
    • Review ongoing work in IETF and work with ADs to identify the WG responsible for accommodating protocol requirements that are not currently being met
  – February 2007
    • Submit requirements I-D to IESG for publication as Info RFC
    • Revise WG charter to accommodate definition of protocols not covered in other WGs e.g. PB
    • Submit I-D on protocols to be defined in this WG e.g. PB specification
NEA WG Charter

• Comments?

• Questions?

• Wordsmithing?
Consensus Check

• Do you understand the problem we’re trying to solve and agree it’s important and solveable?
Volunteering

• Are you willing to participate as a reviewer?

• Are you willing to participate as a contributor?
Consensus Check

• Should we form a WG with the proposed charter?

• Is there interest in forming a WG to solve this problem?